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Acronyms

AGOA:	African Growth and Opportunity Act
ASEAN:	Association of South East Asian Nations
BP:	British Petroleum
CCP:	Chinese Communist Party
CDS:	Coastal Development Strategy
CNPC:	China National Petroleum Corporation
EP:	Export Processing
EPB:	Economic Planning Board
EPZ:	Export Processing Zone
FDI:	Foreign Direct Investment
FIE:	Foreign Invested Enterprise
FTA:	Free trade area
FTC:	Foreign Trade Regime
G-3:	Japan, the European Union and the United States
GDP:	Gross Domestic Product
HRS:	Household Responsibility System
IEA:	International Energy Agency
IT:	Information Technology
NBS:	National Bureau of Statistics
NDRC:	National Development and Reform Commission
NIC:	Newly Industrialized Country
NPL:	Non-Performing Loan
OECD:	Organisation for Economic Co-operation and Development
OT:	Ordinary Trade
PBoC:	Peoples Bank of China
PRC:	People's Republic of China
R&D:	Research and Development
RMB:	Renminbi
SEPA:	State Environmental Protection Agency
SEZ:	Special Economic Zone
SME:	Small to Medium Size Enterprise
SNWDP:	South-North Water Diversion Project
SOE:	State Owned Enterprise
TVE:	Township and Village Enterprise
UNCLOS:	United Nations Convention on the Law of the Sea
UN:	United Nations
UNDP:	United Nations Development Programme
UNEP:	United Nations Environment Programme
US:	United States
WRI:	World Resources Institute
WTO:	World Trade Organization

Executive Summary

Michael Grubb

Introduction

The following report goes about filling the mandate given by the US-China Economic and Security Review Commission to create a report which evaluates (1) how the Chinese economy continued to grow despite the global recession and a sharp drop-off in external demand for Chinese exports, (2) whether the example of China's growth offers any lessons or challenges for American policy makers, and (3) offer policy guidance on how the United States, in the context of the global community at large, should interact with China and the Chinese economy given the observed and potential future policy direction of the Chinese government.

The report presents its analysis and conclusions in 13 sections, compiled into four chapters. The first chapter goes about laying out the historical context of the development of the Chinese market economy in the second half of the 20th century. The second chapter analyses the global financial crisis, the Chinese response to the crisis, and the implications of that response for the prospects of continued growth of the Chinese economy. The third chapter identifies specific areas which we have identified as having the potential to impede the continued growth of the Chinese economy, looking specifically at economic, socio-political and environmental issues. The fourth and final chapter presents the specific policy recommendations of the report in regards to US macroeconomic, foreign and domestic policy in light of the reports findings.

The Policy recommendations put forth in various sections of the report are also included in this executive summary.

Chapter 1: Background

- ***Section 1: China's Emergence as a Market Economy:***

Increased Productivity and International Integration

Beginning in 1978 China began making the transition from a command economy to a more market based economic system. Throughout the 1980s a series of reforms liberalized portions of the economy, specifically in the agricultural sector and in regions designated for access to foreign trade. The events at Tiananmen Square in June 1989 mark a turning point in this transition, and led to further economic liberalization, increased FDI, and a move towards an export oriented growth model.

- ***Section 2: From a Japanese to a Chinese centered Asian Production Network***

Before and during this time period a system of production had developed in East Asia, the locus of which was the Japanese economy. However, in response to the currency revaluation achieved through the Plaza Accords in 1985, firms from Taiwan, Korea and Hong Kong began to invest more heavily in China as a production platform, on account of China's relatively low labor costs. After the Asian Financial Crisis in 1997 investment was further redirected towards China, solidifying China's integration into the established East Asian production networks.

- ***Section 3: Global Integration***

China became a member of the WTO on December 11, 2001. This was followed by a significant influx of FDI from the US, Japan, Korea, Hong Kong, and Taiwan. China's rate of economic growth increased greatly thereafter, as WTO membership allowed for increasing linkages with regional and global trading networks. The US-China trade relationship has also grown in the last decade, though the direction of trade between the

two has been decidedly one-sided. China has amassed huge foreign currency reserves, enabling it to suppress the value of its currency, as well as finance the growing US national debt.

Chapter 2: The Financial Crisis and the Chinese Response

• *Section 1: Immediate Effects in China: Contagion through Trade Channels, Not the Banking Sector*

The Chinese banking system remained quite strong during the financial crisis, as Chinese banks were not heavily invested in mortgage backed securities. As the recession deepened in the US there was an overall drop in external demand, and many foreign firms began to de-invest in China. It is estimated that 20million migrant workers in China lost their jobs on account of this drop in external demand, and the GDP growth rate dropped to 6.1percent. China's Asian trading partners were also negatively effected, as Chinese import demand also decreased sharply.

• *Section 2: China's Fiscal Stimulus and Implications for the Future*

On November 5, 2008 Premier Wen Jaibao announced a RMB 4trillion (\$586billion) fiscal stimulus package, the expressed goal of which is to mitigate the effects of the global downturn on China's economy by providing aid to key industries, by creating jobs to offset unemployment and reduced FDI and achieve 8 percent growth in 2009. Short term demand has been successfully propped up through the stimulus, and the goal of 8 percent growth in 2009 has been exceeded. The long term costs of the stimulus are, however, still unclear. The massive monetary injection has incited fears of over-investment and excess capacity, and the plan has all but ignored necessary improvements in the social safety net. Questions remain regarding the misallocation of credit and a monetary expansion that has greatly exceeded initial expectations.

• *Section 3: China's Monetary Response to the Great Recession*

The Chinese renminbi (RMB) is artificially pegged to the US dollar, and while this provides a certain advantage to China's export sector, it imposes exceedingly high costs on the central government and inhibits their ability to use traditional monetary policy to steer the economy. In the face of excess liquidity and rising real estate prices (on account of the fiscal stimulus) Beijing has implemented measures to curb bank lending and stave off inflation. The continued use of non-market determined interest rates to regulate the economy has led to an inefficient allocation of credit with a preference towards SOEs, despite the increasing contribution of SMEs to China's economic growth. The Chinese response to the crisis entails unclear future costs, and marks a clear movement towards an increased level of state intervention in the economy.

• *Section 4: China Today: the Effects of the Stimulus and Chinese Ambitions for Global Growth*

There has been steady growth in Asian exports since the summer of 2009. The Chinese response during and after the recession has been integral to stabilizing not only Chinese economic growth, but also the continued growth of interregional trade. An analysis of recent trends in Outward Foreign Direct Investment (OFDI) and reforms in the banking sector reveal that Beijing has been rather reserved in its approach to expanding government investment in these sectors. Despite continuing issues of transparency and "round-tripping", which still surround Chinese OFDI, our analysis has shown that most of this investment is concentrated in ICT, clean technology and other business related IT and financial services sectors. There are no clear signs that China is attempting to secure itself a more central role in the global economy through the exploitation of the circumstances surrounding the financial crisis. It is no longer accurate to assume that the investment decisions of Chinese firms are unduly influenced by the central government. It seems clear that Chinese firms active in OFDI are motivated by market and efficiency driven incentives natural of firms seeking to upgrade their share of value-added and gain a higher level of control over the production supply chain.

Policy Recommendations:

- Create a legal environment and intermediary institutions for overseas investment that (1) ensure transparent and reliable data of accounting and management structure that abides by OECD guidelines; and (2) provide necessary guarantees and protection of international assets and property, as well as providing financial assistance and guidance to Chinese firms. This would ease much anxiety over unclear investment motives by SOEs and other state related firms in developed countries, while strengthening the confidence and knowledge of Chinese managers before they make decisions to invest abroad.
- Create a nondiscriminatory OFDI framework while enhancing financing opportunities. Current financing and foreign exchange policy reform seems to have only benefited large SOEs while discriminating against many private and joint stock SMEs. Limitations in foreign exchange and financing might be effectively hurting China's long-term OFDI growth.
- Completely abolish system of government approval for investment, shifting from system that relies on approval to registration. A reduced role of the state in overseas investment activity would allow companies to develop their international business acumen and make better investment decisions based on their own commercial assessments and interests. However the absence of government intervention should be compensated by the implementation of effective corporate governance.

Chapter 3: Challenges to Continued Chinese Economic Growth

• *Section 1: Structural Changes in the Chinese Economy*

China is consciously steering its economy from an export demand driven growth model, to one based more in domestic consumption. As this transition progresses, the dependence of China's east Asian trading partners on the Chinese economy could increase, which is of particular importance for US economic and security interests in the region. The transition to a consumption driven economy will entail a reduction of

the national savings rate, as well as an adjustment in the value of the RMB. This will conceivably reduce the pace of export growth and increase the rate of import growth, potentially contributing to a rebalancing of global trade. At the same time, China's increased exertion of control over its economy has the potential to motivate foreign firms to de-invest in the Chinese economy.

• *Section 2: Perilous Growth: Environmental Costs on the Future of the Chinese Economy*

Chinese economic growth has been at the cost of major degradation to the nation's environment and natural resources. China will eventually have to respond to these costs. Chinese economic growth remains highly dependent upon the exploitation of scarce natural resources, and in confronting the environmental issues it faces the CCP has limited transparency, restricted public participation, and minimized natural resource rights and markets. Social and political stability in China is predicated on continued economic growth, which in turn is dependent on continued exploitation of the environment. It is argued here that as the costs of China's negligence towards the environment continue to increase, these costs will provide significant impetus for stronger environment regulation in the future. The success of such regulation will be dependent upon the ability to restrict powerful industries, which serve a central tax-generating function for local municipalities.

• *Section 3: Political and Social Challenges*

The issue of corruption is a continual challenge for China's ordinary citizens, however there is little evidence to suggest that this issue will pose a significant challenge to continued Chinese economic growth. It is argued here that the disruptive pattern of rural to urban migration poses a more significant threat to Chinese economic and political stability. The transition towards a market economy has been predicated upon the relinquishment of political rights - the CCP has offered the country and increasingly capitalist economic future in return for an undisputed hold on political power in China. Currently, the legitimacy of the CCP's hold on political power and ability to enforce policy is dependent upon the continued support of the urban elite.

Chapter 4: Lessons and Policy Considerations - The US Response

• *Section 1: US Economic Policy Towards China: A Comprehensive Bilateral and Multilateral Strategy*

US policy towards China should have two main goals - engage China through effective economic diplomacy in order to create a level playing field for US industries, and work to curb the reemergence of state-guided capitalism in China. In areas of clear common interest the US should pursue its policy goals within the framework of the US-China Strategic Economic Dialogue. Trade disputes should be addressed and enforced through the Dispute Settlement Body (DSB) at the World Trade Organization. The fundamental goal of US policy should be bringing Chinese economic policies within international norms, and the development of an international regulatory framework in which China is more powerful stakeholder. By reforming regulatory institutions such as the IMF, The World Bank and the WTO in such a way as to increase China's role in shaping the international regulatory framework, China will be more inclined to abide by and work within international norms.

Policy Recommendations:

- Congress should seek to enact legislation to strengthen existing trade enforcement institutions, including the role of the US Trade Representative and US Dept. of Commerce International Trade Administration, so that they are well equipped and with an expanded role to adequately apply countervailing duty, anti-dumping, and responsible tariffs in response to subsidization in China.
- Congress should seek to encourage the use of the WTO DSB as the objective forum to address industry related disputes and should seek to strengthen the World Trade Organization's role as the pillar of the international trade regime.
- Congress should avoid unilaterally enacting legislation that uses severe pressure to force China to let its currency

appreciate and should instead delegate the issue to multilateral bodies that can legitimately adopt an approach to RMB undervaluation.

• *Section 2: US Policy towards Chinese Diplomatic and Economic Engagement with the World*

China has been increasing its engagement with the rest of the world - in resource rich regions such as Africa and Latin America in order to secure the natural resources needed to fuel its growth; with its major trading partners particularly within ASEAN; and China also faces the potential for increasing competition from other growing economies such as India. We argue that the US should increase and maintain diplomatic ties with regions where China has a growing influence. The US should focus on building-up and working through multilateral international institutions as a means of creating incentives for China to operate under international norms within the international community. The US should avoid characterizing the US-China relationship as a zero-sum game, and instead focus on finding ways forward in which both the US and China can stand to gain.

Policy Recommendations:

- Recognize ASEAN as an important multilateral organization: By getting rid of the bilateral approach that America has with certain Southeast Asian countries it would help develop and expand US-ASEAN economic ties and resource gain. This requires soft power relations toward a multilateral forum where there can be non-confrontational negotiations and where all parties can reach a consensus in settling problems that may arise in the region.
- Engage ASEAN and provide support to member nations by trying to resolve the South China Sea conflicts in a way that would benefit each country in the region.
- Continue to encourage human rights, democratic principles, and good governance: The United States should help young African democracies lay the institutional foundations for a free, open, stable, and prosperous society in their individual countries and throughout the region.
- Increase trade and economic relations with Africa: Even

though US–Africa trade accounts for only about 1 percent of total U.S. trade, it has grown rapidly since the passage of the African Growth and Opportunity Act (AGOA) in 2000. The US government should continue to encourage the development of economic linkages with African trading partners, as opposed to the simple provision of monetary aid. By encouraging the development of robust markets in Africa, the US can hope to mitigate China’s destabilizing influence in the region.

- The US should continue to work within the framework of the UN to support concerted multilateral action against overtly repressive political regimes in Africa. Bringing the repressive nature of these regimes to the attention of the international community should, over time, motivate the Chinese government to re-think its own engagement with these regimes.
- Continue to promote the development of economic linkages between the US and Latin America: The US should continue to establish bilateral investment treaties, as well as to look towards the future development of a broad, multilateral trade agreement encompassing Latin America.
- Involve those countries negatively affected by RMB manipulation, in order to pressure China to change some of its market distorting policies.
- Encourage the development of ASEAN as an important multilateral forum, through which economic issues should be addressed: The US should embrace this multilateral approach, as a mean of further encouraging China’s adherence to a distinct set of regional norms.
- Washington should avoid taking a confrontational approach to China’s ASEAN policy: Avoid the zero sum paradigm. The US should be interested in finding ways of cooperation, whereby both parties can benefit from increased economic integration in the region.
- The US should work within the ASEAN structure to encourage those countries with competitive economies with China to work in concert in order to curb China’s unfair trade practices.
- The US should work to maintain the positive relationship between China and Japan.
- The US should continue to renew its historically important political and economic relationship with Japan
- The US should encourage the growing economic ties and improving political relations between the PRC and Taiwan. Increased economic integration provides a disincentive for military confrontation between the two parties.
- Continue to provide Taiwan with arms of a defensive character: Providing Taiwan with the necessary defensive capability is necessary to discourage Chinese military action and is in the interest in regional and national security.
- Continue building ties with India and encouraging a more active stance politically and economically in the region: To help India fulfill this role, US should continue to seek improvement in its military-to-military relationship with India for defense purposes.
- Collaborate more closely with India on initiatives that strengthen economic development and democratic trends in the region: Encourage the present trajectory of India’s current economic development and democratic governance.
- Avoid any potential India-China military conflict over unresolved border issues given the U.S. interest in ensuring stability in the region: The US has an interest in the continued growth of Indian political and economic influence in the region, and any military conflict with China could present a considerable hindrance to this growth, and could threaten stability in the world at large.
- Encourage India to take a larger role in multilateral institutions, commensurate with its growing economic strength. Encouraging increased participation on the part of developing countries such as India in multilateral institutions, specifically in the WTO, could help to curb some of China’s unfair trade practices.
- Recognizing ASEAN as an important multilateral forum: In doing this Vietnam can put pressure on China to relinquish

some of its power over the South China Sea. This would help provide safety and strength in a number of countries to avoid dependence on China. Ties between the region of ASEAN and the US would improve, while not putting at risk the relation between China because the US is taking a mediatory role in the South China Sea conflict.

- Diversification of economic relationships: Improving relations with Vietnam by increasing economic ties would create more cooperation between the two countries and allowing the US to have more influence in the Asian region. Building infrastructure would strengthen US and Vietnam communication lines providing for closer related economic linkages between the two countries.
- Increase security in regional multilateralism in ASEAN: If this is done it would provide security for Indonesia in case of future conflicts between China and Indonesia. It would also help prevent violence against ethnic Chinese living in Indonesia, with the US treating the region of ASEAN with great importance in Asia.

• *Section 3: Renewing America's Economy*

The Financial Crisis and the Recession have revealed a number of structural deficiencies in the American economy - in the last two decades the US economy has come to incur increasing levels of debt, and become overly dependent upon consumption and finance. China has used this period of crisis as an opportunity to upgrade its economy and insure the competitiveness of its industries in the future, and the US must do the same. We argue that an effective US response will require increasing access to higher education in the US, investments in improving our national infrastructure, and increased government support for basic research as a means of fostering innovation. Reform in these areas should put the US economy on a sustainable path for the future.

Policy Recommendations:

- Congress should work towards increasing access to higher education to a larger portion of the population.

- Congress should work to improve the quality of math and science education within the primary education system, and promote the study of these fields at the university level.
- Congress should relax immigration laws in order to attract talented foreigners to work in the US economy, and retain those which have chosen to receive their education at American universities.
- Congress should increase investment to rebuild our aging transportation infrastructure: This will create jobs and increase productivity by reducing congestion.
- Congress should dramatically increase investment for building the Transportation infrastructure of the Future: This includes investments in public transportation, and High Speed rail.
- Congress should increase funding and speed of the development of a Smart Energy Grid. This will create jobs, increase efficiency, and help develop a promising domestic industry.
- Congress should increase and maintain funding for R&D in renewable energy technology, through both market based incentives and direct government funding
- Congress should work towards the successful implementation of a system to reduce and regulate the emission of greenhouse gasses
- Consider actions to reform Social Security and Medicare to bring down their growing long-term costs.
- Consider a Federal VAT tax to increase government revenues and encourage consumer saving.
- Consider giving the Presidents Commission on Fiscal Responsibility and Reform an up or down vote in the Congress to speed up the adoption of critical long-term deficit reforms.

China and a Changing Global Landscape

Callista Bevans

Why Focus on China?

The People's Republic of China's growing international presence and affects on the world economy are becoming felt in all corners of the globe. To fuel their continued growth the Chinese are a presence in Latin America and Africa where they are buying natural resources and creating friendly relationships. To fuel trade and industry China is a dominant force in East and Southeast Asia. As a powerful exporting economy they are a concern of the United States and across Europe. In some cases these are welcome relationships, such as in Namibia where aid and scholarships have created a new source of income and connections.¹ In some cases the presence of China is creating unease or even conflict, such as in Australia where some fear the Rio Tinto mines purchased by the Chinese are run unfairly by Chinese government owned state enterprises, or in Vietnam where imported Chinese workers are viewed as taking jobs from locals.² With the pomp of the 2008 Olympics and the strength of the Chinese response to the global financial crisis driving them, the Chinese are reaching beyond their borders and modeling themselves into an expanding global power.

It is obvious that something is changing in the world. Global capitalism is being used in new ways, and diplomatic relations are shifting away from the West and dominant international organizations. Political and economic efforts by the Chinese are more often than not inseparable. Many of these political changes are fueled by the Chinese desire for natural resources to continue their amazing economic growth. There is no question that China has become vitally important to the United States and to the global economy. This fact has become more evident with China's strong response to the global financial crisis and continued growth despite a recession and drop in international trade. The Chinese economy

demonstrated unexpected resilience and strength. This report proposes that understanding the Chinese response to the global financial crisis and recession is the key to understanding the current Chinese economy, the path they are creating for future economic growth, as well as how China will continue to act on the world stage, this will allow the United States to create policy that will be effective as the Chinese and global economy continue to change.

The growth and global integration of the Chinese economy occurred over an extremely rapid period of time. This growth has also been very consistent, with the Chinese economy showing an average of 10 percent growth per year of their economy.³ China has raised a huge population out of poverty in just a few generations and has become an industrialized, economic powerhouse. This rapid and dynamic growth has created a great deal of prosperity. It has also raised concerns for both the American public and policy makers. From the beginning of its rapid growth America has been affected. Some firms have prospered and grown from connections with Chinese manufacturing. Yet job losses in manufacturing as well as the loss of American control in global economic affairs have also been a concern of the United States. This concern has at times manifested itself as both fear and misunderstanding. The current populist attitude held by both policy makers and the public toward China is one of great concern, and also great uncertainty.

This uncertainty and fear are embodied in great part by media stereotypes and also political rhetoric. The popular media have predicted China's rise as a new global power for over twenty years. In most cases this media attention and political rhetoric focus on the "China threat,"⁴ or in some cases the incredible business opportunities China presents. In recent months this framing of the issue of China's growth has grown even more widespread. This rhetoric falls into

some standard stereotypes, including the belief that China is already a threatening super power, the belief that people in the United States simply cannot understand China, and the belief that it doesn't matter what kind of power China is becoming as long as Americans are not missing out on the business opportunities it presents. American people are faced with the option of fearing China or being told they are incapable of understanding it. China is growing and in the process is changing politics and the global economy; it is a complex issue to present to the public in popular media or on the part of politicians. Ultimately, all of these fears seem to coalesce around one key theme; that China is growing into a world power, without becoming a responsible stakeholder in the international system. In the wake of the financial crisis many Americans are weary and a little fearful. President Obama acknowledged American anxiety in his 2010 state of the union address. The financial crisis demonstrated Americans vulnerability. In this state of mind the threat of China changing the world to its favor seems more real than ever before to both the public and policy makers.

This report seeks to both calm the rhetoric surrounding China and to create a more useful and authentic framing of the issues surrounding Chinese economic growth and global integration. China may indeed choose not to conform to the international system; it may change that very system. It is essential that United States policy makers do not act out of populist fears or misconceptions of China. China weathered the global financial crisis and resulting recession better than most nations and they have gained a great deal of economic and political power relative to that the United States because of this success. A more useful framework to analyze China's economic response and future growth is to think of 2010 as a new moment in time, in which China is making choices about the path of their economy; choices to which the United States can respond to in meaningful ways. China is going to capitalize on their current position of strength. It is clear the Chinese view the global recession as an opportunity rather than a loss. It needs to be just as clear to the United States that China will be working to gain power from this position and react accordingly. There is no predetermined path to follow for successful economic growth. Every nation has achieved success in its own unique way. Yet there are just as many ways to fail as there are failed economies. There is no theory to predict whether or not China will become a global super

power or choose to be accountable to international norms. Yet a better understanding of where the Chinese are pushing their economy can provide clues and create a basis upon which to create policy.

The question that initially inspired this report focuses on how China reached this moment in time. To understand this crossroad first requires understanding China's role in the evolution of the global financial crisis and its new position of strength. Why did China's economy continue to grow throughout the crisis and recession, and what can U.S. policy makers learn from this response? China's response to the global financial crisis was unique in the world. Despite the financial losses and economic stagnation seen around the world China's economy grew. China's largest customer of exported good is the United States, and with the huge recession in the United States it was expected that China would suffer in proportion to the loss in buying power in United States. Chinese exports did slow, but did not falter dramatically. Foreign direct investment and capital left the country, and stock markets plunged. To weather this crisis China undertook a dramatic national response to the recession. This included initial adjustments to monetary policy, and later a huge stimulus package of about RMB 4 trillion, or \$586 billion. This report found that the stimulus package was indeed successful in creating stability and some growth through the crisis and recession. Most of the stimulus money went to fund infrastructure projects and to bolster domestic consumption. One recent result of the stimulus however is tighter monetary policy, as the Chinese fear an overheating of the economy. Beyond this direct response to the crisis, this report focuses on all areas of the Chinese economy that are responding in some way, such as changes in currency policy, the imbalance between various industries within the Chinese economy and their effort to create middle class consumer society throughout the recession. Taking a broad look at the response to the crisis and recession creates a basis on which to study the Chinese's greater economic goals and plans.

The result of this analysis which is most important to United States policy makers is the revelation of the twin forces at work in shaping a greater Chinese economic and political policy. One force is greater liberalization for firms and markets. The other force is that of the Chinese government

toward greater control and perhaps big-state style capitalism.¹ There is the additional tension between greater integration into the global economy, and pushback against integration, some of which can already be seen in the Chinese economy today. These tensions are important because they can shape how the United States will make policy regarding the Chinese economy. Command capitalism or Capitalism with Chinese tendencies will shape the Chinese economy in ways that may not seem obvious or intuitive to Americans whose view of economics is rooted in the free market system. Anticipating these forces and some of their consequences is vital in understanding the future global economy.

Command capitalism or capitalism with Chinese tendencies is an economy in which the state plays a much more active and directive role than in liberal, market based economic systems. Historically China began to industrialize in a command capitalism style, with the government supporting state owned firms. Yet by the 1980's Chinese policy has shifted and the economy was being guided toward greater market capitalism. The rise of retailing had caused a huge shift in the sites of production into China. Chinese firms and business owners used great entrepreneurship and flexibility to create growth in the economy. This development pattern has created a long standing tension between the two types of economies. This tension can be seen physically in the nation. Sites of production owned or contracted by foreign firms are located in the south and on the coast of China. While the state owned enterprises and banks are run by the government from Beijing. The political and economic leaders in Beijing are viewed by many to have a very productionist bias in directing the Chinese economy, while the firms that participate in production for foreign buyers are an active participant in global markets. The separation between these two forces can also be seen in how well integrated the two sections of the economies are. The state owned enterprises have much better access to banks and political power within China. While the production facilities along the coasts are outward oriented and integrated wholly into the global economy. The current Chinese socialist market economy is unique in the world. How this economy changes

1 "Big-state capitalism", "command capitalism", and "Capitalism with Chinese tendencies" are used interchangeably in this report. All three describe a market based economy in which the Chinese Communist Party has a great deal of power and influence. In this type of economy the government creates economic goals, usually production focused, and uses both incentives and disincentives to affect change in the market to fulfill these goals.

will be incredibly important in shaping the future of global capitalism.

The consequences of moving further toward command style capitalism could be dramatic both for China and the world. If the Chinese government continues to fail to enforce intellectual property rights within the nation and curtail access to markets, banks, and information, foreign firms will feel they have less power to adapt and be creative in the Chinese economy. Despite the current benefits of production in China, and the nation's large and growing domestic market, it is entirely possible firms and capital will move out of China. How much of an effect command style capitalism will have will be determined by what extent the Chinese go to in determining the parameters of domestic markets. The Chinese government already plays a very strong role in supporting goods made in China. If China moves toward command capitalism the government can be expected to put greater emphasis on controlling production of a variety of goods and services. They will also most likely move into greater design functions, in an effort by the government to produce goods in every sector and rely as little as possible on the world market. In the long run China may also seek to influence retailing and make efforts to control all parts of production and retailing.

Some effects of this shift to command capitalism could be positive. This type of change could elevate China into an even more profitable and powerful exporting nation, and perhaps continue to weaken the American economy which so largely depends on Chinese goods. There are some industries and sectors of the economy that the government may chose to support which could draw in foreign capital and firms, creating areas of success. In the short run there are foreseeable gains for the Chinese should they move strongly toward command style capitalism, yet in the long run the sustainability of this approach is in doubt. The Chinese government already supports an imbalance in investment, supporting huge state owned enterprises, while most of the economic growth and prosperity is actually generated by private firms. Further growth toward command style capitalism could slow or even retard Chinese integration into the global market, which in the long run will slow likely slow Chinese economic growth.

Many America policy makers and businesses take further integration of China into the global economy for granted. There is no guarantee that China will continue

to integrate into the global economy should they chose to remain in greater control of their own economy. The idea that China would withdraw from global integration and refuse to use current global institutions creates unease in most nations around the world. China is already reaching for resources around the world while ignoring many international norms. If China continues to use its power and resources for its own economic good without participating in global institutions it could damage the relationship between the United States and China, as well as increase hostilities and damage relations between many nations around the world. One current example is China's attitude toward and relationship with Iran, which is understood by most of the global community as creating greater global insecurity. Understanding which path the Chinese government is moving toward is important for United States policy makers in anticipating future challenges and opportunities both economically and politically.

This report ultimately seeks to explore the current success of China coming out of the global financial crisis, and to anticipate the forces at work in the Chinese economy and the effects these might have on the future of the United States and global economy. This report uses a critical approach to the study of these issues. It's important to understand key trends and factors that contributed to China's economic growth and integration over time. Thus this report begins with a modern history of China and then a study of the global financial crisis and the Chinese response. In this report the authors seek to take a balanced approach to studying the economic growth of China and to avoid falling into any given assumption or predominant theory. We attempted to study each issue from many different points of view, being especially careful to avoid taking things out of context. We expand on some areas of special importance, such as the relationship between China and the rest of Asia. We also expand on the challenges and options that China faces moving into the future. For example, China's economy cannot continue to grow without at some point paying for the great ecological damage that has been wrought on that nation.

Understanding that there is no future in which the United States is not responsible for working with a powerful and economically important China, this report seeks to create a set of policy options and recommendations that will support the United States continued prosperity and international security. The United States needs to address

immediate economic points of contention with China. There has been a flurry of economists and experts arguing that China's currency policy is highly damaging toward the United States and must be addressed.⁵ However, this type of heated rhetoric does nothing to illuminate the deeper problems and misunderstandings that both nations face. The United States needs a coherent set of policies to retain what diplomatic and political power we have relative to China around the globe. China has been courting developing nations and in some ways the United States may be losing future negotiating positions by not taking as active a role as China on the global stage. Finally the United States must focus on its own economic goals and strengthen its economy. The best defense may indeed be a good offense. This report will suggest that the best way for the United States to ensure economic prosperity despite how powerful an economic force China becomes, is to create dynamic and strong domestic economic policies. The United States still has one of the most diverse, educated, resourceful and powerful populations, and using our own innate abilities to strengthen our economy may be the surest way to continued wealth and security.

Chapter One: China's Historical Background

The first chapter of this report focuses on the modern history of China and especially on how China's economy developed. To understand how the Chinese economy grew it is necessary to understand its relationship and integration with the rest of East Asia. This chapter will first focus on how the center of production in Asia moved away from Japan to China. The second section will focus on how China emerged as a market economy. It begins with a study of the communist command economy and how initial reforms were designed to create greater productivity. These included agriculture and land reforms. Beginning in the 1970's the Chinese government began to move the economy toward a market based system. Following the Tiananmen crisis in 1989 China became truly engaged in global capitalism. This trend continued through the 1990's as China became part of the Asian production system with Hong Kong and Taiwan. Finally this chapter concludes with a section on China's continued integration into the global economy, with a focus on its admittance into the WTO and its place in creating the imbalances that led

to the global financial crisis. This chapter sets up a greater understanding of how the Chinese economy contains both a market based system, as well as a socialist led economy, and paves the way for understanding how these two forces are struggling in the current economy.

Chapter Two: The Economic Crisis and Response

Chapter two will focus entirely on how the global financial crisis was created and its immediate effects on the Chinese economy. This chapter begins with a section focusing on how Chinese integration into the global economy helped create the global financial crisis, as well as make China more vulnerable to the effects of this type of disaster. This chapter will explore the losses of the Chinese stock indexes, the drop in FDI and capital, as well as what kinds of drop off in demand for Chinese goods occurred. The second section in this chapter will then focus on how the Chinese government responded, focusing specifically on the stimulus package. Generally it seems that the stimulus package was successful in keeping the Chinese economy growing, and this report studies in what sectors and areas that growth occurred, and in what ways the stimulus package was not utilized to its full advantage. There is also a section focusing especially on Chinese currency policy and how this was affected by the stimulus, and what recent changes have occurred in the wake of the crisis. Finally there is a section focusing on the state of the Chinese economy today. This includes looking at how firm structure, banking and industry relationships and trade imbalances have been affected by the crisis and response, and how the Chinese response has positioned the economy for future economic growth.

Chapter Three: Challenges Facing Continued Chinese Economic Growth

Chapter three of this report focuses on the challenges and opportunities that China faces now as it moves out of this global recession. This begins with a look at specific economic challenges that China faces, including short term challenges like the current housing bubble and over-investment in some sectors of the economy. This section also focuses on China's efforts to move to an economic system with consumption and production balanced, and how successful they have become

at accomplishing this goal. This chapter includes a section that will analyze China's resource scarcity and environmental problems, focusing on water, pollution and energy resources. If left unresolved for too long the cost to China to fix these problems could be huge. Finally, this chapter explores social and political issues that may effect economic growth in the future. These include political areas of contention, population issues such as internal migration and aging, and censorship within China.

Chapter Four: Policy Recommendations

Finally this paper uses the lessons learned from China's economic response to the global financial crisis, and an analysis of future challenges and opportunities, to conclude with a section outlining policy considerations that United States policy makers should take into account regarding China. This includes a section on what economic policy options are available to the United States, and some recommendations by the authors on bilateral economic policy between the United States and China. There are also policy considerations and recommendations regarding China's diplomatic and soft power efforts around the globe, and how the United States can respond. This includes specific recommendations on how the United States should create policy across Asia, because the United States responses to China's new global diplomacy and economic policy will have a huge effect on the entire region. Lastly, this report argues that the best defense is a good offense; the United States must focus on creating a strong and dynamic domestic economy if it hopes to remain competitive with China and continue to influence international affairs. Domestic policy recommendations are proposed in this chapter that will create this type of thriving economy so that all Americans can prosper.

The People's Republic of China has been fascinating and challenging American citizens and policy makers since its inception. This report attempts to create a greater wealth of knowledge about China's current economic situation, and the nation's efforts to create growth in their economy and political reach around the world. China is participating in the global economy and international system according to their own rules and prerogative, perhaps changing it in the process. Given this it is imperative that the United States create a

set of policy prescriptions regarding China that are strong, flexible and long lasting. It is essential for both the United States economic growth and security, as well as that of the globe as a whole, that the United States create a policy that can effectively respond to China's new position of power, no matter how fast or in what ways China continues to grow.

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Chapter One

Background to the Financial Crisis

1978-2007

Chapter 1, Introduction

The Rise of the Chinese Economy

Arielle Kloss, Nathan Gardner and Dimitar Anguelov

Introduction

This chapter addresses the historical context of China's rise as a global economic superpower. Since the late 1970s, when economic reforms were introduced, the growth of China has depended on steady integration with the global economy. A guided liberalization effort allowed a distinctly Chinese capitalism to emerge in the late 1980's. China gradually transitioned from a command economy to state-driven capitalism that struck a unique balance between communism and free-market. As markets began to play an increasingly larger role, the Chinese economy expanded and a sophisticated, mixed-socialist market economy developed. The rise of East Asian "tiger" economies in the 1970's supplemented the rise of China production networks in the 1980's and the ensuing retraction of Japanese growth paved the way for China's ascendance. An ever greater integration in the global economy vis-à-vis linkages to East Asian export networks, and accession to the WTO in 2001 occurred, China's development has reached unprecedented heights.

In this chapter we provide an analysis of the historical developments of world capitalism since the 1950's with a focus on China's integration into it. First, we assess the internal economic reforms, beginning in 1978, which signaled the transition from command to market-based economy and contributed to China's opening to world markets. Then, we discuss the trajectory of capitalism and the global economy for the past fifty years and situate China's rise amidst the development of an Asian division of labor led by Japanese industrialization and American consumer demand. Finally, we analyze the rise of China as it integrated with the global economy and continued to liberalize its trade regime in the late 1990's in preparation for its entrance in the World Trade Organization. Joining this elite organization gave China the opportunity to take full advantage

of the benefits that globalization had to offer.

Internal Reforms: From a Command to a Market Economy

To understand how the Chinese economy has become so powerful, the history of its transition to socialist market capitalism must be understood. The first section of this chapter addresses the internal developments that moved China from a planned to a dual-market economy. Domestic reforms in 1978 following the end of "Red China" were the first step towards China's opening-up to the world economy. As the role of the market expanded, China attempted to manage its growing export-oriented sector, as well as cater to its domestic economy. China subsidized its state-owned enterprises (SOE) and protected growth through non-tariff barriers and import quotas. However, continual liberalization subjected China's economy to greater competition by foreign actors and contributed to a growing inequality among the Chinese people. At the same time, urban unrest about the lack of political freedoms in the late 1980s grew and culminated in the massacre at Tiananmen Square in 1989. This signaled an important point for China's economy as its socialist underpinnings were questioned in the face of capitalism's embrace, forcing the Chinese authorities to temporarily scale back reforms.

Renewed liberalization in the early 1990's opened China's doors to foreign involvement in its domestic and export sectors. Greater investment and activity by foreign firms contributed to GDP growth, increased capital flow and capital formation, and sped-up the transfer of high-technology and managerial skills. These developments aided the industrialization of coastal provinces where special economic zones attracted foreign business. Increased investments and trade integrated China's market with East Asian production

networks, specifically through its connections with Hong Kong and Taiwanese manufacturers. Through its export-processing regime, China increased its involvement in global trade, propelling its economic growth and fueling further trade reforms. However, as the role of the market in the Chinese economy expanded at an ever greater pace, an increasingly dualistic economy emerged. The development of “Two Chinas” reflected the growing inequality within China, as divergent interests effectively separated inland and coastal regions and led to increasing disparities in growth. This has left the Chinese government with the predicament of how to balance its economic growth with the rise of social inequalities. Whether social and environmental progress can reflect sustainable growth remains to be seen.

Global Capitalism: The Japanese “Lost-Decade” and the Rise of China

In addition to internal developments within China, external influences of global demand and retailing as well as changes in the Asian production system facilitated China's growth. The second section addresses China's rise as the center of global manufacturing, following the fallout of Japan. After WWII, Japan, Taiwan, and South Korea experienced economic growth placing Japan as the model for growth for developing Asian countries as they followed in Japan's wake through the “Flying Geese Model.” The Chinese economy did not follow Japan's “flying geese model”, yet, by the end of the 1990's had become a prominent economic center. The first large movement of production in Asia occurred after the Plaza Accord of 1985, which led to an appreciation in East Asian currencies and made exports and production more expensive. At the same time drops in raw material prices and oil forced China and South East Asia to reorient their development strategies by allowing increased foreign investment from Japan, South Korea, and Taiwan. Following this expansion of investment into Asian, Japan's economy went into recession in the 1990s. This occurred just as US firms were creating stronger linkages in East Asia, taking advantage of earlier changes in retail and production networks from the past few decades, and South Korea and Taiwan were catching up to Japan in technology and outsourcing their labor intensive manufacturing. As foreign investment continued into China,

the Asian Financial Crisis of 1997 caused a further increase in investment in China as investors sought a stable investment environment.

Integration with the Global Economy

The third section analyzes China's increasing integration with the global economy specifically after its accession to the WTO. China's opening-up to the world continued in the late 1990's as it prepared for membership in the WTO. Chinese authorities reduced tariffs on trade and lifted restrictions on the flow of capital, goods and services. Foreign investments followed a trend since the early 1990s and continued to grow in the coming decade. FDI inflows fueled growth as Asian manufacturers continued to converge on China in search of cheap labor and land, and thus stimulating its exports.

Entrance in WTO gave China access to global markets and a permanent most favored nation status. The change in composition and patterns of trade that began in the 1990's continued to grow and intensify as China exports grew tremendously. These developments had a significant impact on the global economy. The largest consumer of Chinese goods, the United States continued to depend on China for cheap manufactured goods, which global retailers channeled to the American market. For the past twenty-five years, increasing trade between the two countries has led to large trade imbalances between the two. China has run large trade surpluses, allowing it to accumulate vast foreign-exchange reserves. In turn, China has used these reserves to undervalue its currency. This currency-driven competitive edge has become the center of controversy in light of the recent global recession, and the focal point of policy formation and bilateral relations with the United States.

Meanwhile, in the face of extraordinary growth with few restrictions, China has steadily lost control over its exploding economy. While it has reaped tremendous benefits from its embrace of global capitalism, the feeling that the Chinese government is losing control of its economy, as well as a slew of social and environmental problems, is making the Chinese government rethink its developmental strategy to better reflect its goals and needs. In light of the on-going global economic downturn China now has the opportunity to regain control of its economy and bring together the divergent

growth of its coastal and inland regions.

Looking Onwards

Having assumed one of the leading roles as an economic superpower in light of an extraordinary decade of growth led by global integration, China may now face an opportunity to lead its economy. Its impressive performance during the recent crisis speaks to the economic fortitude that its unique development and internal dynamics brought about. Moreover, China's recent development and performance has become an engine for growth of the global economy when other major economies have struggled to come out of the recession. However, the economic power that it has come to wield is neither independent of global developments nor without consequence. After all, the globalization of production that is now centered on Chinese manufacturing and the demand for it was a root cause of the global imbalances that culminated in the financial crisis.

Coming out of the global recession strong and poised to forge a new path has put greater emphasis than ever before on understanding China and the role it is creating for itself around the globe. Whether or not it may be able to dictate the terms of a new global economy, however, will depend on a series of political and economic expediencies with serious policy implications. Understanding China's position in the world requires an understanding of its unique development and the forces that have shaped it.

China's Emergence as a Market Economy:

Increased Productivity and International Integration

Arielle Kloss

Introduction

Over the past thirty years China has transformed from a state-controlled economy that was closed to international trade to become one of the greatest influences in today's global economy. China has had the fastest-growing major economy in the past thirty years with an average GDP growth rate above ten percent.¹ As such a strong presence in the international economy, China was significantly affected by the Great Recession. The actions that it takes in response will be crucial in determining the future of the global economic environment. The People's Republic of China currently functions as a socialist market economy that engages in international trade and attracts a considerable amount of foreign investment. A socialist market economy is when the state has overall control but a substantial amount of the state and privately owned sectors are governed by free market principles.² China's economy is unique, and therefore it is important to examine its historical development to provide clues to how China will act in the future. Although the international environment and global economic changes helped to propel China to become a center of industry, reforms adopted internally over the course of the past thirty years were also essential to China's growth. While the first decade of reform increased domestic productivity, it was not until 1989, after the Tiananmen Square incident, that China truly became integrated into the international economy as a global trading partner. Reforms during these years facilitated the gradual movement from China's Soviet-style planned economy to a socialist market economy that has become incredibly influential in today's international political economy.

This chapter will explain the history of the reforms that occurred after the end of "Red China" in 1978 and the domestic policies that resulted in China opening up to become

an internationally integrated market economy through the end of the 1990s. The first phase of reforms contributed to China's exceptional growth by facilitating the gradual shift to a market economy and significantly increasing domestic productivity in both the state and non-state sectors. As the economy developed, however, urban unrest about Chinese politics and inflation that eroded real incomes in the late 1980s grew and culminated in a giant protest in Tiananmen Square in 1989. The government responded with military force to clear the square resulting in massive injuries and casualties. After a brief attempt at macroeconomic austerity, economic freedoms were expanded through the dismantling of the urban work unit system. China then moved forward with liberalizing the market to improve livelihoods of urban residents that had largely stagnated from 1978 to 1989, proving 1989 a crucial turning point in the development of the Chinese economy. A social contract was agreed upon that people would remain quiet if the government continued to deliver prosperity to the people through increased economic liberalization. During this time period China became more integrated into international trade in the 1990s. It became involved in the Asian production system, specifically through its connections with Taiwan and Hong Kong. This integrated system increased China's involvement in global trade, propelling more externally focused trade reforms. These helped the coastal foreign trade zones to industrialize and take advantage of technology transfer. Increased expansion led to foreign investment that contributed to China's overall GDP growth. As the market grew, a dualistic economy was constructed that separated the economies of the inland and coastal regions. This essentially created "Two Chinas" with diverging interests and increasing disparities, leaving the Chinese government with the issue of unifying the markets. From generating rural and enterprise productivity, to becoming

an economy with foreign interests, China has grown and integrated itself into the global economy over the past thirty years to become extremely influential. As analyses currently emerge about China's projected growth, it is important to understand the affects of these internal economic reforms on productivity and growth during China's gradual emergence as an internationally trading market economy.

Pre-Tiananmen (1978-1989): Increasing domestic productivity through economic reforms

Before the reforms began in 1978, China functioned as a Soviet-style command economy. A command economy is when the central government makes all decisions on the production and consumption of goods and services.³ Under Chairman Mao capitalism and the private sector were abolished leaving everything to the state's authority. The government focused on the development of heavy industry and creation of capital-intensive plants known as "Big Push" industrialization.⁴ Directed by five-year plans mandated by the central government, industrialization persisted under the governance of the state. In 1958 the Great Leap Forward, itself a five-year plan, attempted to increase output by abolishing private plots and forming communes to promote cooperation.⁵ This effort to leap forward to the socialist future was a disastrous social experiment leading to a massive famine by the end of 1961.⁶ Under the planned economy the government had complete control over the economy. Planners issued commands to firms about the goals of production and the allocation of goods and resources among producers as well as set state prices that generally benefitted the "Big Push" by assigning high prices to products of industry and low prices to agricultural products that were owned by peasant collectives.⁷ The state micromanagement of the economy stifled the autonomy and flexibility of industries leading to inefficient production. A hierarchal personnel system, in which every worker had overseers closer to the government, reinforced the state's power over the economy by controlling managerial career paths. In 1966, the Cultural Revolution began, which hurt the economy by inducing confusion. This involved Mao's encouragement of students to overthrow the Communist Party leadership, not including Mao himself. The motives are complex, however it was done either to

revive revolutionary spirit and "cleanse China of bureaucratic tendencies" or Mao's attempt to remove his opponents in the power structure.⁸ Regardless of the reason, the Cultural Revolution caused disruption and left workers without incentives to work hard because bonuses were frozen and over-employment resulted to deal with unemployment.⁹ With lack of productivity in the agricultural and industrial sectors, "Red China" was not experiencing economic growth and by the death of Mao in 1976, China was ready for a change.¹⁰

The decade following the death of Mao and the new leadership of Deng Xiaoping brought various economic reforms. Deng Xiaoping's economic philosophy can be explained by his quote, "groping for stones to cross the river," denoting his goal of economic growth through gradual means without any specific theory of development in mind.¹¹ Xiaoping wanted to ameliorate imbalances and increase reserves by creating incentives for productivity both within the rural and state sectors.¹² These goals set the tone for a focus on improving the domestic economy in the following years, making external focuses ancillary concerns. China merited great success from these reforms. Post-1979 China had an average growth rate of nine percent a year, an improvement from the six percent growth rate from pre-1978.¹³ Through reforms in the agricultural and rural regions, as well as within the state sector, incentives were created for workers that generated productivity increases that were integral to China's growth.¹⁴ Through price reforms, increased household and managerial responsibility, and the transitional dual-track system, China was able to experience rapid domestic growth and steadily move to a market economy. During this time, although economic freedoms were expanded, the limited political rights that citizens experienced under the CCP were left unchanged.

Market-oriented reforms were significant in boosting productivity in China's rural and agricultural sectors. Deng Xiaoping wanted to reduce the investment in heavy industry and shift resources to agriculture and consumption in order to move the economy onto a path of moderate growth with less strain on resources.¹⁵ Price, institutional, and market and planning reforms during the 1980s were crucial for China's growth. Price reform, and the decollectivization of agriculture led to household farming and the success of Township and Village Enterprises (TVEs) which transformed the once stagnant rural and agricultural

sector to become a valuable part of China's economy.

Under Maoist rule, agriculture was controlled by state-allotted prices. Under this system farmers had little incentive to be productive because the state prices were low and the farmers did not see much income. Mandatory prices were abolished during the reforms and replaced by procurement contracts that involved the negotiation between the state and the farmers, giving farmers greater autonomy.¹⁶ In order to increase the incentives for farmers the government decided to increase the amount of procurement and create retail prices.¹⁷ This enabled farmers to sell their above-quota goods at market fairs. As the rural market began to open farmers diversified their production by raising animals and doing activities such as handicraft production that they could sell on the market.¹⁸ The price reform provided farmers the ability to engage in the market and incentives for them to produce more. The creation of state and market prices were integral in increasing productivity within the agricultural sector and greatly contributed to China's growth.¹⁹

The creation of the Household Responsibility System (HRS) solved problems of the motivation of workers and farmers to produce a larger surplus and decrease the economic imbalances common in command economies.²⁰ The pre-1978 system of agriculture was collectively run. These collectives however, had difficulty monitoring productivity and collective resources. Individual farmers were not adequately recognized or rewarded for their efforts and this reduced their incentives to be productive. In order to better manage the rural sector, reforms initiated the decollectivization of agriculture. Households were assigned specific plots of land and were held responsible for generating a certain quantity to satisfy procurement quotas. They could then sell the above-quota goods on the market. This was the development of the HRS, which spurred household and privatized family farming leading to an increase in household income and savings. In fact, the net income of rural households increased from RMB 133.6 in 1978 to RMB 2,253 by 2000, demonstrating that this system of increased autonomy saw much economic success and productivity gains.²¹ By 1984, grain output surged to 407 million metric tons, more than thirty percent higher than in 1978.²² These reforms did not develop within the state but rather from the ground up. Although the decollectivization of agriculture was technically illegal in 1978, many production teams began a system of contracting

land, output quotas, and individual households underneath the radar. However, the great economic growth that occurred as a result of these changes led to the HRS in 1981.²³ By this time, 45 percent of production teams had already been dismantled and by 1983, 98 percent were run by the HRS.²⁴ This system was incredibly successful in reducing poverty in the rural areas and increasing incentives for productive farming.²⁵

While small private businesses, foreign investors and traders, and family farms were affected by reforms, one of the most successful developments was within the Township and Village Enterprises (TVEs). These are market-oriented public enterprises that are funded, owned, and supervised by the township or village government.²⁶ Before the reforms of Deng Xiaoping TVEs were under strict control limiting their productivity. As restrictions loosened, however, they became very important drivers of the Chinese economy and expanded quickly. 28 million people were employed by the TVEs in 1978 and by 1996 TVEs employed 135 million people.²⁷ Many of these were publicly owned yet worked fairly independently. By the mid 1980s, fiscal decentralization gave more decision-making power to the local governments and the central government gave price incentives to further promote these enterprises.²⁸ TVEs led to increased household savings and rapid growth of rural industry.

With the emergence of the HRS, price reforms, and successful TVEs the rural sector became much more locally run and experienced a considerable amount of economic growth. The gross value of agricultural output increased by six percent between 1978 and 1990 in comparison to 2.1 percent between 1952 and 1978.²⁹ Internally focused economic reforms were integral to increased Chinese growth, reducing poverty and paving the way for future reforms.

The state sector was also affected by reforms. Before the reforms of 1978 the government had micromanaged State Owned Enterprises (SOEs) leaving them with very little autonomy and inefficient. The iron-rice bowl had granted job security, steady incomes and benefits for employees within the state industry. This resulted in too many people on the payroll as well as obligated the state to provide many social services.³⁰ Reforms began the dismantling of this system to increase efficiency. During the reforms, enterprises enjoyed increased autonomy as well. Enterprises could not retain any surplus profits before the reforms so they lacked an incentive to increase production.³¹ Beginning in 1978 SOEs were allowed

to retain their profits above a state mandated quota and to participate in capital investment.³² Through the adoption of the “economic responsibility system”, responsibility shifted from the state to the manager.³³ This involved the assignment of tasks to low-level units and adjusting pay according to productivity.³⁴ Unlike in the rural sector, privatization did not occur within SOEs and during this time period and SOEs continued to be fairly unprofitable.³⁵ Despite the clear unprofitability of the SOEs, the security that the iron-rice bowls provided prevailed and SOEs continued throughout the 1980s, displaying the continued control of the state.

Deng Xiaoping wanted to gradually move out of the planned economy, so a transitional two-tiered pricing system was developed that accommodated both the state and the market known as the dual-track system.³⁶ The government established two prices for commodities, a low state price and a generally high market price for goods.³⁷ Two-tiered pricing allowed state and non-state entities, especially within the rural sector, to interact, facilitating the increased interaction between state and market forces. Up until 1993, China’s gradual economic transformation to a market economy was characterized by the dual-track system. Although the dual-track allowed for the increased role of the market, the state still maintained a level of control. The continuation of the plan ensured stability and guaranteed the attention of the government’s key priorities. With this system the market could grow without immediately dismantling the state pricing system. Throughout the 1980s, the dual-track economy provided the space for the state and markets sector.

In 1978, China engaged the world market on the periphery of its greater state-run domestic economy by creating special economic zones (SEZs) in coastal cities. These were regions where foreign investment was encouraged by lower tax rates, fewer and simplified administrative and customs procedures, and the duty-free import of components and supplies.³⁸ Four SEZs were created in 1978 and 1979 and by 1984 there were fourteen.³⁹ Because these zones were geographically specific areas of trade, the SEZ economies continued to operate separate from the domestic Chinese economy. Although the introduction of SEZs did contribute slightly to China’s overall GDP (about 1 percent of total GDP) with increased foreign investment during the 1980s, it was not until the early 1990s that export growth became a central focus for China and a significant portion of its economic growth.

The reforms over this period shifted China gradually towards a market economy and increased domestic productivity. Between 1979 and 1994, productivity gains accounted for more than 42 percent of China’s growth and overtook capital accumulation in the early 1990s as the most significant source of growth.⁴⁰ With the reforms decentralizing control and expanding autonomy, the output of collective enterprises and private and joint ventures grew. Between 1978 and 1992, the output of state-owned enterprises declined from 56 percent of national output to 40 percent, while the share of collective enterprises rose from 42 to 50 percent and that of private businesses and joint ventures rose from 2 to 10 percent.⁴¹ During this time, however, international trade was geographically concentrated in SEZs, remaining separate from the domestic economy.

Economic liberalization brought macroeconomic imbalance, however, and towards the end of the 1980s urban discontent was emerging. Disconcerted with repression, government corruption, rising inflation, and structural changes, citizens grew disillusioned and upset with the leadership.⁴² Deng Xiaoping had “promised economic reform and improved living standards, with modest liberalization but without democratization”.⁴³ Urban residents accepted this bargain while wages increased throughout the early 1980s. However, in 1988 real wages stagnated and citizens realized that the uncertainty of economic benefits from the reforms perhaps were not worth the political limitations.⁴⁴ The death of a pro-democracy official, Hu Yaobang, sparked the congregation of many protestors, many intellectuals and students, within Tiananmen Square in Beijing in April of 1989.⁴⁵ The movement grew and soon included one in every ten people in Beijing. This included workers who were negatively affected by rising inflation. Many worked for SOEs at fixed-wages and inflation reduced the real value of their wages. In mid-1988 inflation reached 30%, severely affected urban workers on fixed-wages.⁴⁶ The worker’s involvement in the protest scared the government because they were the backbone of China’s economy and therefore threatened their authority.⁴⁷ The protest lasted seven weeks and ended when the military finally used force to clear the square. Many people were left injured and dead and global concern emerged about the future of China. The path that the Chinese economy would take as well as how the government was going to assuage its citizens’ discontent was integral to the CCP maintaining

power and continuing China's economic growth. The incident was, therefore, an important event that forced China's leaders to crack down on dissent as well as reconsider the direction of its economic and political reforms if the CCP was to remain in power.

Post-Tiananmen (1989-1997): Development of an internationally integrated market

The aftermath of the Tiananmen Square Massacre marked a new direction for the Chinese economy. An attempt at conservative austerity measures through 1991 failed after the market corrected inflation issues itself. This was followed by economic liberalization moving China further towards a market economy and committed itself to economic reform. Political reforms were put on hold while economic reforms continued and expanded, "the old economic dogmas cast aside".⁴⁸ Chinese leaders believed that by liberalizing citizens' economic freedoms and increasing standards of living, particularly in urban areas, they would assuage skepticism about limitations of individual political rights. With the decision to move forward with economic reforms, stagnant urban economic conditions could be ameliorated and people could be free to pursue their economic aspirations. Citizens made the deal to accept political constraints in exchange for economic freedom, expanding the private sector.

This growing market presence necessitated a system that catered more directly to it. A dualistic trade regime was consequently constructed that propelled the country towards export-promotion and further integrated the economy into the Asian system of production. This marked the period in which China shifted its focus from its domestic, agricultural sector towards the development of foreign trade and integration into the world market benefitting rural populations. This development of a dual economy gave privileges to the foreign trade regime, while continuing control over domestic activity, creating a divergence of interests in different sectors of China's economy.

China began to recognize its potential for success as an integral part of the Asian production process by the late 1980s. In 1988, China adopted the Coastal Development Strategy (CDS). The goal was to enable China to expand its exports and compete in the global market. "The CDS attempts to link the coastal areas with the global marketplace

and to promote export-oriented economic development through linkages to the inland areas".⁴⁹ The ideology behind the CDS was that coastal areas should focus on labor-intensive and export-oriented industrialization, and industries should focus on developing foreign exchange and increasing global competition. They should use their earnings to attract more foreign investment and technology for the development of heavy industry, and finally use the capital they have acquired from heavy industry to develop the agricultural sector.⁵⁰ This strategy placed export-orientation as the priority and the domestic agricultural sector as secondary. A dual economy essentially resulted from this strategy.

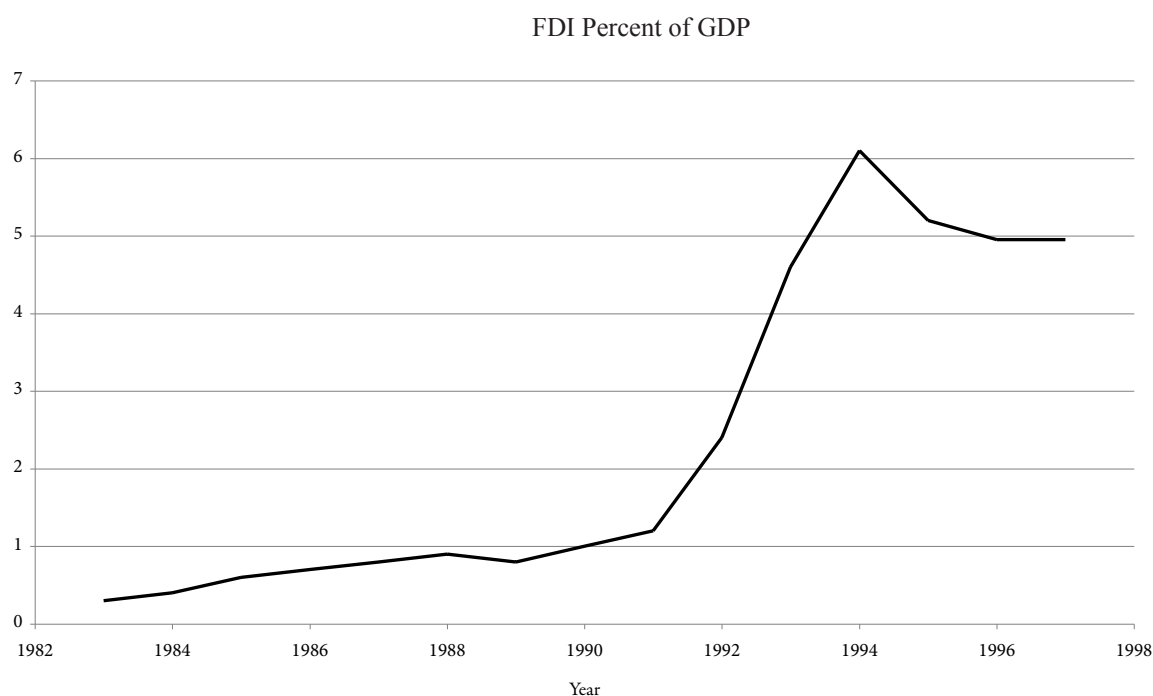
This dual economy consisted of a separate, export-promoting trade (EP) regime for foreign invested enterprises (FIEs), while the domestically focused, ordinary trade (OT) worked as an import substitution regime.⁵¹ The EP was open to the outside with minimum restrictions and administrative interference, tariffs were nonexistent, and there were benefits of tax concessions.⁵² The creation and growth of this regime greatly increased the role of FIEs in China's economy, especially concentrated in the Guangdong and Fujian provinces.⁵³ FIE activity began to take the lead in domestic competition of firms in the 1990s. By 1995, export processing was half of all of China's exports, and FIEs accounted for 57 percent of all export processing.⁵⁴ Therefore, the export processing zones within the dual economy grew as China's markets became more involved with international trade. The EP regime also helped to create the Asian division of labor that will be talked about in the following section.

Minimal regulations and interference of the state in activities of foreign companies facilitated China's ability to become involved in the Asian system of production. Over the reform period, especially in the late 1980s, Chinese trade had become closely linked to other East Asian countries, specifically Taiwan and Hong Kong, because of low transaction costs and proximity, aided by similar language and customs.⁵⁵ Between 1979 and 1989, Hong Kong contributed 59 percent of all foreign investment.⁵⁶ After the Tiananmen incident, Hong Kong's role in China became more significant because of the increased stresses China endured to secure investment and foreign trade. Hong Kong was the major channel of commodity exports at the time, and China saw it as its "window to the outside".⁵⁷ The following years were characterized by even more integration. Between 1989 and

1991 Hong Kong exports to China for outward processing and related FDI ventures increased from 71 percent to 77 percent.⁵⁸ This shows an increased level of integration of the Chinese market with those of other East Asian countries. Because of the proximity and low transaction costs, trade became very efficient between these countries over time and production networks developed, turning China into a major center of manufacturing. The informal contact between China's foreign trade sector and Taiwan increased even further in 1991 when indirect investments through third parties were authorized, leading to an increase in Taiwan investment in China. By 1992, 49 percent of shipments from Taiwan to Hong Kong were for China and 29.5 percent of goods from Taiwan to Hong Kong were from the PRC.⁵⁹ An interrelated trade network was thus created. This unification of markets facilitated the increase of international trade and development of China's advanced market economy.

Foreign direct investment (FDI) was further encouraged in 1992 contributing to economic growth in China. Through renewed confidence in the Chinese market and increased access to the domestic economy for foreign firms, FDI was strongly encouraged. When Deng Xiaoping took a "Southern Tour" of the SEZs in 1992 to gage their productivity, he deemed them successful and declared China

as a "socialist market economy".⁶⁰ This alleviated skepticism that many investors had following Tiananmen about the stability of the Chinese market. Also more foreign investors were encouraged to invest in China's domestic marketplace. The amount of foreign firms that were given access to the domestic economy was extremely limited throughout the beginning of the reform period and was generally confined to export manufacturing. In 1992 however, China offered access to its domestic market for foreign investors who could offer "advanced technology", which had a very liberal definition.⁶¹ The investor-friendly EP regime that had been put into place and the SEZs that had been growing since 1978 made it easy for investors to respond when they were admitted increased access to China's domestic economy.⁶² China also partially opened previously closed service sectors to foreign participation such as banking, retailing, telecommunications, and real estate significantly increasing the inflow of FDI.⁶³ China declared twenty-eight more cities, along with thirteen border cities and eight districts along the Yangtze River open areas for trade. Never before had FDI been more than one percent of China's total GDP (See Fig 1.1.1.).⁶⁴ However since 1993, investment inflows reached an average of five percent.⁶⁵



(Fig. 1.1.1)^{38t}

Reduced barriers and decreased regulations encouraged foreign investment. The demonopolization of the foreign trade regime (FTCs), price changes, devaluation, relaxed restrictions on convertibility, and the reduction of nontariff barriers encouraged international trade.⁶⁶ Between 1992 and 1995, the number of production enterprises with trade rights expanded and domestic firms with export and import rights reached 10,000.⁶⁷ This was a significant change from the beginning of reform when only twelve FTCs had rights. The reduction of nontariff barriers and relaxed restrictions on convertibility increased China's ability to trade internationally as well. By 1997, China had FDI inflows of US\$ 49 billion.⁶⁸

The growth of foreign investment led to an increased accumulation of capital and technological transfer as well as regional industrialization that contributed greatly to China's economic growth.⁶⁹ Foreign firms brought in machinery and equipment and trained Chinese managers and workers.⁷⁰ However, the technology brought in was not high-tech and Chinese partners in joint ventures were involved in the process of production, not marketing, research, and development.⁷¹ Therefore, although FDI did contribute to technology transfer, it was fairly limited and Chinese industries rather focused on labor intensive, low value-added manufacturing.⁷²

Although international trade became a very important part of China's economy, it created some issues for greater China by creating interregional disparities between inland China and the coastal regions. The creation of a dual system reflects the divided interests that emerged in China during this time period. While the EP regime grew in comparison to the OT sector, the coastal zones experienced considerable development and disparity increased between the coast and inland China. OT exports grew just by 4 percent between 1995 and 1998, while EP accounted for 56 percent of China's total exports in 1996.⁷³ Also, the labor force shifted greatly from the agricultural to the manufacturing sector. By 1991, the amount of nonagricultural jobs more than doubled from 1986 and private sector employment grew from 3.46 million new jobs a year between 1986 and 91, to 10.85 million jobs a year between 1991 and 1995.⁷⁴ Migration to the coastal cities ensued and soon migrant workers comprised a great deal of the workforce in the EP zones. By the late 1990s, 40,000 migrants worked in the city of Shenzhen, a prominent EP zone, at extremely low wages.⁷⁵ In 1985, the coast-inland income ratio was 1.31, rising to 1.65 in 2000. Nearly all the widening

took place between 1985 and 1995 during the development of the dual economy.⁷⁶ This is important because the inland-coastal inequality is the most significant contributor to overall Chinese inequality.⁷⁷ As the dual-economy exacerbated inland and coastal disparity, the interests of the EP and OT regimes divided. Urbanization occurred in the urban, export-oriented sectors, yet in the rural sector and OT regime, industrialization and development did not occur to the same extent. What was beneficial for the EP regime was not necessarily good for the domestic, inland economy of China. This conflict of interest between the OT state-controlled sector and China's export orientation faces China with the problem of whether to pursue international trade or to concentrate on domestic productivity. Would its domestic economy or its international trade regime become its priority in the future?

The increased foreign investment and international trade necessitated a fairer legal and regulatory system that is more compatible with the advanced market economy. In order to create a level playing field for the new market economy, China established a system of governance through administrative and fiscal reforms in 1994. Administrative reforms at the end of 1993 reduced the size of the central government. The Company Law "contained provisions for all state-owned enterprises to gradually reorganize as limited-liability corporations with clarified corporate governance institutions".⁷⁸ Ultimately this placed state institutions under a new legislation that separated government administrators from everyday operations of the enterprises, giving managers more responsibility.⁷⁹ This allowed for a diversification in ownership, including privatization, and improved governance in SOEs in their gradual transition to become corporations. The change in managerial structure also changed the system from a hierarchy with centralized decision-making, to a flatter structure that consisted of more flexibility. These corporate legal and administrative changes encouraged smaller SOEs, in the same business lines, to consolidate into larger companies, similar to the Korean chaebol or Japanese *kieretsu* in order to minimize unnecessary production lines and reduce overhead costs.⁸⁰ While the reforms did improve efficiency in the SOE sector, productivity remained low and resources continued to be wasted.⁸¹ Over-employment was common and the state had to pay for their various social services that they provided in the "iron rice bowl" system. By the mid 1990s SOEs continued to occupy about two-thirds of the industrial sector, yet only

produced about one-third of the outputs.⁸² Between 1989 and 2002, the number of SOEs in China plunged from 102,300 to 46,800, decreasing jobs that provided social security and increasing unemployment.⁸³ The restructuring, downsizing, and reorganization that occurred within the state sector in the 1990s dismantled the iron rice bowl system that had granted so many workers within the state sector job securities under the former, Soviet-style planned economic system. The end of the iron-rice bowl, although it could promote productivity and efficiency in the state sector, could have a multitude of implications. Workers guaranteed security and benefits under the system could be laid-off leading to massive unemployment rates. Many would also be left without the benefits of social services and steady incomes, resulting in a less stable system.

Another important reform in the 1990s to improve the trade environment was tax reforms. Fiscal reforms in 1994 were designed to ameliorate budgetary problems that had contributed to the decline of fiscal revenues since 1978.⁸⁴ Before the reforms the system was very complicated, not standardized, and unfair to many economic actors. Although 60 percent of GNP was from the non-state sector, 80 percent of tax revenues were from SOEs.⁸⁵ The reforms created new taxes, a tax assignment and sharing system, as well as a new central government taxation agency.⁸⁶ The most important added tax was the 17 percent value added tax (VAT). The new taxes had low rates and were uniform, creating a fairer system applied to all actors. The central government collected most tax revenues and shared them with the provinces; before, the local governments collected the revenues.⁸⁷ A broadening of the tax base and increased uniformity increased competition among enterprises with the creation of a “level playing field” and resolved a lot of the central governments’ fiscal problems.

By 1997 China’s economy had come a long way from its planned economy under Chairman Mao. After reforms, China had become heavily engaged in international trade and experienced massive economic growth, although it slowed slightly since 1995.⁸⁸ With prospective plans to become a member of the WTO, China continued to reform its economy. From 1995 onward, China began to attempt to unify its dual system in case it needed to adopt “national treatment” under the WTO membership.⁸⁹ FIEs were playing an increasingly major role in the Chinese economy, and concerns began surfacing. Foreign firms started dominating

certain industries and Chinese brands diminished as a result. Also, FIEs were able to take advantage of competition between local governments for investment, creating concern of unfair competition. Many Chinese leaders believed that a limitation should be placed on the special treatment that FIEs received within the EP regime.⁹⁰ As a result China looked to tighten EP, while opening up the OT regime in order to create a more unified and fair environment of competition.⁹¹ “The desire to unify the trade regimes was due to a recognition that the earlier stages of trade reform had been successful, but that the current hybrid system had both advantages and defects. China’s leaders believed by gradually unifying the system, the best points of both might be combined in a new more open and more uniform system”.⁹²

Conclusion

The historical trajectory of the reform period sheds some light on how China may act in response to the current crisis and whether or not its economy will continue its red-hot growth. From completely state-controlled, to a dual system, the Chinese socialist market economy is that which is becoming more integrated. China’s economy has become an important presence with complex international ties. By the time that the Asian Financial Crisis hit, China’s export sector was integrated into the Asian division of labor, and had established a separate system for foreign trade and for its domestic market. China’s foreign trade regime had become increasingly important. Yet on the other hand, it was negatively affecting the rest of its inland rural population by leaving it behind. This is important because the immense size of China’s population sets its economy apart from many other strong nations. Unique among the newly industrialized economies, China’s large population could be a potential consumer base. The efforts, therefore, of the Chinese government to minimize the income gap of greater China and the coastal region and unify its markets could be a way to boost the domestic economy, giving China the option to look internally for its consumer market instead of abroad. The strength of its domestic economy could then be a factor that determines the course of further economic growth for China. Could domestic consumer power become strong enough that China looks inward instead of outward for its market or would China continue to pursue an export-

oriented agenda? The export processing regime and coastal cities were extremely important in China's integration into the global market, however, and this would not be possible without international developments that moved China towards becoming a major center of production. In the following section, the economic context within Asia at large during the reform period will be explained.

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From a Japanese to a Chinese centered Asian Production Network

Nathan Gardner

Introduction

China's dramatic rise in economic and political stature has many explanations, but the two most critical features of these explanations are whether this was due to internal dynamics within the country or its linkage with the established global economy and East Asian production networks. In the following section how the East Asian division of labor moved from a Japan-centered to a China-centered production network will be discussed. There will be an emphasis on how Japan began the East Asian networks with the flying geese model. From this point Japan eventually lost this pattern as other influences created by new market and production patterns from the US took over. While these changes were occurring, Japan was able to continue to grow, striking fears in the U.S. about competitiveness vis-à-vis Japan, however those fears did not materialize due to interventions such as the Plaza Accords in 1985 and the Japanese bubble economy bursting in 1991. Will China run into the same problems? If not, then will it, as can be seen from the Asian Financial Crisis in 1997, take in more FDI and continue to grow economically when others surrounding it are in trouble. And with the financial crisis occurring presently, will China use this to achieve greater political and economic leverage on the international stage?

Starting at the end of World War II, the East Asian production networks and division of labor began under US guidance during the post-war occupation of Japan to contain and rollback Soviet and Communist influence in the region. Beyond the original plan set out by the US, the unintended third country Cold War conflicts actually jump started Japan, Taiwan, and South Korea's economic growth.¹

From this set up, we can begin to examine the vertical structure Japan established through promotion of certain industries, through subsidies and other protective measures,

so that their industries could grow. From the 1960s Japan extended this model of state led growth and protection to other East Asian states, such as South Korea and Taiwan. These states magnified and modified the Japanese model to fit their own economies and established themselves in the larger Japanese production networks. As this growth model became highly successful in the 1960s and 1970s it created pressures on currency appreciation, which the US addressed through the Plaza Accords in 1985. As a result of the currency adjustments Japan and these newly industrialized countries moved their production networks to Southeast Asia at the same time that Southeast Asian countries and China began opening up to foreign investments.

Japan's growth seemed unstoppable; however an asset bubble formed and in the early 1990s burst, causing recession in Japan and a withdrawal of Japanese influence abroad. During the 1990s the US became competitive again in electronics, especially in information technology, while Taiwan and Korea were able to catch up with Japan. During this time investments in China began to increase rapidly due to its low wages relative to source countries. Following the Asian financial crisis investment was redirected towards China as investors searched for stability, which dramatically increased foreign investment in China, furthering its integration into the world market.

Cold War Asia under U.S. Hegemony

Re-industrialization in Japan was meant to allow Japan to serve American Cold War strategy in East Asia and not to become an economic competitor. George Kennan maintained that the US must maintain control over Japan's access to strategic resources so that "we could have veto power over what she does."² As the Soviet Union became the preoccupation in

Washington, DC George Kennan, the Soviet specialist in the State Department, laid out a reverse course for Japan so that Japan would become a key ally in the Cold War. This reverse course attended to strengthening the Japanese economy through export based industries for the remaining open markets in Asia³, as well as the US. To further help Japanese industries the US assisted in upgrading Japanese manufacturing capabilities with technology infusion in the 1950s.⁴

Japan's industrial capacity was further strengthened when the Korean War began in 1951. From 1952 to 1956 US military orders from Japan amounted to \$3.4 billion, equal to a quarter of US commodity imports.⁵ This allowed Japan to become the supplier for military provisions, thus creating not only a market for industrial and higher technology goods but also further building Japan's logistical export base.⁶ Japan benefited from the Korean War, as did South Korea and Taiwan from the Vietnam War. South Korea in particular saw as much as 20 percent of its foreign reserves come as a result of the war in the 1960s.⁷ Through special treatment such as high amounts of foreign aid, reduced tariffs and market access, the newly industrialized countries (NIC) (South Korea, Taiwan, Hong Kong, and Singapore) were able to maintain export growth rates of 20 to 50 percent a year between 1965 and 1973. After the oil crisis the continued exports continued to grow at a rate of 13 to 21 percent a year between 1973 and 1985.⁸

Reindustrialization of Japan

To foster exports from Japan in 1949 the yen was set at 360 to \$1 and the occupation authorities dropped price floors on Japanese exports. This currency peg was held until 1971.⁹ Benefitting from the security created by the US, Japan was able to focus exclusively on economic growth and reindustrialization as put forth by the Yoshida doctrine.¹ Through the 1960s and 1970s the Japanese government took on an active role in industrial policy directing credit to specific industries and using other financial measures, such as subsidies, to further assisting these industries. Additionally,

1 The Yoshida Doctrine was based on Japan focusing exclusively on economic development, keeping a low profile diplomatically, and relying on the US Cold War security framework for defense (Beeson 4).

the government selected and protected priority industries with tariffs and other barriers while at the same time limiting the entry of foreign capital.¹⁰

Although Japanese firms were protected from imports, firms were able to expand due to a government-controlled competition between large firms in the large Japanese domestic market.¹¹ Due to Japan's lack of military power it still accepted the realist argument and designed a system of 'mercantile realism' whereby it was able to exert influence through its technological and economic advantages. As Huntington states, "Japan has accepted all the assumptions of realism but applied them purely in the economic realm."¹² To maintain this upper hand, Japanese firms established 'full set' industrial structures (Keiretsu)² and were able to expand into East Asia, maintaining and sustaining industrialization in these countries with its advanced technological and economic position.¹³ Additionally vertical integration allowed Japanese firms to keep a controlled market share when going abroad as they often brought their Japanese subcontractors with them.

Production centered around a keiretsu³ company kept foreign competitors out of the market and high quality standards kept local companies that were in the same markets out of the Japanese networks. These combinations of factors within the production network kept technology transfer minimal, typically occurring when a Japanese firm began to face diminishing returns.¹⁴ For example Taiwan's computer chip industry is heavily dependent on machinery imports from Japan and South Korea's automobile manufacturers are fully integrated into global manufacturing structures that are held by Japanese corporations.¹⁵ Starting in the 1980s Japanese corporations began to rapidly expand operations overseas. General trading companies were essential to manufacturing firms; general trading companies make up 25 percent of the total affiliates associated with Japanese firms.¹⁶

2 Large business groups that consist of many companies that cross invest between each other and hold frequent consultations between management. Enterprises essential to each group are banks, trading companies, and the core companies that make up the business group. The consolidation allows a business to group to have a 'full set' to complete all its business transactions and operations within the group (Nishikawa 42).

3 Examples include Mitsubishi, Fuyo, Mitsui, Sumitomo, Daiichi Kangin, and Sanwa (Nishikawa 42).

Flying Geese Model

The metaphor used to describe the pattern of the Japanese lead position is known as the “Flying Geese Model”. In this structure Japan would lead and countries such as South Korea and Taiwan would follow Japan’s development model. Japan would continue to lead by utilizing more advanced technology to build new industries while outsourcing declining industries to the countries behind them.¹⁷ In this model, other East Asian economies were junior to Japan and would likewise face limited competition because every country had a place in the model. From the Japanese perspective, this model of development was an ideal depiction of trade.¹⁸

South Korea’s growth in the 1960s and 1970s was in part due to the Park regime taking the import substituting industries of the 1950s and creating incentives for them to produce for export.¹⁹ South Korea, unlike Japan, had a very small domestic market so the state allowed monopoly in certain sectors and promoted exports early on; it was this exposure to international competition that made Korean companies disciplined and efficient.²⁰ Like Japan, the Korean government used protectionism and promotion of certain export industries through the use of finance controls and subsidies.

Official investment from Japan to South Korea began in 1965 with an initial package of \$300 million as part of the normalization of relations. Japanese investment was soon four times the amount of US investment between 1972 and 1976, \$396 million in Japanese investment compared to \$88 million in American investment. Japanese trading companies also handled a large majority of South Korea’s trade: 50 percent of exports and 60 percent of imports between 1963 and 1972.²¹ During the 1960s, the Economic Planning Board (EPB) was set up to decide budgets, decide which industries to promote and which to shut down, and dealt with trade promotion and search for markets and investment. The trade aspect of the EPB was also responsible for bringing in consultants from US and Japan.²² Japan, at the same time, encouraged this state led policy with its expertise and assistance. An example of this was the Asian Industries Development plan in 1987, this program unlike other development programs focused specifically on building certain export sectors through master plans driven by the state.²³

Beginning in 1960, Taiwan was looking to attract

FDI when it instituted the Statute for the Encouragement of Investment which liberalized foreign ownership restrictions and gave various tax credits. The multiple exchange rate system was abolished and tariff rates were lowered to increase competition.²⁴ In 1966 Taiwan began the first export processing zone (EPZ) in the city of Kaohsiung. Following this, more than 150 EPZs were established throughout East Asia over the next fifty years. These zones allowed governments to experiment with reforms and economic incentives before extending them to the larger economy.²⁵ Taiwan, unlike South Korea, kept firms competitive by threatening them with imports if they did not keep prices at international levels.²⁶

Unlike the larger economies of Taiwan and South Korea, Hong Kong was the first to follow the flying geese model completely and began investing abroad in the 1970s. Hong Kong, like Japan before it, sent its declining industries to other developing Asian countries, with a focus on labor intensive industries such as textiles and electronics.²⁷ Hong Kong’s FDI became focused exclusively towards China from the mid-1980s, especially Guangdong Province which borders Hong Kong. From 1990 to 2002 Hong Kong’s FDI to China increased 785 percent from \$2 billion to \$18 billion respectively. At the same time as China opened to world foreign investment, the percentage of relative investment that came from Hong Kong declined 41 percent from 58 percent to 34 percent respectively.²⁸

The Plaza Accord

The success of the export market strategy, initially in Japan, and its spread and success in South Korea, Taiwan, Hong Kong, and Singapore led to massive pressure on these countries’ currencies to appreciate. In 1985 a coordinated currency appreciation was organized through the Plaza Accords. The appreciation led to short run cost increases that led firms within these countries to seek overseas production centers, since by this time these countries had become net exporters of capital investment.²⁹ Additionally, the increased currency values created more money to be invested overseas. Japanese foreign investment increased markedly from the late 1980s to mid 1990s. For example, in 1989 FDI to East Asia was only 26 percent of total investment but by 1995 it had increased to 55 percent of total investment. In

particular Japanese FDI to East Asia was heavily concentrated in machinery manufacturing sector, a sector that Japan is especially competitive in internationally. For example in 2002 manufacturing FDI was 72 percent of cases and 69 percent of value to East Asia.³⁰

Though the effects of the Plaza Accords caused expansion of production abroad, the fact that it occurred so quickly afterward indicates that Japanese firms and their associated subsidiaries were already planning this beforehand.³¹ The competitive Japanese subsidiaries and suppliers that followed the large Japanese firms abroad were key in creating an East Asian division of labor and production.³² These small to medium sized enterprises (SME) make up more than 40 percent of the Japanese firms that have operations in East Asia. Additionally, a large number of these firms operate three or more affiliates in the region.³³ SMEs that went abroad were able to cancel old inefficient subcontract relations and establish new interfirm ones that led to a turnover of inefficient SMEs in Japan. This caused a “hollowing out” of Japanese industry that was not criticized and even encouraged by the government through various incentives to invest abroad.³⁴

Southeast Asia and Chinese Reorientation

With the decline in raw material commodities in the 1980s and drop in oil prices in 1986, China and Southeast Asian countries realized that commodity based export development would not work.³⁵ In fact, in 1981 commodity prices fell 7 percent and then in 1982 fell another 12 percent. Oil prices also fell from \$39 a barrel in 1981 to \$14.8 a barrel in 1986.³⁶

In response the Association of South East Asian Nations (ASEAN) and China dropped their import-substitution strategies and began letting foreign capital and goods enter their economy. This led to increasing investment from Japan and other capital rich East Asia economies.³⁷ This coincidence of appreciation of NIC's currencies and a relative depreciation of China and Southeast Asia's currencies attracted immediate FDI. Approved Investment levels from 1986 to 1990 rose 1086 percent to \$6.2 billion in Malaysia; 2340 percent to \$14.1 billion in Thailand; 993 percent to \$8.8 billion in Indonesia; and 109 percent to \$6.9 billion in

China.³⁸ By 1990, FDI from Japan, Taiwan, South Korea, Hong Kong, and Singapore had overtaken US and European investment in Southeast Asia. What attracted this investment was a “dual track approach” taken by ASEAN members to attract FDI for both import-substituting and export-oriented industry. This was done by limiting export-oriented FDI to certain regions or industries that received incentives while at same time protecting certain import-substituting industries through tariff refunds and indirect taxes on intermediate inputs and allowing FDI to also penetrate the import substituting sector. Additionally, governments in Southeast Asia placed a substantial amount of resources on building adequate infrastructure such as ports and roads.³⁹

It was during the 1980s that China created EPZs that allowed foreign firms to operate with less taxes and regulations on their operations than in the normal economy, and manage their entry into China. In the beginning this largely consisted of Chinese firms filling orders for firms based in Hong Kong. In 1986 the Chinese government began the Coastal Development Strategy, all coastal provinces were opened to foreign investment and export processing. Due to earlier internal reforms small Chinese firms outside the state sector could respond to demands of foreign firms seeking business and operations in China.⁴⁰ The result from these incentives and reforms was FDI totalling \$6.3 billion in 1985.⁴¹ Before 1980 there were less than 1,500 private firms that exported in the coastal provinces and due to increased FDI by 1990 there were more than 300,000 private firms exporting in the coastal provinces.⁴²

The Japanese Asset Bubble

The Japanese had experienced unprecedented growth throughout the 1980s, but in 1992 the economy went into a depression as the asset bubble collapsed. Japanese GDP growth rates slowed from 2.1 percent from 1990 to 1994, 1.3 percent from 1995 to 1999. Government debt, from attempts to stimulate the economy, also rose from 50 percent of GDP in 1990 to 102 percent in 2000. In addition, non-performing loans were still on the books into the 2000s, which was assessed at \$706 billion in 2000.⁴³

Due this decline, Japanese industry and government slowed the transition of production and only let the most

labor-intensive process move abroad. This included Japanese banks that recalled loans overseas to deal with domestic liquidity. FDI declined from a peak of \$66 billion in 1989 to \$35 billion in 1992, but most of this decline in investment was from the US and Europe. It wasn't until 1995 for China and 1997 for the rest East Asia that Japanese investment substantially declined.⁴⁴ Although investment declined, Japan's trade with East Asia in was more than 30 percent of total trade in the 1990s and it increased to 40 percent by 2000.⁴⁵

Japan's loss in competitiveness is follows along with its loss of manufacturing over time. From 1995 to 1999 there was an 11 percent decrease in domestic manufacturing firms from 387,000 to 345,000 respectively. At the same from 1995 to 2000 overseas production rose from 9 to 14.5 percent with approximately 50 percent concentrated in electrical and transport machinery.⁴⁶ As East Asian countries were able to catch up with Japan there was no longer a competitive advantage in high-technology for Japanese domestic operations that allowed them to continue exporting at such high rates.

The Lost Decade

The economies of Taiwan and South Korean in the late 1990s began to overtake Japan in many industries especially in information technology (IT) production due to American linkages. For example, Taiwanese producers largely based in China are now the leaders in production of IT hardware with production share in 1998 at 40 percent for notebook computers, 58 percent for monitors, 61 percent for motherboards, and 84 percent for scanners. In the semiconductor industry Asia's share of world production rose from 25 percent in 1991 to 36 percent 1998. 11 percent of that 9 percent raise from 1991 to 1998 was attributed to South Korea, while at the same time Japan's share declined from 39 percent to 22 percent. A more dramatic transfer was Japan's decline in share of production of TFT-LCD displays. Before 1996 it was at 90 percent but declined to 37 percent in 2001. South Korea's leading electronics manufacturers, LG Electronics and Samsung Electronics, took 41 percent of this market in 2001.

One reason was that lead times between development of technology and outsourcing had shortened dramatically,

for example in 1976 Japan began making VCRs and it wasn't until 1984 that production was outsourced. Demonstrating how much the technological gap has been shortened, recently the production of digital televisions began simultaneously in Japan and other countries. Additionally, due to price competition, Japanese subsidiaries began sourcing directly from East Asian rival firms rather than from Japan firms. A survey done by the Japanese Ministry of Economy Trade and Industries (METI) showed that procurement from Japanese domestic subsidiaries had declined 9 percent from 46.7 percent in 1992 to 37.7 percent in 1999. At the same time, sourcing from Asia increased 5 percent from 15.4 percent to 20.4 percent.⁴⁷

In a reversal of roles, Japanese firms now have to learn production methods from their East Asian competitors. This is especially true is the semi-conductor field with many Japanese going to Taiwan to learn methods of production. An example was Nippon Steel Semiconductor, which was renamed Nippon Foundry when it was taken over by Taiwan's United Microelectronic Corporation (UMC). UMC remodeled the company into a custom foundry and many Japanese producers come to learn their methods of production. In addition to primary competition from Korean and Taiwanese firms, China has also been able to industrially upgrade since the late 1990s and is the world production center of crude steel, air-conditioners, color TVs, among other products. China has now become the third production center of IT hardware behind the US and Japan.⁴⁸ It was during this time frame between the Japanese asset bubble burst and the Asian Financial Crisis that Japan and East Asia began to diverge and Japan no longer offered a viable state led growth model for the rest of Asia to follow.⁴⁹

Asian Financial Crisis

Many circumstances have been blamed for the financial crisis, chief among them were the close relationship between government and business under the state led growth model that the Japanese exemplified for the rest of Asia. The close relationship between government and business led to all sorts of moral hazards. Others point out that the export oriented growth model did not work for many Asian countries because they were left stranded when external demand, especially

from the US, was not high enough.⁵⁰ This is exactly what had happened to South Korea in 1979 to 1980 when South Korea's "big push" industrial products could not find export markets and South Korea's small economy could not absorb the excess. As a result automobile manufacturing halted during this time period.⁵¹ Also to blame was the bank centered funding approach which led to lack of discretion and resulted in massive amounts of non-performing loans.⁵²

What started as a financial crisis soon became a political crisis as well. For example in Indonesia, food prices soared as inflation continued to rise which led to rioting around the country. President Suharto was forced to resign after 30 years of rule as the economic turmoil continued. This rioting not only had the effect of scaring away foreign investment, it also caused capital flight by ethnic Chinese who were targeted by violence. One such incident took place in May 1998 in which 1000 people lost their lives and there were also a large number of rapes against ethnic Chinese women. This caused a capital flight of US\$16 billion to Singapore and Hong Kong.⁵³

While Northeast Asia has been able to get back on track since the 1997 financial crisis, Southeast Asian countries have continued to struggle, having their exports replaced by China in the US and EU markets. This was evident when China overtook Southeast Asia in foreign investment amounts in 1992; additionally, China was able to raise exports to the US market by 2.1 percent from 1995 to 2000, while in the same time period Southeast Asia's exports to the US dropped .3 percent.⁵⁴ This investment trend has continued with evidence that Japan sent more investment to China as opposed to Southeast Asia starting in 2002.⁵⁵

Beginning in the 1990s Taiwan began developing increased commercial linkages with mainland China using Hong Kong as intermediary. Taiwan became China's second largest supplier of goods and second largest investor in 1991. Additionally, China became Taiwan's second largest export market in 1992.⁵⁶ Taiwanese businesses have a tendency towards investment in China due to cultural linkages that reduced transaction costs even though for Taiwan business in China and Southeast Asia cost roughly the same in most aspects.⁵⁷ Likewise, South Korea had begun investment in China at this time and as of 1990 invested \$140 million. Like South Korean domestic projects, projects in China are substantially larger in scale than investments in other

countries.⁵⁸ Even prior to this in the 1980s South Korea had been using China as a finishing center for textiles due to lower labor costs and then shipping them to US markets.⁵⁹ It was estimated that trade between the two countries accounted for 34 percent of South Korea and China's total trade in 1987.⁶⁰ As the Chairman of the Korea Exchange Bank in 1981 stated, "...within ten years, Korea will be the bridge...between mainland China and the United States."⁶¹ What he did not foresee is that this would be the case for other Asian countries' producers and as well as the US itself.

Changes in US Retail Structure

The changing of the retail landscape in the US began with the Federal Highway Act of 1956. The building of a national highway system allowed bulk transport, through use of trucks, to spread beyond the major cities that were supplied by railroad. Logistics hubs were coordinated differently, with more flexibility, as they are no longer dependent on the railroads and could use trucking efficiently.⁶² This national highway system also allowed people to move out of the cities into suburbs, but still get into the city for work with relative ease. In addition, in 1954 new tax laws were passed that allowed for rapid depreciation of commercial properties, the result was higher returns for investors in the construction of new commercial properties. With this shopping centers began to be constructed throughout the US. Before the surge in construction, in 1953 there were around ten major shopping centers in the US. Ten years after the construction boom began, in 1964 there 7,600 shopping centers in the US. Most of these shopping centers consisted of an anchor store, such as Sears, J.C. Penny, and Macy's, with a variety of smaller specialty niche chains.⁶³ Additionally, the fair-trade laws were removed so that retailers could sell below the manufacturer's retail price. The "fair trade laws" were legal price floors that manufacturers could set for retailers at both the state and federal level. This prevented larger retailers from expanding as they could not discount merchandise. Within these department stores and chains they developed in-store or exclusive brands that were contracted to various suppliers. With this method retail chains, such as Sears and J.C. Penny, circumvented the fair trade laws and expanded and began to dominate the retail sector as smaller independents went out

of business. An example of a large chain getting around the fair trade laws by creating in-store brands was Sears's Kenmore line of appliances. This type of retailing essentially made the fair trade laws ineffective and most states began repealing them from the mid-1960s into the 1970s.⁶⁴ In 1962 Walmart, Kmart, Kohl's and Target all began operations within months of each other as discount stores. Specialty retailers, such as the GAP also began around this time period. A commonality between these retailers was that they increasingly sourced from Asian suppliers.⁶⁵

The change in retail structure has led to the argument that it was market incentives and not the state that led to rapid industrialization in Asia. Free trade advocates argue that because Asian economies liberalized to facilitate free trade it allowed them to manufacture products cheaply with cheaper labor and other comparative advantages.⁶⁶ It is from the general merchandise retailers in the US and the suppliers in Asia that global markets for consumer goods started and according to Hamilton, "These two types of firm have been, arguably, the most important global market-makers for all consumer goods except for cars and food in the past thirty years."⁶⁷ It was in 1965 that the US began its first trade deficit with Japan at just \$334 million but still maintained a \$6.3 billion trade surplus with the rest of the world. The ratio of International trade to GDP at the time was only 10 percent. By 1980 this ratio had reached 24 percent and the US had become a net importer with a trade deficit just below \$20 billion. Most of these imports were coming from East Asia (Japan, South Korea, Taiwan, Hong Kong, and China) with over 50 percent of the total of imports in all categories starting in 1975.⁶⁸

Initially in the late 1960s and early 1970s retailers looking for cheaper suppliers in Asia would have gone through a Japanese trading company, particularly Mitsui, as an intermediary between the US firm placing the order and the Asian firm that manufactured it.⁶⁹ As most retailers in the US began to source through Asian firms, US firms established their own buying offices in Hong Kong, Taiwan, and South Korea and expanded their orders following this. Examples include Sears in 1967 opening an office in Taiwan, with Kmart and J.C. Penny following in 1971. Buying offices in South Korea also opened around the same time.⁷⁰

As this East Asian export oriented program continued, in 1975, countries started to diversify in types

of manufacturing with Japan and Korea focusing on large standard orders based on the advantage of their large company structures. South Korea for example had large conglomerates that took most of the foreign orders and then kept these orders within their vertical networks. Taiwan took advantage of batch production due to their small but many companies to do the production.⁷¹ With this diversification retailers were able to vary their orders and respond to consumer tastes in a limited fashion. In the 1980s even more standardization of the supply chain occurred with the computerization and use of Uniform Product Codes (UPC). This allowed for development of "lean retailing" which allowed retailers to rationalize inventory based on immediate knowledge of consumer choices at the point of sale.⁷² This allowed for tracking of consumer tastes in a much more effective manner so retailers could specify production to suppliers. Moving into the 1990s this trend led to a consumer driven as opposed to a supplier driven chain in a real sense.

Around the mid-1990s a large percentage of Japanese, South Korea, Hong Kong, and Taiwanese firms had moved their labor-intensive industries to China and Southeast Asia. At the same time, US retailers had gone beyond just ordering from Asian firms but began to integrate them into their supply chain. As a result US manufacturers continued to be phased out of US retailers' inventory because sourcing in Asia simplified logistics and provided much cheaper labor costs.⁷³ Soon US retailers followed their Asian suppliers into China by establishing buying offices there, as Hong Kong, Taiwan, Japan, and South Korea were now accounting for 70 percent of FDI in China.⁷⁴ The tendency for US retailers to establish offices in China is explained by a Wal-Mart buyer, "The only reason [manufacturing] moved from Taiwan was China's low level of wages. 'We didn't have any trouble in China, because the Taiwanese went into China and built their factories. We were dealing with the same people'."⁷⁵

The Workshop of the World

Like Southeast Asia, Chinese exports are dominated by foreign multinational companies; they account for 47.9 percent of exports. However, unlike Southeast Asia, China has an industrial base to support its export industries. In 2001 Japanese firms surveyed reported that 50 percent of

sourcing in China is from Chinese domestic firms, whereas in Southeast Asian it is only 38 percent from local domestic firms.⁷⁶ Besides reducing demand for Japanese exports to Southeast Asia, the Asian Financial Crisis also caused a drop in demand from Japanese firms operating in Southeast Asia due to loss of local market demand. Japan has suffered a similar loss in market share to Southeast Asia because of competition from China.⁷⁷ Not only has Japan been losing out in market share, but the combination of China, Hong Kong, Taiwan's (Greater China) total external trade, when subtracting trade among them, has eclipsed Japan's \$731 billion at \$810 billion in 1999. This change is most evident in the computers and telecommunications where US research and development (R&D) and Chinese production networks have displaced Japan.⁷⁸

R&D expenditures in Asia (NICs and China) from developed country firms has expanded rapidly with 23 percent of US firms and 19 percent of EU firms investing in Asia. Japanese firms have lagged behind at 9 percent for the NICs and 13.5 percent for China. This low expansion outside of Japan is again another sign of the slow transition that Japanese companies are making and that there is still a tendency to reserve R&D activities exclusively for domestic operations to avoid technology transfer and maintain the hierarchal structure of the flying geese model.⁷⁹ Japanese firms are continuing to find ways to improve their production networks so that they can compete, but have run into difficulties in finding the right balance in their division of labor between domestic and overseas operations to create economies of scale. In China, with its large consumer base and production capacity, Japanese firms have to compete with Korean, European, and increasingly aggressive US firms, in the high end markets, and compete with Chinese and Taiwanese joint ventures, in the low end markets. Japanese firms are finding competition increasingly difficult due to their late arrival, as well as their less agile production networks.⁸⁰

Conclusion

Through a combination of factors the East Asian division of labor has moved away from being centered around Japanese production networks towards increasing competition between various firms from different countries basing their production

and assembly in China. The initial push abroad was the result of the Plaza Accord of 1985, as costs of production increased and forced Japan, Taiwan, and South Korea to search for new production centers in Southeast Asia and mainland China. After this, with the Japanese asset bubble bursting and the recession, Japan was no longer able to compete on the level it had before and became somewhat inactive during this crucial period of rapid change and fell behind due to competition from US firms that had East Asian links, especially through Taiwanese firms that were established in mainland China. It was during this period that Japanese FDI in East Asia peaked in 1997 and then began to decline. As a result, when Japan reentered to compete again it found its production networks were not flexible enough and continues to restructure, as it typically takes a Japanese firm three to five years to change a business plan and begin to reallocate resources in its corporate structure to overseas production.⁸¹ After the Asian Financial Crisis in 1997 investment to China increased again, especially from the EU which invested \$671 million in 1996 and leaped to \$4 billion in 1997, overtaking Japanese investment. The US also overtook Japan to become the second largest investor in China after Hong Kong.⁸² Taiwan and Korea follow Japan in fourth and fifth place in terms of investment. It is clear from the trends that have occurred, and which are still in motion, that East Asian production networks have moved beyond Japan to China as a result of higher costs in Japan and the NICs and restructuring of retailers and their production networks over the past few decades.

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Global Integration

Dimitar Anguelov

Introduction

China's guided transition from a command to a market-based economy gained significant momentum in the 1980s as it began to open its economy to global trade. However, by the mid-1980s the rate of growth had already unsettled the Chinese authorities and forced them to scale back trade reforms. Initial efforts to insulate the domestic economy through tariff and non-tariff barriers succeeded, but these barriers began to dissipate in the 1990s as trade was further liberalized and the Chinese economy opened up to world trade¹. Liberalization also came at the expense of the domestic economy and state-owned enterprises (SOE), as foreign firms started to penetrate the Chinese markets and to compete with domestic manufacturers. China's entrance in the World Trade Organization (WTO) in 2001 forced the central government to relax its control over the economy still further at a time when the economy grew exceptionally fast and with few restrictions. The current on-going global economic downturn, however, has presented the Chinese government with an opportunity to regain more control over its economy and to guide it towards sustained long-term growth in both exports and domestic sectors.

China's economic performance since 2001 was foreshadowed by the liberalization of its trade regime in the previous two decades. The foreign trade reforms that it introduced in the 1980s continued in the 1990s as it sought to create a more open economy in preparation for the WTO. Significant steps towards this goal were taken in 1994 when the central government reduced tariffs on foreign trade and sought to achieve currency convertibility.² These reforms were met by increased trade and capital flows as firms from neighboring Asian economies poured money into China's coastal provinces, creating export-processing facilities to

assemble their products. China's factor endowments of cheap labor, a favorable investing environment, and its cultural and geographic proximity made it an attractive place for East Asian manufacturers to shift their production bases.

Liberalization of the Chinese economy continued throughout the 1990s and early 2000s with a gradual reduction of tariffs, removal of non-tariff barriers and export subsidies, and the opening up of service sectors and the domestic economy to foreign firms. Accession to the WTO on December 11, 2001 granted foreign investors further access to China and encouraged the growth of local Chinese export-oriented manufacturers. The export of Chinese goods was channeled through discount retailers, such as Wal-Mart, Target and Carrefour, and brand-name merchandisers that sought to unify their supply lines around low-cost producers and consolidate their global production chains in order to meet the rising demand for manufactured goods.³ After accession in the WTO the Chinese economy grew ever more dependent on the same buyer-driven commodity chains that first supplemented the rise of East Asian economies in the 1970s and 1980s (see Section 2).⁴

For the past decade China's largest single-country trading partner and largest consumer of its products has been the United States¹. The US market absorbs the largest share of Chinese exports for the past decade, accounting for an average of 20 percent of Chinese exports between 1998 and 2007.⁵ Similarly, by the end of 2009 Chinese exports accounted for 19 percent of all US imports (see "US-China Bilateral Trade").⁶ While trade between the two countries has intensified over the years, its direction has been largely one-sided, leading to a significant trade imbalance. Since 2005 the trade imbalance between the two countries has averaged more than \$230 billion per year. In 2008, a trade-deficit of \$286 billion with China

1 The 27-country block comprising the European Union is the largest importer of Chinese goods (2008)

accounted for a third of the total US trade deficit of \$681 billion.⁷

China's uneven bilateral trade with the United States helped it amass extensive surpluses in its current accounts. This surplus has allowed China to accumulate vast foreign-exchange reserves, amounting to \$2.2 trillion by 2009, of which more than \$700 billion were in US Treasury securities and more than 70 percent were dollar-denominated.⁸ China has used these large reserves to regulate foreign exchange by buying and selling currency on world exchange markets in order to artificially deflate the value of the renminbi (RMB) and maintain the competitiveness of its exports. This currency-driven competitive edge has become the center of controversy in light of the recent global recession, and the focal point of policy formation and bilateral relations with the United States (see Chapters 2 and 4).

China's cheap currency and comparative advantage in cheap labor, along with foreign demand and foreign direct investment, has driven the explosive growth that in the last ten years has made it the largest exporter and the second largest economy in the world. These developments reflect China's integration with a global economic order that it so ardently avoided before 1978 and so carefully approached thereafter. Since its entrance in the WTO, however, it has experienced the kind of growth uncharacteristic of its political and social underpinnings. While it has reaped tremendous benefits from its embrace of global capitalism, the feeling that the Chinese government is losing control of its economy, as well as a slew of social and environmental problems, is making the Chinese authorities rethink their developmental strategy to better reflect the goals and needs of the country (see Chapter 3).⁹

Foreign Trade Reforms and the Chinese Currency

By the late 1990s China had effectively opened its economy to the world. Greater openness to world imports in the 1990s accompanied the export-processing (EP) regime established in the early 1980s. The reforms undertaken in the 1990s were made in preparation for membership in the WTO. In 1993-94 vice Premier Zhu Rongji led the Chinese government to successfully implement trade reforms that removed trade tariffs, lifted restrictions on trading rights for foreign and domestic private companies, and sought to reduce the dualistic

trade regime that characterized the 1980s.¹⁰ In addition, the government liberalized access to foreign currency and achieved marginal success in currency convertibility.

Convertibility of the RMB was only partially successful due to the effects that the 1997 Asian financial crisis had on the economies of East Asia. Following the reforms of 1994, China had established a "managed float" of the RMB by 1997 and was poised to achieve currency convertibility soon thereafter.¹¹ However, as the financial crisis unfolded, currencies across East Asia plummeted due to capital outflows and forced the Chinese government to maintain the "managed float" and in effect establish a fixed exchange rate of 8.3 RMB to the US Dollar.¹² This currency peg remained in place until July 11, 2005 when China revalued the RMB at 8.1 units to the US dollar due to pressures from the United States and the World Economic Council. However, China continued to peg its currency to a basket of major foreign currencies, including the dollar, the euro, the Japanese yen and South Korean won.¹³ Since this minor appreciation of 2.1 percent in 2005, the RMB experienced a nominal appreciation of 21 percent until it was once again pegged in 2008.¹⁴

China's currency policy has had a major impact on its growth. The lack of currency convertibility in the late 1990s spared it from the negative macroeconomic effects that the East Asian financial crisis had on the rest of the region. In the past decade, an undervalued RMB has provided stimulus for growth, serving as an effective export subsidy. Combined with China's factor endowment of cheap labor and a growing productivity, a cheap currency allowed China to stimulate its exports and to maintain a competitive edge in the global economy. The decision by Chinese authorities to peg the RMB in 2008 has become a point of contention for international trade policy and contributed to political tension between China and the United States. Though the fixed currency has provided the Chinese economy with certain advantages², the decade of exponential growth that began with the coming of the new century would not have been possible without China's impending integration with the global economy. After nearly two decades of opening up to the world economy through a

2 For China, a currency peg also carries negative impacts, as it prevents the PRC from employing traditional monetary policy in order to battle financial trends, such as inflation. See Chapter 2, Section 3 (China's Monetary Response to the Great Recession) for more information on China's monetary policy and the implications it has for its economic future.

series of economic and trade reforms China's entrance into the WTO was a huge source for economic growth and the final step towards coherent global integration.

Changing Composition and Patterns of Trade

Between 1985 and 1995, and 1995 and 2001, China experienced shifts in the composition and patterns of its trade. These trends reflected continual reforms and integration with the world economy. Reforms introduced in the 1980s as well as the impacts from the 1985 Plaza Accords (see Chapter 1, Section 2; see "FDI and the Global Economy") brought a period of rapid export-led growth that was dominated by labor-intensive products as China made use of its comparative advantage in cheap labor. These goods included toys, sporting goods, apparel, textiles, footwear, and furniture.¹⁵ By 1994 labor-intensive manufactures accounted for 74 percent of all labor-intensive goods and more than half of all exports. This was a significant shift from the agricultural and mineral-intensive products that made up 49 percent of exports in 1984 but only 15 percent a decade later.¹⁶ China's export-processing regime provided an avenue for the trade of manufactured goods, with Foreign Invested Enterprises accounting for 40 percent of Chinese exports by 1996 and nearly 60 percent by 2005.¹⁷

Between 1996 and the early 2000s the composition of trade shifted again as greater openness increased ordinary trade (OT)³ imports and as inflows of FDI from the newly industrialized Asian countries (Taiwan and Hong Kong) and the industrialized US, Japan and European Union (EU) increased the transfer of capital intensive products and technologies.¹⁸ These factors contributed to a rising value-added component in Chinese production and exports that consisted increasingly of more sophisticated products, such as electronic, industrial, telecom and office machinery, as well as transport equipment.¹⁹ These products represented 41 percent of Chinese exports by 2003, compared to 17 percent a decade earlier. This trend was contingent on increasing vertical specialization of production networks in East Asia, in large part due to the channeling of consumer demand by American retailers (see "FDI and the Global Economy"). Asian economies exported specialized, unfinished products to China, which it assembled into finished goods and re-exported

abroad. By 1997 imports for processing became a significant component of trade, comprising 50 percent of total imports and 40 percent of exports.²⁰

The changes in the composition of trade during the late 1990s were reflected in changes of trading patterns within Asia and around the globe. Aided by foreign investments and the export-processing regime, China became an importer of unfinished goods from Asia and an exporter of finished products predominantly to the United States and Europe. Accession to the WTO accelerated the pace of growth and tremendously intensified trade along these trade patterns. Indeed, between 1997 and 2001, trade imbalances between China and the United States doubled from 41 billion in 1997 to \$83 billion in 2001 and \$103 billion in 2003 (see "Market Access: Exports and Imports after WTO" and "US-China Bilateral Trade").²¹ Trade with other regions followed this pattern as well, with the direction of trade growing increasingly one-sided. While the industrialized nations of the US, EU and Japan became net importers of Chinese goods, Asian countries became net exporters of goods to China.

WTO Membership: Commitments and Prospects

Prior to accession to the WTO China had already committed to opening up its trade regime. Consistent with a trend of liberalization since 1985, including the reduction of trade barriers and tariffs, China accelerated removal of non-tariff barriers (NTB), enacted a number of tariff exemptions for processing trade and began to lift restrictions on foreign investment in the late 1990s. In addition, it substituted import quotas with tariff-rate quotas (TRQ) for some agricultural goods.²² This process of "tariffication" allowed China to negotiate its entrance in the WTO through commitments on the phase-out of its tariffs. This allowed for a gradual entry in the global economy in order to prevent shocks to the domestic economy.⁴ Upon entrance in the WTO China made additional concessions to its protective regime and liberalized trade further.

China became a full-fledged member of the World Trade Organization on December 11, 2001. Membership in the WTO offered economic benefits but demanded

3 According to Naughton, "Ordinary Trade imports are sold on the domestic market, represent potential competition with domestic producers, and were the focus of tariff and non-tariff barriers under the dualistic trade regime."

4 In addition, the WTO made provisions for the phase out of quotas on Chinese textile exports, in order to prevent a flooding of Chinese textiles in the world market. See "Market Access: Exports and Imports after WTO"

concessions as well. The most significant provisions for membership were access to world markets and the lifting of import restrictions. Upon entering the WTO China gained permanent most-favored nation (MFN) status with its trading partners, as well as the ability to safeguard its significant textile and clothing exports and maintain exclusive state-trading for cereals, tobacco, fuels and minerals.²³ On the other hand, it was obliged to open its economy to world imports and investments, allow foreign access to service sectors, remove export subsidies and non-tariff barriers, eliminate price controls, and reduce tariffs.²⁴

While requirements concerned with export subsidies and import-product discrimination took immediate effect, those focused on the reduction of tariffs and price controls, and the right for foreign companies to distribute in the domestic market, were subject to gradual easing over several years. Most membership requirements were fulfilled by 2005 as export and import restrictions gradually phased-out. China's most notable achievements in meeting its membership obligations were reduction of tariff rates to 10 percent by 2004 and removal of import quotas by 2005. Additional obligations to WTO membership included immediate reduction of agricultural subsidies to 8.5 percent of production value, a phase-out of tariffs on agricultural goods to an average of 15 percent by 2005, protection of intellectual property rights, and gradual easing of restriction on access to telecom, banking and insurance service sectors.²⁵

The 1996-2001 interim saw a relative decline in the growth of the Chinese economy as it grappled with and overcame the effects of the 1997 Asian financial crisis, a real appreciation of the RMB and a temporary stall in trade liberalization.²⁶ Upon entering the WTO China's growth resumed at a staggering pace as it gained access to world market and liberalization measures opened up its domestic economy.²⁷ Linkages with regional and global networks strengthened the Chinese economy and allowed for diversification of trade and a growing value-added component to its production.²⁸ Entrance into the WTO was the final stepping stone for China's integration with the global economy and the driving force of its explosive growth in the next decade. However, increasing global integration and the ensuing growth would erode China's influence over the trajectory of its own economy. While WTO measures granted China access to world markets, its domestic economy was subject to greater openness as well.

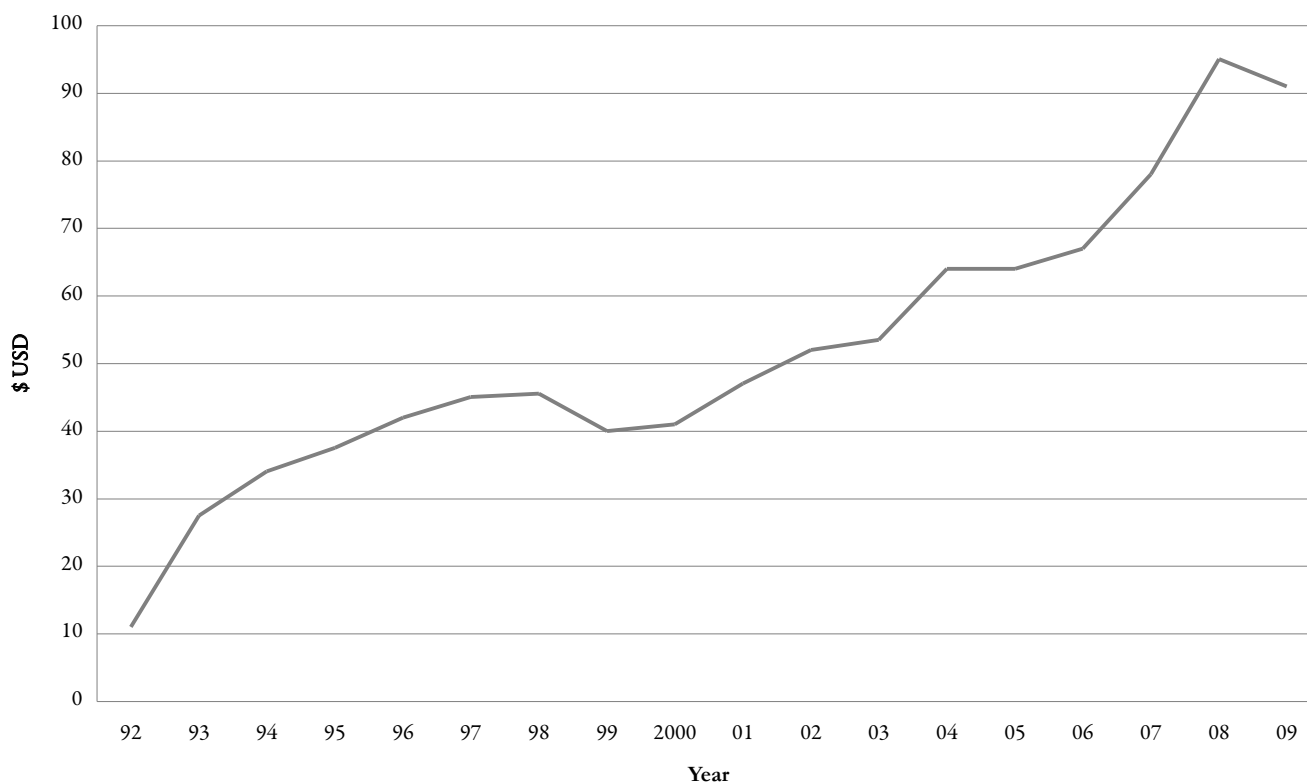
Increasing openness and privatization allowed international firms with managerial experience, comparative advantages in service provisions, and established brand names and access to world markets, to penetrate the Chinese market and compete with SOEs and domestic firms.²⁹

Foreign Direct Investment and China's Dual Economy

For the past two decades FDI has significantly transformed the Chinese economy and remains a continuing source for growth. Inflows of foreign investments not only infused the economy with much needed capital for growth but accelerated the transfer of advanced technologies and managerial skills. Moreover, FDI altered the compositions and patterns of trade for production networks as East Asian firms facing rising production costs and appreciating currencies sought to move their manufacturing bases to China.³⁰ Low production costs made possible by an elastic labor supply, along with a favorable investing environment and cultural affinities made China an attractive destination for investments from Hong Kong and Taiwan. Investments from foreign firms contributed to greater innovation, added skills, and added value to Chinese production. While in 1995 the value added to industrial output by FIEs was less than 15 percent it grew to 24 percent by 2000.³¹ These patterns and transitions were realized through China's export-processing regime, which provided an avenue for FIEs to channel their production.

Greater openness during the 1990s and a growing institutional capacity provided incentives for investors to pour money into the Chinese economy. The investment input by foreign enterprises not only stimulated growth in trade but made domestic markets more efficient as well, as state-owned companies were forced to become more responsive to market signals.³² FDI grew substantially after 1992 as the Chinese government eased restrictions on FDI inflows and access of foreign firms to its markets. Inflows of FDI reached a peak of 6 percent of GDP in 1996 and continued to grow in volume throughout the next decade, with the overall share as a percentage of GDP falling to an average of 4 percent between 1996 and 2005.³³ While FDI inflows between 1990 and 2000 averaged \$30 billion, they tripled over the next

FDI Inflow to China 1992 - 2009

(Fig. 1.3.1)³⁸

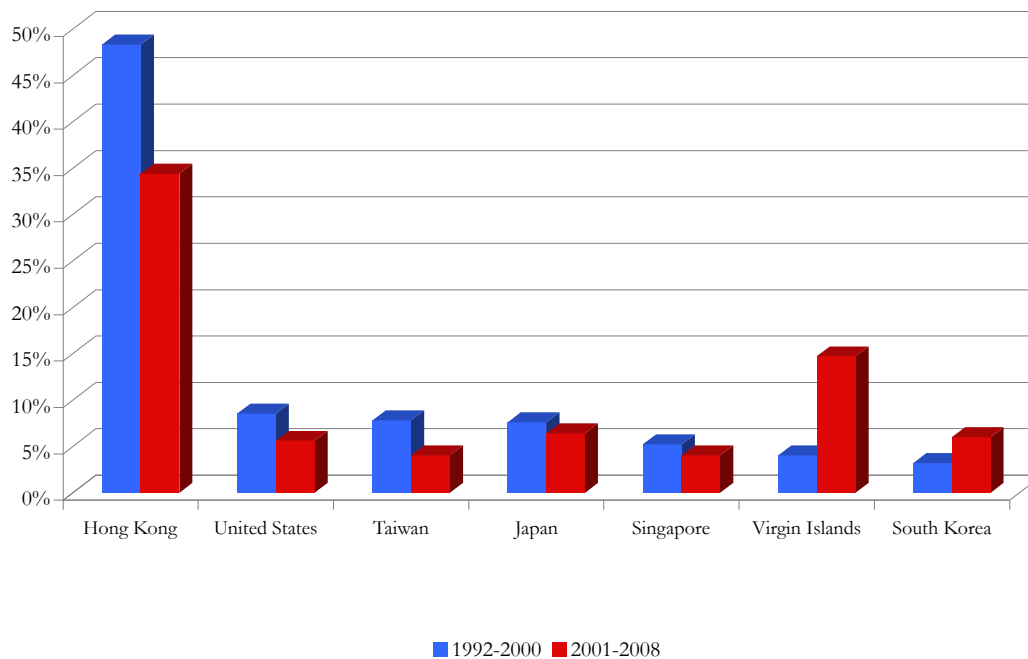
decade, reaching \$95 billion⁵ by 2008 (see Figure 1.3.1).³⁴ Though the initial reforms of 1992 contributed to a flood of foreign investments, China still maintained restrictions on access to important service sectors. In 1994 the Chinese government began to gradually and selectively open sectors of the economy to foreign investments. It relaxed the real estate sector to foreign participants and extended market access to more foreign firms, which were predominantly investing in the export manufacturing sector.³⁵ This trend continued well into the next decade and by 2003, 70 percent of foreign investments were allocated to manufacturing and only 27 percent to the service sector.³⁶ However, membership in the WTO was contingent on the implementation of specific reforms pertaining to foreign investment, which demanded greater access to the service sector. Thus, upon entering the WTO China initiated easing of restrictions to its telecom, banking, insurance and retail service sectors to foreign firms and capital.³⁷ Additional liberalization measures following entrance in the WTO opened China's domestic economy to greater penetration by foreign firms and loosened the grip of

the PRC on the trajectory of its economy.

In the face of steady trade liberalization China faced challenges to insulating its domestic economy from international competition. Moreover, opening its domestic economy to foreign trade posed difficulties for creating a cohesive economy by integrating ordinary trade (OT) with its export-processing regime, as FIE came to dominate both export-processing and compete domestically. Meanwhile, as the composition of China's trade shifted from agricultural to manufacturing products in the late 1980s (see "Changing Composition and Patterns of Trade") so did the composition of Chinese labor, which shifted from the agricultural to the non-agricultural sector (see Chapter 1, Section 1). As growth and development concentrated in coastal regions, the disparity between the urban Coastal and rural Western regions grew. Growth in FDI accompanied greater participation of foreign firms in the domestic economy at the expense of domestic firms. Privatization and down-sizing of the state sector in the mid 1990s led to a significant rise in unemployment as SOEs facing inefficiency, budget reductions and international competition laid off millions of workers (see Section 1).³⁹

5 Depending on the source, this figure varies up to \$108 billion by 2008, when financial sector FDI is included.

Share of FDI inflow to China by Country of Origin

(Figure 1.3.2)^{1 45}

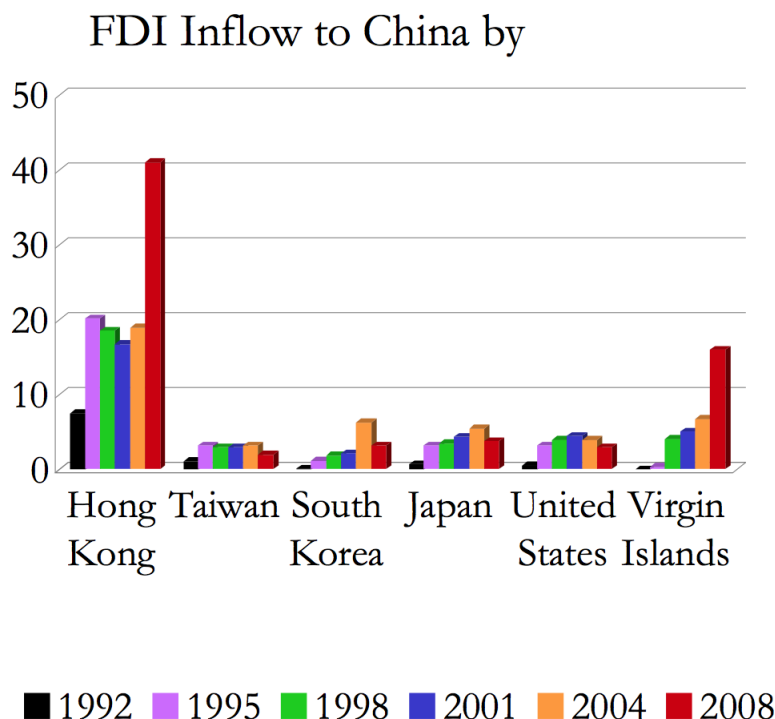
1 The British Virgin Islands (as well as Bermuda, Cayman Islands, and West Samoa) are “tax heavens” through which FDI investment is increasingly channeled; hence, the decrease in FDI inflow from Taiwan, Korea, and others.

In the past decade, the Chinese economy experienced substantial growth with less central oversight as trade became subject to international rules. Following China's entrance in the WTO OT imports surged, rising from a low point of 4 percent of GDP in 1997 to 13 percent of GDP in 2004. OT imports provide the best measure of openness of the Chinese economy. As a share of GDP they indicate a three-fold increase in openness between 1998 and 2004.⁴⁰ This trend carried important implications for the Chinese economy. While liberalization measures following WTO accession stimulated competitiveness in the Chinese market and delivered expertise and technology vis-à-vis FDI, domestic firms could not compete as effectively with multi-national corporations.⁴¹ SOEs performance stagnated between 1995 and 1999 and was less than impressive in the early 2000s. While total exports grew by 17.6 percent between 1985 and 2004 domestic firm exports grew by 12.5 percent.⁴² Since the lifting of restrictions multi-national corporations enjoy comparative advantages in service provision, global market

access, and competitive position in the domestic market.

Foreign Direct Investment and Global Capitalism

The inflow of FDI into China originated above all from newly industrialized Asian countries with close links to Chinese manufacturing. Since reforms were introduced in the 1980s Hong Kong and Taiwanese firms have been the largest source of foreign investment. Between 1985 and 2005 FDI inflows from Hong Kong, Taiwan and the British Virgin Islands accounted for 60 percent of all foreign investments in China, while Hong Kong's share alone comprised 42 percent of the total. The developed industrialized nations of Canada, Japan, the EU and the US accounted for 25 percent of FDI inflows between 1985 and 2005. While the United States was the third largest investor in China until 2002, its share of investment decreased over the next year, and was replaced by Japan and Korea by 2003.⁴³ Indeed, the United State's share

(Figure 1.3.3)^{1 46}

1 Note: these represent the most significant contributors of FDI to China, with many others, including Germany, the United Kingdom, France, Netherlands, Canada, Macau, Cayman Islands and West Samoa comprising the total.

of investment in China has continued to slide since its peak of \$5.4 billion in 2002. By 2008 the United States ranked seventh in total investment to China, with \$2.9 billion of investments. Hong Kong remained the highest investor with \$41 billion in 2008, accounting for 43 percent of all foreign investment (see Figures 1.3.2 and 1.3.3).⁴⁴

Though the volume of FDI varied so did the economic sector and purpose to which they were directed. While FDI from Hong Kong and Taiwan predominantly went towards economic processing and the shift in export networks that accompanied it, FDI from industrialized nations including the US, Japan, and the EU were directed towards the domestic market.⁴⁷ Hong Kong and Taiwanese manufacturers directed their investments primarily towards the export-processing regions on the Chinese coast where they set up their production bases. The southern provinces of Guangdong and Fujian were the largest recipients of East Asian investment, with FDI comprising 13 percent and 11 percent of their GDP between 1993 and 2003 respectively.⁴⁸ The industrialized economies of the US, Japan and the EU, on the other hand, directed most of their investment towards creating joint ventures with Chinese firms, establishing a market presence to better penetrate the domestic economy,

and positioning multi-national corporations to better integrate and streamline their production chains.⁴⁹ Multi-national corporations, especially retailers and brand name merchandisers became dominant players that utilized their market presence and consolidation of production chains to channel global demand and supply, and thus penetrated the Chinese domestic and external economy.

China's rise would not have been possible without the inflow of foreign investments and the transfer of technology and production networks which fundamentally restructured its economy. However, these developments were the products of broader undercurrents of global capitalism, which had organized around demand-driven commodity chains of American discount retailers and brand name merchandisers. The emergence of discount retailers in the 1960s and 1970s coincided with the rise of the newly-industrialized East Asian countries of Hong Kong, Korea and Taiwan under the Japanese "flying geese" model. Advances in US transportation and logistics, as well as changes to US law in the 1970s, allowed retailers to gain significant leverage over their wholesale suppliers and to demand incremental price decreases. At the time, retailers also began organizing production networks in Asia through contract manufacturing. These developments

held major implications for the trajectory of global capitalism and regional export networks in Asia. The momentous 1985 Plaza Accord which led to a significant appreciation of East Asian currencies forced Asian manufacturers (suppliers) to diversify their products and shift their production bases to China, where property and labor were cheaper, in order to keep their contracts with American retailers^{6,50}

Throughout the 1990s American and global retailers increasingly sourced their products from Chinese suppliers because of the low production costs they offered. The leverage that retailers like Wal-Mart hold over suppliers has led to a continuous race-to-the-bottom for the low-cost provider of products. This demand for low production costs and China's strong growth since the early 2000s has led to a convergence of Asian businesses on the Chinese mainland as a platform for their manufacturing activity⁵¹. Retailers' leverage and buying-power have allowed them to consolidate their supply chains vis-à-vis low-cost producers and channel consumer demand more easily. Wal-Mart in particular has played a crucial role in channeling and shaping global consumer demand through its suppliers. The United States remains the largest consumer market for cheap Chinese manufactures and Wal-Mart has directed a significant portion of trade with China. Wal-Mart alone accounted for 10 percent of US imports from China in 2004, and 30 percent of all foreign buying in China, having exported \$18 billion of goods. In addition to providing an avenue for Chinese manufacturers, Wal-Mart has established a local presence in China in order to take advantage of the huge market potential there. After opening its first superstore in Shenzhen in 1996, Wal-Mart today has 146 stores in China.⁵²

Market Access: Exports and Imports after WTO

Entrance in the WTO effectively integrated China with the global economy as restrictions on trade and investment were gradually reduced and goods and capital moved with greater intensity and ease. Membership in the WTO gave China permanent most-favored nation status with significant trading partners such as the US and the EU, which ensured

steady access to global markets and reduced uncertainty for exporters.⁵³ Greater stability in the Chinese economy instilled confidence in foreign investors and encouraged greater inflows of FDI, which spurred further integration with economies around the globe and stimulated exports.

The greatest component of China's trade and a driving force of growth over the past two decades has been the exporting of manufactured goods. The Chinese economy has depended heavily on its natural endowments of cheap labor in order to maintain low production costs, which, along with global demand, has helped it sustain an economic boom for more than a decade. Upon entering the WTO China's newly gained nearly-unrestricted access to world markets provided a great stimulus for its trade and exports in particular. Between 1980, when economic reforms were first introduced, and at the peak of the financial crisis in 2008 China went from being the 26th largest to the 2nd largest exporter in the world. Prior to its entrance in the WTO, in 2000, China ranked as the 7th largest exporter in the world.⁵⁴ The volume of Chinese exports in then was \$300 billion but doubled to \$600 billion by the middle of the decade. In 2007 exports passed the trillion dollar mark (\$1.2 trillion), replacing the United States as the second largest exporter in the world (\$1.16 trillion).⁵⁵ The global recession slowed China's exports in 2008, but trade rebounded only a year later, while the rest of the world economy continues to be mired in financial difficulties until today. By 2010 China surpassed Germany as the world's largest exporter and second largest economy.

China's trade during the past ten years has grown at rates well-above those of the rest of the world. During 2006 and 2007 alone, exports grew by 27 percent and 26 percent respectively while imports grew by 20 percent and 21 percent respectively. Annual export growth has averaged 23 percent since 2000, with the total value of exports growing tenfold. Imports of merchandise have grown by a similar margin.⁵⁶ The value of imports grew to \$956 billion in 2007, totaling China's trade to \$2.1 trillion. Meanwhile, China's Gross Domestic Product (GDP) has grown at an average of 10 percent per year between 1998 and 2008, peaking at 13 percent in 2007.⁵⁷ These astronomical statistics speak to the intensity of global trade and economic integration of the Chinese economy after its accession to the WTO. The trading patterns that emerged in the late 1990s (see "Change in Composition and Patterns of Trade") continued to intensify during the past decade.

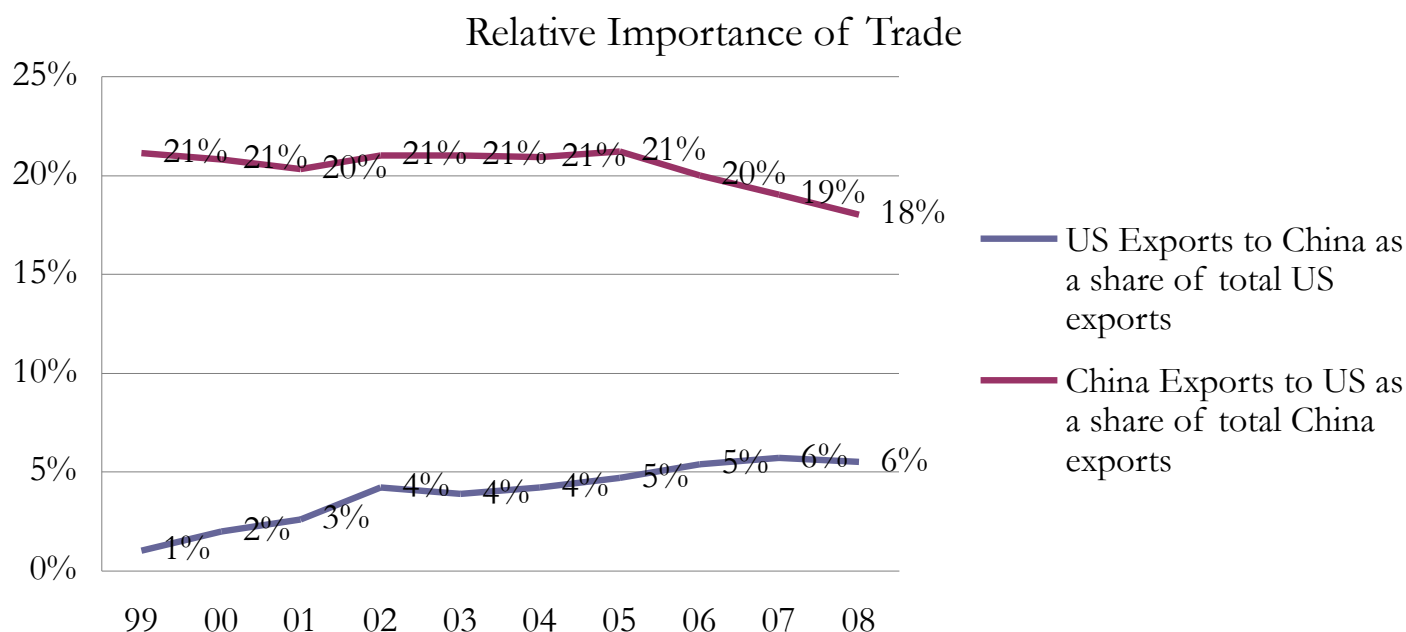
6 See Chapter 1, Section 2 for more details on the affects of the 1985 Plaza Accords on Asian economies and on the relationship between retailers and their Asian suppliers. For further reading, see "Making Global Markets: Wal-Mart and Its Suppliers" by Gary Hamilton and Misha Petrovic.

The composition of China's trade since the late 1990s has consisted primarily of labor intensive light-manufactures as well as electronics and machinery. Since 1997, high-technology electronics and machinery with a greater value-added component have grown as a share of total exports and became China's dominant export sector. Between 2002 and 2008 the export of machinery, transport equipment and electronics grew by a factor of five, from \$136 billion to \$729 billion.⁵⁸ Exports of industrial and electronic machinery accounted for 43 percent of total exports in 2003, and grew to 51 percent by 2008.⁵⁹ China's exports of machinery and electronic equipment were also the largest product category imported by the US. Heavy and light-manufactures made up a large portion of trade between the two countries. In fact, more than half of the US deficit with China comes from the imports of products from these three categories: office equipment and data processing; telecom and sound equipment; and electrical machinery, parts, and appliances.⁶⁰

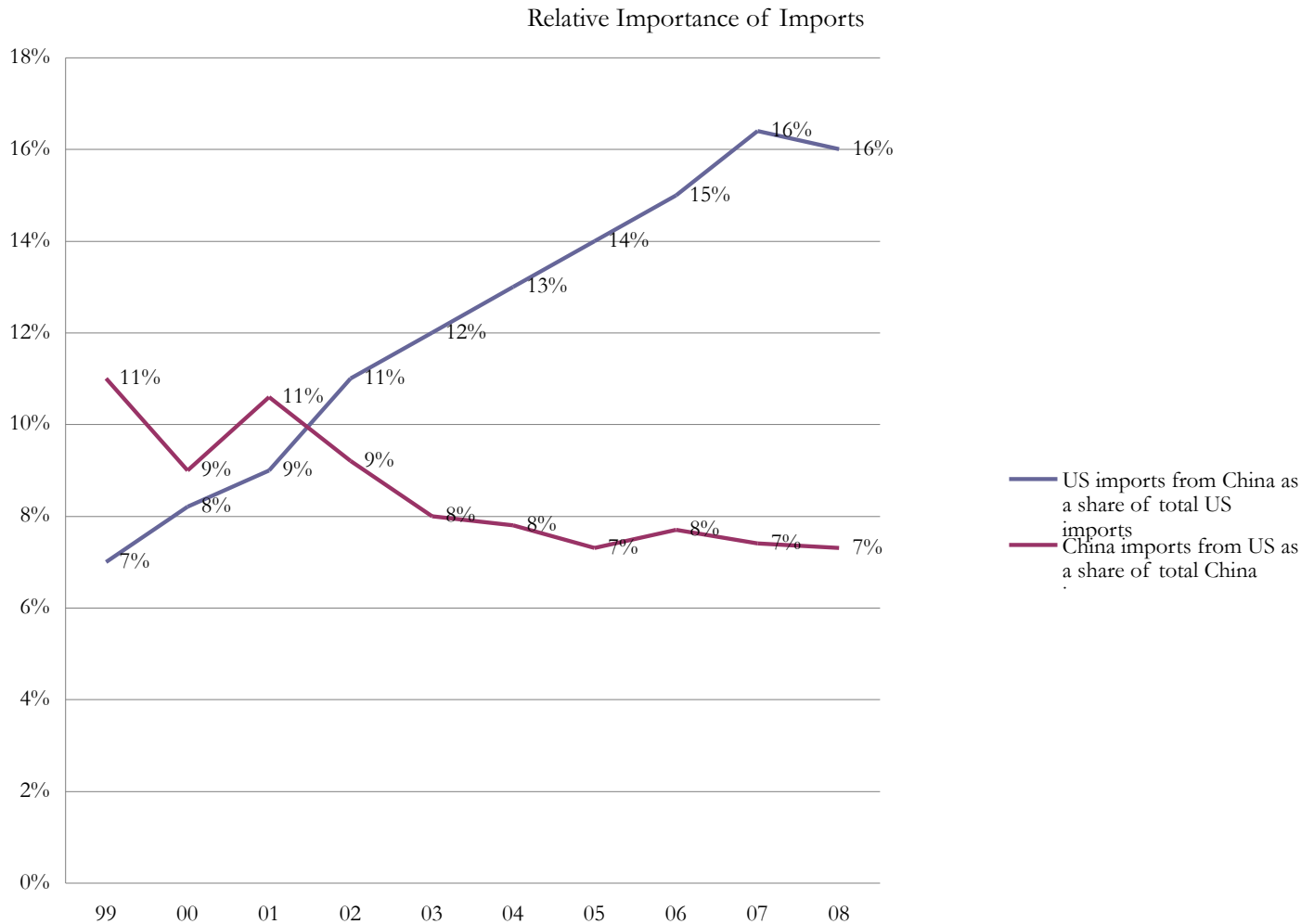
Despite the dominance of machinery and electronics, light manufactures and textiles have continued to grow and remain a significant portion of total trade. In 2003 the exports of light manufactures, including furniture, apparel, and sporting goods accounted for close to 30 percent of total exports. Textiles and garments made up a large share of light-manufactured goods grew further as world quotas on textile imports expired at the end of 2004. By that time

China was already the world's largest exporter of apparel and textiles⁶¹. The phase-out of the multi-fiber agreement (MFA) in 2005 benefited the Chinese textile and garment sectors tremendously. Following the phase out of the quotas between 2004 and 2005, textile exports increased by 22 percent and exports of clothing increased by 20 percent⁶². China captured 75 percent of world growth in clothing exports, and its share of total growth in world textiles was above 100 percent.⁶³ Between 2002 and 2008 exports of textiles tripled from \$58 billion to \$179 billion and exports of apparel more than doubled, from \$23 billion to \$54 billion.⁶⁴

While phase out of the MFA quotas greatly benefited Chinese producers it had a negative impacts on major textile producers such as Mexico, which already enjoyed access to world markets as part of the Agreement on Textiles and Clothing (ATC) established under the Uruguay Round of world trade negotiations in 1996, as well as the North American Free Trade Agreement (NAFTA). As in the export of machinery and electronics, China became the largest exporter of apparels and textiles to the US. By 2001 it overtook Mexico as the largest exporter of apparels to the United States, controlling 14 percent of the US market at the time, and nearly 30 percent by 2006. Mexico's share of the US clothing market shrunk from 15 percent in 1998 to 7.4 percent in 2006. In 2006 China replaced Canada as the largest share-holder of the US textile market, capturing nearly



(Figure 1.3.4)⁶⁷

(Figure 1.3.5)^{1 68}

1 Note: The value used to calculate US trade with China (blue) is derived from US trade data; the used to calculate China trade with the US (brown) is derived from Chinese trade data.

15 percent.⁶⁵

US – China Bilateral Trade

China's export-led growth over the past two to three decades has depended on the access to world markets for its goods. By gradually opening its economy through persistent reform efforts China was able to utilize its comparative advantages to fundamentally transform itself and the global economy. Membership in the WTO granted China access to the markets it needed to integrate with the global economy and to harness its economic prowess. The biggest market that lent itself to the bulging export base of the Chinese economy was that of the United States. In the past decade the Chinese and American economies have become closely integrated and have grown increasingly dependent on each other. The bilateral trade between the United States and China over the

past decade has experienced substantial growth. However, while the volume of exports and imports has grown for both countries, the direction of trade has been entirely one-sided. The United States has remained a net importer of Chinese goods since 1985 when total trade between the two countries was only \$7.7 billion and the trade deficit only \$6 million (2009 Census). Over the years, this meager deficit has grown to a huge trade imbalance between the two countries. The US has continued to run trade deficits with China for the past twenty-five years, which has averaged \$230 billion a year since 2005.⁶⁶

US trade with China had already reached a significant level even before China entered the WTO. By 2001, trade between the two countries totaled \$120 billion, with a surplus of \$83 billion going to China. In 2002 Chinese exports accounted for 11 percent of all US imports, and 15 percent of the total by the middle of the decade.⁶⁹ On the other hand,

China's imports from the US accounted for around 9 percent of China's total imports in 2002 and decreased to 7 percent in 2005. By the first quarter of 2009, imports of US goods had risen slightly to 8.2 percent of Chinese imports.⁷⁰ In terms of exports, Chinese exports to the US between 1999 and 2006 accounted for 22 percent of all Chinese exports but decreased slightly to about 18 percent of the total for the 2007-2008 period (see Figures 1.3.3 and 1.3.4).⁷¹ US exports to China accounted for only 4 percent of US exports.⁷² A predominant part of Chinese exports to the US consisted of manufactured goods, machinery and transport equipment (see above). US exports to China were made up of products from multiple categories, including, machinery and equipment, raw minerals, mineral fuels (inedible), lubricants, manufactured goods, and chemicals.⁷³ These trends reveal the increasing importance of Chinese goods for the American market, and, conversely, a continuing reliance of Chinese exporters on the American markets.

The consistency of these trading patterns for the past decade has exacerbated the balance of trade between China and the United States. As Chinese goods have continued to penetrate the American market a significant bilateral trade deficit has emerged. For the past decade US trade with China contributed to a third of the total US trade deficit. After 2005 the trade imbalance between these two economies significantly increased. The US current account balance, which predominantly consists of its trade balance, rose from a \$400 billion deficit in 2001 to a deficit of more than \$800 billion in 2006. Thanks largely to the fall in Chinese exports during the recession of 2007 and rising savings rate in the United States, the current account deficit more than halved by 2009.⁷⁴ At the same time, China has continued to amass substantial trade surpluses, amounting to \$475 billion in 2008. These surpluses decreased to \$372 billion in 2009, and are expected to pick up again in 2010.⁷⁵ Prior to 2007, these trends played a big role in bringing about the developments that caused the financial crisis.

Current Account Deficits and Global Imbalances

The growing trade deficits of the United States and the accumulation of trade surpluses by China, particularly since the Asian financial crisis of 1997, have led to global imbalances

in current accounts, a development with serious economic ramifications. China's current account surpluses allowed it to collect massive foreign exchange reserves in the past decade, which it used to its economic and political advantage. Most of its reserve accumulations came after 2005, as global trade and especially trade with the United States intensified. Between 2000 and 2009 China's reserves increased by \$1.8 trillion, but more than 70 percent came in the latter half of the decade. By 2009 China had accumulated \$2.2 trillion in reserves, of which 70 to 75 percent were dollar denominated and \$786 billion were in US Treasury securities.⁷⁶ Moreover, by purchasing US treasury securities, China has "financed" the huge US debt that rising current accounts have contributed to. Thus, the accumulation of foreign reserves by China has paralleled the rise of US current account deficits. Accumulation of foreign exchange reserves has allowed China to intervene in foreign exchange markets in order to control the value of its currency, and effectively subsidize its exports vis-à-vis major trading partners with whom it runs trade surpluses.

The current-account patterns exhibited by China and the US reflect a global trend of capital flows between developing nations and industrialized countries. The slew of financial crises during the 1990s, and the Asian financial crisis of 1997 in particular, carried with them many unforeseen consequences. In the wake of economic collapses in Mexico (1994), East Asia (1997), Russia (1998), Brazil (1999), Argentina (2001) and Turkey (2001), developing nations, including China, began a trend of foreign exchange reserve accumulation in order to safeguard their economies from similar fates in the future. Developing nations used their "excess" savings to amass foreign exchange reserves as a buffer to capital outflows and a run on their currencies, as had happened during the East Asian financial crisis. Between 1996 and 2004 the cumulative current accounts balance between developed and developing nations reversed with the former becoming net importers of capital and the latter becoming net exporters.⁷⁷

The excess savings that industrializing nations poured primarily into the United States provided the backdrop for the ensuing financial crisis. This "global savings glut" as Ben Bernanke called it, financed the US debt and provided American residents with "cheap credit" (low interest rates). This "cheap credit" allowed for extensive financial liquidity and sustained a worldwide property boom which inflated

asset values and created the housing bubble.⁷⁸ The bursting of the housing bubble in the United States and the defaulting on mortgages catalyzed a series of financial meltdowns that sent shockwaves around the world. The drop in global demand in 2008 had a strong impact on the Chinese economy as falling exports eliminated millions of manufacturing jobs. China's response to the crisis was swift, infusing the economy with a \$586 billion stimulus package. This economic stimulus proved pertinent to China's quick recovery and continued growth during the recession. Its stellar performance and now prominent global standing have lent China power and maneuverability in shaping global economic policy, which is stirring global controversy.⁷

Conclusion: Towards an Integrated Economy

China's economic performance since 2001 was foreshadowed by the liberalization of its trade regime in the previous two decades. The foreign trade reforms that it introduced in the 1980s continued in the 1990s as it sought to create a more open economy in preparation for the WTO. Significant steps towards this goal were taken in 1994 when the central government reduced tariffs on foreign trade and sought to achieve currency convertibility.⁷⁹ These reforms were met by increased trade and capital flows as firms from neighboring Asian economies poured money into China's coastal provinces, creating export-processing platforms to assemble their products. The rise of global retailers and their growing buying-power, and the changes in Asian economies following the 1985 Plaza Accords, facilitated the shift in global manufacturing to the Chinese coast.

It is in light of these external developments and the role of global capitalism in shaping the contours of China's growth in the past decade China's entrance in the World Trade Organization (WTO) in 2001 forced the central government to relax its control over the economy still further at a time when the economy grew exceptionally fast and with few restrictions Entrance in WTO gave China access to global markets and a permanent most favored nation status. The change in composition and patterns of trade that began in the 1990's continued to grow and intensify. Chinese exports surged after entrance in the WTO and grew incrementally

throughout the decade. From the 7th largest exporter in 2000, China became the largest exporter and second largest economy in the world by 2010.

China's integration into the global economy following its accession in the WTO has had and continues to have significant impacts on its economy and the rest of the world. Entering the WTO gave China the opportunity to utilize its economic endowments to their fullest potential and to its greatest benefit and allowed it to benefit tremendously from its comparative advantage in abundant and cheap labor, and from its well-developed export processing regime. The flow of goods, services and capital intensified significantly as a result of fewer restrictions on trade and increasing linkages with East Asian production networks. The largest consumer of Chinese goods, the United States continued to depend on China for cheap manufactured goods, which global retailers channeled to the American market. For the past twenty-five years, increasing trade between the two countries has led to large trade imbalances between the two. China has run large trade surpluses, allowing it to accumulate vast foreign-exchange reserves. In turn, China has used these reserves to undervalue its currency. This currency-driven competitive edge has become the center of controversy in light of the recent global recession, and the focal point of policy formation and bilateral relations with the United States.

While global integration has provided significant benefits to China's economy it has also brought economic, social and environmental costs. In the face of extraordinary growth aided by decades of liberalization, cheap labor, and a cheap currency, China has steadily lost control over its exploding economy. While it has reaped tremendous benefits from its embrace of global capitalism, the feeling that the Chinese government is losing control of its economy, as well as a slew of social and environmental problems, is making the Chinese government rethink its developmental strategy to better reflect its goals and needs. In light of the on-going global economic downturn and China's commanding performance in it, it now has the opportunity to regain control of its economy and guide it towards sustained long-term growth in both exports and domestic sectors.

⁷ See Chapter 2 for China's response to the global recession, and Chapter 4 for US policies towards China

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Chapter Two

The Financial Crisis and the Chinese Response

2007 - 2009

Global Financial Crisis and the Chinese Response

Elizabeth Lyons, Stefan Myers, Nathan Snyder and Kendall Smith

Introduction

From the turn of the twenty-first century to the summer of 2007, global wealth in trade and financial markets burgeoned to unprecedented heights. Globally, real interest rates remained low and reduced restrictions on capital flows spurred a global financial boom.¹ International trade grew dramatically, causing upward pressure on asset values. Banking and financial markets interlinked worldwide through sovereign wealth funds and highly leveraged hedge funds held by large investment banks including Lehman Brothers, Bear Sterns and Goldman Sachs.² These financial institutions established a 'shadow banking' industry in which complex financial instruments encouraged risk taking in global markets. During this economic peak, the financial industry, rising property values and the US Federal Reserve Bank promoted an easy credit environment that drove US consumption.

Increases in capital flows and complex investment portfolios encouraged heightened levels of wealth, trade and integration. These developments further promoted the economic trends outlined in Chapter One and cemented China's centrality as a leading export economy. As discussed, the 1980s initiated linkages between Chinese manufacturers and US retailers. By the turn of the century, China-US bilateral trade constituted the predominant trade channel in global commodity markets.³ Advancements in communications, transportation and technical logistics allowed retailers and merchandisers to rationalize global supply chains. American manufacturing declined rapidly as US retailers, faced with heavy competition, sought lower price points. China and other South East Asian manufacturers capitalized on low labor costs to deliver cheap commodities. Beginning in earnest after the Plaza Accord in 1985, the Chinese government embraced export-led growth. The implementation of a pegged exchange

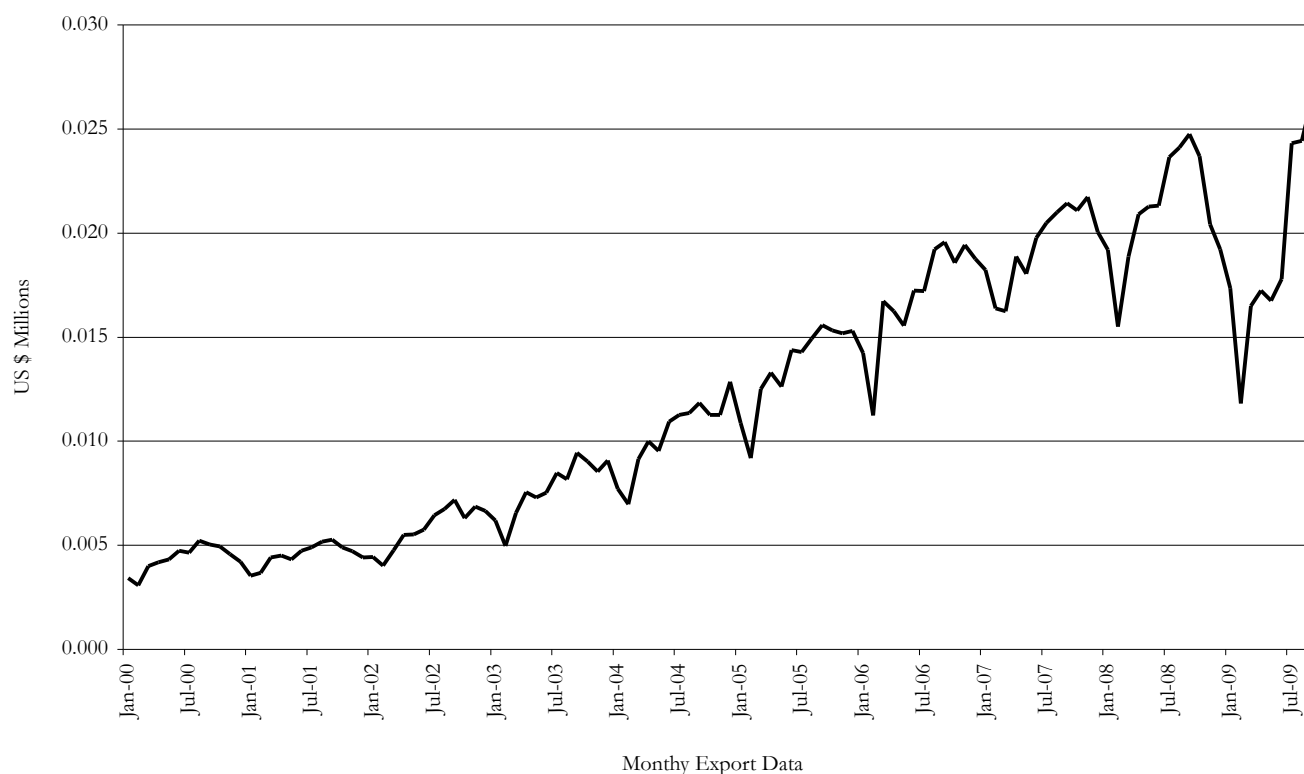
rate artificially depreciated the price of Chinese exports in world markets. Coastal provinces, such as Guangdong and Zhejiang, became export manufacturing centers, attracting foreign investment and driving China's rapid economic growth. See Figure 2.1 demonstrating the growth in Chinese exports to the US from the 2000 to 2009 period.

Global imbalances in trade and capital flows polarized global regions into zones of consumption and zones of production. The US and Europe maintained significant and growing account deficits, reflecting the role of consumption as an economic driver domestically. Emerging economies, led by China, accumulated massive account surpluses. These surpluses reflected high household savings rates and the predominance of export sectors in driving growth. These economic imbalances were linked through global supply chains. The imbalances were only sustainable because other countries offset their impacts: China credited the US account deficit, and the US purchased Chinese goods that faced no demand in domestic markets.⁵ From the late 1990s to 2007, trade and wealth grew to unprecedented heights in the global system, fuelling these systemic dependencies further.

Global Economic Integration: The Success of Export-Oriented Growth

From 2000 to 2008, the proliferation of trade channels, trade transactions and investment abroad integrated global economic operations. International corporate subsidiaries set up operations in South East Asia to capture larger market shares. Through these foreign enterprises, emerging economies received technology transfers and expertise from foreign firms. In addition to statements professing commitments to market liberalization, Chinese officials restructured the Foreign Direct Investment (FDI) regime in 1999 to attract

Exports to US

(Intro Figure 2.1)⁴

foreign investors and propel the export production capacity of the economy.⁶ In the wake of WTO accession in 2001, Chinese policymakers lowered import tariffs and eased FDI restrictions. The restructuring allowed foreign operations to function independently from Chinese joint ventures, facing less red tape and lower tax rates than Chinese firms.⁷ This trend, documented in Chapter One, progressed well into 2005. Chinese policymakers continued to adopt liberalizing policies that promoted a more profitable investment environment in China. As a result, foreign enterprises' profits strongly rebounded throughout 2000 to 2008. China received \$75 billion in FDI in 2007 alone. These trends contributed to ballooning U.S. corporate profits and finance activity.

China's economic success is tempered by the heavy role that foreign firms played in promoting this growth.⁸ In the electronic and information technology sectors, many foreign firms used China simply as an export platform. In 2003, "foreign firms accounted for 92 percent of China's \$41 billion in exports of computers, components and peripherals and 74 percent of China's \$89 billion in exports of electronics and telecommunications equipment."⁹

Not only did western companies account for large ownership shares in Chinese export growth, but neighboring Southeast Asian firms also played a significant role in China's supply chain. On China's list of 200 largest export firms in 2003, 28 are Taiwanese owned, and all of those 28 are electronic manufacturers.¹⁰ While China operated a major trade surplus with the US, "its trade deficit with the rest of East Asia ballooned from \$34 billion in 2001 to \$47 billion in 2002 to \$70 billion in 2003."¹¹ China has been credited with reviving demand for exports from Taiwan, South Korea after the disastrous 1997 Asian Financial Crisis. While this position has painted China as something of a locomotive driving East Asian economic growth, it also reveals China's dependent relationship with local trade partners. While it is important to acknowledge the structural economic relationship between China and neighboring Asian economies, the deficits China holds with Korea, Taiwan and Japan are currently insignificant compared to the massive account surplus with the US. China's fiscal deficit accounted for only 0.4 percent of GDP in 2008.¹² Throughout the 2000-2008 period, China's external international position remained solid, primarily because the

leverage it held with its current account surplus.¹³

Between 1980 and 2007 the Chinese share of global GDP rose from 1.7 to 5.9 percent.¹⁴ China became the largest recipient of FDI worldwide.¹⁵ Large investment projects closely integrated the Chinese economy with G-3 demand (Japan, The European Union and the United States). Dynamic correlations between western business cycles and the Chinese industrial sector drove specialization in manufacturing.¹⁶ A study by Ligang Liu demonstrates the degree of business cycle synchronization between China's output and G-3 GDP strongly increased from the 1990-1999 period to the 2000-2005 period. During this final period of analysis, combined G-3 shocks appear to explain close to 60 percent of output variations in China and over 40 percent of variations in China's price changes.¹⁷ This correlation indicates the growing partnerships and dependencies between foreign firms and manufacturing in China. In order to attract FDI, quarter after quarter, Chinese manufacturers had to continuously increase productivity and foreign firms' profit margins. Accordingly, production systems were streamlined to better serve foreign orders, emphasizing "low manufacturing costs, high efficiency, good quality and high credibility."¹⁸ Commodity designs reflected market demand in G-3 economies and faced no demand in Chinese consumer markets. This orientation of Chinese manufacturing introduced vulnerabilities to declines in G-3 demand. Despite these vulnerabilities, export-oriented growth served to significantly boost manufacturing and industrial productivity gains.¹⁹

Export manufacturing in China became the driving force behind growth. By 2007, China's exports to the US were 19 percent of total exports, constituting 62 percent of China's trade surplus. In addition, 5 percent of Chinese GDP depended on US exports.²⁰ Reciprocally, the US trade deficit continued growing; from \$403 billion in 2003 (year end) to \$1.95 trillion as of December 2008.²¹ Bilateral US-China trade was a domineering force in both economies, shaping structural trade flows and confirming a dependency between the two countries. This trade relationship was characterized by imbalances, one that depended on growing account surpluses and deficits. Before policymakers in either country fully acknowledged the potential danger of imbalanced growth, the Chinese government took gradual steps to rein inflation, while promoting the same export-oriented growth strategies.

Paradoxical Growth: Encouraging the Rapid Growth Model While Reining in Inflation

In October 2007, China was maintaining a 13 percent growth rate. Rapid growth created an overheating economic environment, as did structural economic integration with G-3 demand cycles. G-3 cycles had an immediate impact on Chinese domestic indicators, including inflation.²² Initially, any concern for Chinese economic vulnerability to western demand was outweighed by pressure to maintain high investment and growth levels. By 2001, officials in Beijing began to recognize over-inflation.

The high growth and investment rates aided President Hu Jintao's consolidation of political power.²³ He utilized this power to assert inflation-fighting policies. Beginning in 2001, Beijing authorities began to purchase foreign exchange reserves as part of their sterilization policy. In an attempt to control inflation and price spikes, the central bank purchased dollar-denominated securities. In 2004 alone, Chinese holdings of reserves increased by \$206.3 billion.²⁴ The US Federal Reserve Bank, in need of creditors for the growing account deficit, continued to sell Treasury Bonds and securities to the PBoC. High bond prices generated lower yields and therefore lower interest rates, further driving the systemic easy credit, high consumption environment in the US.

To exploit this high consumption environment in the US, Chinese monetary policy focused on maintaining low commodity prices in international markets. The RMB pegged currency regime keeps the RMB at a depressed value denominated in US dollars. The currency peg remained unchanged from 1995 to July 2005. In 2003, it was estimated that the RMB was undervalued by 15 to 25 percent.²⁵ Responding to international criticism, Chinese officials attempted to relieve pressure on the exchange rate by reducing tax rebates for exports to the US, making Chinese exports more expensive.²⁶ Since July 2005, the currency has appreciated slightly through the implementation of a managed floating exchange rate system. Chinese officials maintained the undervalued peg at 8.28 RMB to the dollar.²⁷ While these policy moves initially signaled greater flexibility and market determination of the RMB value, these objectives were never fully realized. Chinese officials have remained entirely committed to maintaining the pegged exchange rate intact in

order to propel export-oriented growth.

Despite the overheating in the economy, Hu Jintao's administration pursued policies that continued to promote rapid growth through investment and export, while controlling inflation.²⁸ The result has been a complex and limiting monetary system that binds the hands of Chinese policymakers in exercising traditional monetary policy (interest rate adjustments). Specifics and potential hazards regarding these policies will be explored in section three of this chapter. These policies have had a major impact on the post-recession strategies of the Chinese government.

To further ensure high investment inflows and account surpluses, Chinese officials placed high restrictions on capital outflows in 2005. These limits on corporate investment outside of China compelled many Chinese to save or invest locally, contributing to the Chinese savings glut.²⁹ In 2007, Chinese households saved almost 35 percent of their total income, compared with a miniscule .5 percent by their US counterparts.³⁰ Underdeveloped Chinese stock and equity markets further limited household and corporate investment opportunities.

In 2003, China Banking Regulatory Commission began to decrease China's non-performing loan ratio from over 20 percent in 1990 to 1.8 percent in June 2009.³¹ These restrictions limited Chinese banks' exposure to private sector investments and sub-prime U.S. mortgage investments.³² Although FDI flows to the Chinese economy were a major contributor to high GDP levels, China only received 12 percent of its FDI directly from G-3 countries. In fact, indirect FDI through Hong Kong accounted for 44 percent of FDI received by China.³³ This buffer zone through Hong Kong served to mitigate direct outflows of investment and protected Chinese firms from potentially cumbersome and domineering relationships with foreign investors. Prior to 2007, Chinese officials focused on securing a strong external position economically, creating solid economic fundamentals through lowly leveraged banking, household, public and external sectors.³⁴ From 1991 through 2006, the US current account deficit rose from roughly zero percent to 6.5 percent of US GDP, with 40 percent of the increase occurring after 2001.³⁵ The majority of this incline can be contributed to the growing trade deficit with China.

Policies enacted in both the US and China supported the expansion of this unbalanced trade regime throughout

2005. Chinese officials were intent on maintaining the depreciated RMB peg, stalling inflation and encouraging growth through export strategies. Their US counterparts were intent on maintaining the growth of asset values, stock indexes, and low interest rates to spur domestic consumption. This partnership inherently deepened the trade deficit and surplus. Imbalances went largely unnoticed, at least officially. Amidst soaring portfolio values in the US and skyrocketing growth rates in China, future indexes and growth trends appeared to only be heading upwards. In this environment, few policymakers voiced concerns for restructuring global imbalances. Up until July 25th, 2008, official Chinese policy continued moderate contractionary efforts, while promoting export growth. The slogan adopted by Chinese officials in the Politburo meeting was "preserve while controlling" (yi bao yi kong), "that is, preserve rapid growth, while controlling overly rapid inflation."³⁶ This late in the summer of 2008, Chinese officials did not believe the global recession would force a structural re-evaluation of their economy. Eventually, the global financial crisis of 2008 caused a complete turn around in Chinese policy as officials tried to promote domestic consumption and decrease trade imbalances. Until this force shocked the domestic Chinese economy, market liberalization and export-motivated growth remained the primary strategy for Chinese policymakers.

Maintaining a Dual Economy in Light of Capital Market Liberalization

While capital market liberalization remained primary for Hu Jintao's administration, certain policies indicate a minor preservation of a dualistic economy in China. The need to protect Chinese firms and State-Owned Enterprises (SOEs) from complete vulnerability to western economic cycles encouraged certain protectionist measures and monetary policies. Export-oriented growth may have left the Chinese economy severely vulnerable to sector-specific shocks. As outlined by Bransetter and Lardy(2006), in light of WTO accession in 2001, the Chinese government outwardly embraced market liberalization and implemented policies that promoted integration with the global economy. However, monetary policies and industry specific maneuvers indicate different concerns in Beijing before the global financial crisis

took hold.

Initially, this sentiment is revealed in the sterilization of non-performing loans from bank balance sheets in 2007³⁷ (see previous section). Secondly, Hu Jintao's implementation of strict capital controls, especially on outflows, prevented complete financial integration with the global system by prohibiting Chinese firms from unrestricted investment abroad. Thirdly, it can be argued that financial repression has placed the PBoC in the command chair to favor SOEs over other firms through lending. It may be argued that these policy moves are an attempt to counter larger market share captured by private and foreign enterprises as a result of liberalizing policies.

Banking and monetary policy has intervened since the mid-1990s to maintain an undervalued exchange rate. Lardy (2008) argues that the cost of maintaining this peg is mitigated by a repression of real interest rates. Noticeably taking effect in 2002, real interest rates have not adjusted to benchmark rates through liberalized markets.³⁸ Instead, the central bank nearly prohibits fluctuations in the real interest rate on demand deposits. The result is low and negative real returns on deposits and an inefficient allocation of capital among Chinese firms. This manipulation of lending availability and the actual cost of borrowing unduly hurts household and corporate savings. Controlling the majority of credit available for lending, this policy puts the central bank in a position to favor SOEs and industry specific enterprises to their liking.³⁹ Several studies including Boyreu-Debray et. al (2005), Wei (2007) and Lardy (2008) demonstrate that financial repression has resulted in an inefficient allocation of funds, preferably directed to SOEs over small and medium sized firms.⁴⁰ Section Three of this chapter on China's Banking Sector will discuss the effects of this policy in more detail. It is important to acknowledge that financial repression and differential treatment in the allocation of lending was taking root in 2002. This analysis reveals overcapacity and inefficiencies within the economy prior to the global financial crisis of 2008. In an era where productivity gains were crucial to firm survival, vertical integration and technology transfers in foreign and joint-stock firms out-competed more cumbersome SOEs that lacked these attributes. The PBoC enacted manipulative interest rate policies during the height of the trade and capital liberalization period. This occurred at a time when foreign, joint stock and SMEs were increasing

market shares.

On the other hand, these observations must be tempered by the fact that gains in trade due to the liberalization policies and WTO accession in 2001 far outweigh any reallocation of funds to the SOEs. The private sector, including private firms, foreign firms and joint ventures, accounted for the majority of international trade during this period. The Chinese government did indeed cultivate the expansion of these firms simultaneously.⁴¹

This interplay is exemplified in the case of steel industry, where the central government implemented its desire to consolidate state-owned firms through monetary policy. During 2000-2007, small and medium sized (SMEs) steel firms gained larger market shares by achieving higher productivity levels than large SOE competitors. Naughton (2009)¹ demonstrates how the Chinese central government attempted to utilize the state-run banking sector as an agent to extend industry and corporate interests. In 2003, a wave of industrial policies emerged that were "supposedly neutral toward ownership, but in fact were heavily biased toward the state sector."⁴² By repressing interests on savings deposits made by corporations, the central government tempered the growth of private firms and SME in the steel industry from 2003-2007. Instead, this money was redirected to the central banking sector, which continues to implement explicit and implicit policies toward private firms and SMEs in line with the central government's interest. Chinese political history surrounding a dualistic economy has oscillated between SOE favoritism and promotion of private/ foreign-enterprises. In the period prior to the global financial crisis, the oscillations skewed toward favoring foreign enterprises and private enterprises in many ways. However, the central government via the PBoC attempted to maintain oversight in select industries.

While the Chinese economy did indeed become more open and advantageous to foreign investment during the WTO accession period, the Chinese central government remained cautious toward complete integration of SOEs, joint-firms, private firms, and foreign firms. Despite increasingly integrated and indistinguishable firm networks, Chinese economic duality did exist throughout the economic

1 Naughton, Barry. "Loans, Firms, and Steel: Is the State Advancing at the Expense of the Private Sector?" China Leadership Monitor no. 30. Fall 2009.

liberalization period (1990s – 2005). The central government targeted certain provinces as export hubs, directing investment and capital to these regions. China secured itself as an export and processing platform of South East Asia, central in the Asian manufacturing supply chain. Workers migrated to these cities, hungry for employment in the multiplying factory sites. Through fiscal engineering, Chinese policymakers attempted to maintain oversight in the industrial sector at a time when foreign enterprises and foreign money flushed the Chinese manufacturing sector.

Housing Market Bubble in the US

Concurrent to the low lending, high savings environment in China, American counterparts operated under starkly different economic conditions. The easy credit environment in the US drove consumption and risky investments throughout the 2001 dot-com boom and the housing bubble in 2005. As a result of global imbalances that kept US interest rates low, a global savings glut fueled a derivative and housing bubble. In the late 1990s, the US Federal Reserve Bank reduced the issuance of Treasury bonds. Foreign investors looked to the next safest US assets: quasi-government bonds issued from mortgage lenders like Fannie May and Freddie Mac. Simultaneously, Fannie Mae and Freddie Mac expanded their bond-issuance and mortgage lending, laying the foundations of the housing bubble in the US.⁴³ The US financial system restructured and exploited the value of lower sub-prime mortgage backed securities, selling them in highly leveraged capital and money markets around the world.⁴⁴

Overvaluation of financial assets fueled commodity consumption and a ballooning housing market. Peaking in 2005, many homeowners restructured and leveraged mortgage assets to further access cheap loans. Lenders wrote out \$625 billion in sub-prime mortgages in 2005.⁴⁵ In the boom of mortgage lending, financial institutions utilized complex financial instruments such as securitization, derivatives and auction-rate securities to repackage mortgages, resell them, and shift loan risk.⁴⁶ Risky mortgage securities and other asset-backed securities hit \$187 billion in 2006.⁴⁷ Newly innovated financial architecture that separated debt origination from its packaging and ownership was up 72% from 2005 to 2006.⁴⁸

The non-banking financial system, or shadow

banking, grew dramatically during the boom. In early 2007, asset-backed commercial paper conduits, in a number of financial instruments, hit \$2.2 trillion. Assets in hedge funds grew to roughly \$1.8 trillion and the combined balance sheets of the then five major investment banks totaled \$4 trillion.⁴⁹ These assets were assumed to be readily sellable at fair values, the liquidity supporting them was assumed to be continuous.

In the summer of 2006, the housing bubble collapsed and sent home-building shares down 41 percent since the previous year. New home sales fell 15 percent.⁵⁰ Due to the complex integration of housing asset values, the mortgage market and shadow banking industry, the decline in property values caused security values to plummet. In addition, falling asset values eroded capital cushions and “were resold into distressed markets.”⁵¹ In 2007, banks faced a severe liquidity trap due to defaults of mortgage loans. Banks could no longer absorb the ‘bank-run’ the non-banking system created and many suffered a sharp increase in the cost of borrowing.⁵² Once investors “withdrew or threatened to withdraw their funds from these markets, the system became vulnerable to a self-reinforcing cycle of forced liquidation of assets, which further increased volatility and lowered prices across a variety of asset classes.”⁵³

Throughout 2007, the US economy experienced low to negative rates on numerous economic indicators including unemployment, declines in household incomes and declines in real GDP. A domestic recession was announced during the third quarter of 2008, as GDP rates recorded negative growth for the second quarter in a row.

Despite a significant deterioration of the US economy, the Chinese government continued to invest in U.S. securities including long term Treasury debt, federal agency debt, corporate debt, U.S. equities and short term debt. The Treasury Department estimates that as of June 2008, China’s holdings of U.S. Securities totaled \$1,205 billion (up from \$922 billion in June 2007).⁵⁴ By continuing to finance the U.S. account deficit, China continued to encourage its export regime growth. However, in the wake of the financial crisis, Premier Wen Jiabao expressed concern that these macro-imbalances would not continue to secure a stable, dollar-denominated globalized economy.⁵⁵ However, at this time, Beijing remained committed to its dollar-denominated assets to maintain Chinese export competitiveness despite the

decline in external demand.

Global Financial Crisis

Integrated investment portfolios spread contagion to major banks across Europe and Japan. Iceland experienced a severe financial meltdown as banking capital seemingly evaporated overnight. By 2008, bank capital had diminished to such a degree that many major commercial and investment banks were on the verge of collapse. In September 2008, Lehman Brothers reported bankruptcy and other top U.S. financial institutions faced a nearly closed money market, with three, six and twelve month paper unavailable.⁵⁶ Central governments from the U.S. to Germany scrambled to raise funds to buy off toxic assets from banks' balance sheets in a desperate effort to return some liquidity into the lending market. Banks desperately clung to what cash they had, and "the gap between the inter-bank three-month lending rate and expected average base rate over the same period rose to new highs."⁵⁷ The stabilization and recapitalization of banks became a major necessity for countries from India to Japan, the U.S. and Britain.

From 2007 to 2008, the icons of modern US financial system were uprooted. The public accused investors of 'irrational exuberance' in their financial activities. This exuberance was reflected in a bumber of changing factors in the financial system over the previous decade. First, the culture surrounding Wall Street investment impressed Panglossian attitudes or 'efficient market hypothesis' as a guiding principle; asset markets are the most rational in its use of information.⁵⁸ Secondly, the negligence of financial regulatory bodies created an irresponsible investment environment.⁵⁹ Finally, the complicity of rating agencies in understating risk allowed newly innovated financial instruments to dominate investment portfolios.⁶⁰ These intersecting factors contributed to the eventual implosion of the US financial system. The windfall from the collapse of the housing market collapsed gripped the US economy in one of the greatest economic downturns since the Great Depression.

The global financial crisis marked the "first outright contraction since the end of World War II."⁶¹ Relative to the forty-year world growth in output of 3.7%, 2009 marked a 1.5% decline in world GDP. For a \$64 trillion global

economy, such a shortfall translates into \$3.2 trillion foregone in world GDP.⁶² America's financial irresponsibility and fiscal excess was criticized globally. Calls for a more regulated international financial system echoed through government chambers worldwide. The ability of globalization to drive trade, wealth creation and growth rates was suddenly palliated, as those same integrating forces spread recessionary declines globally. Unbalanced global trade became unsustainable and dangerously unregulated.

This chapter will document the effects of the global financial crisis on the Chinese economy. From there, we will explore the policy responses implemented by the Chinese government and how these responses have shaped current economic conditions in China.

Section One. Immediate Effects in China: Contagion through Trade Channels, Not the Banking Sector

From the turn of the twenty first century to summer of 2007, global economic integration reached unprecedented levels. The first section of Chapter Two will explore the immediate effects the global financial crisis on the Chinese economy. Economic indicators reveal plunges in Chinese stock indexes, firm bankruptcy and productivity declines. The drop in global demand reduced Chinese exports, FDI and capital flows to China. Domestic unemployment increased, property values fell and construction of new projects slowed. These macroeconomic shocks were countered by a strong external position. The Chinese public debt remained low and foreign reserve holdings increased during the financial crisis. The high savings rate and capital stock allowed Beijing to enact fiscal and monetary stimuli to stabilize the economy. In November 2008, the Chinese government responded to the global financial crisis with a stimulus package and a new wave of monetary policy.

Section Two. The Chinese Stimulus Package

Section Two examines China's fiscal stimulus in detail and assesses its effectiveness in responding to the economic crisis. The stimulus targeted unemployment, domestic demand, social programs, transportation and power infrastructure, and China's ten "pillar industries". As a result of the stimulus, China successfully rebounded from the crisis, boosted

demand and achieved targeted GDP growth above 8 percent for 2009; however it is unclear that the stimulus will help to resolve China's economic imbalances. The Chinese economy is heavily reliant on exports and investment-driven growth. Scholars and economists have looked to the stimulus for signs that it would correct these imbalances. However, the focus of the stimulus has been primarily investment in infrastructure, with less priority given to social spending, and it is likely that currently supported domestic consumption will not sustain with the retreat of the stimulus. In response to recent signs of overheating, Beijing's policy focus has shifted more towards social spending for 2010, with less emphasis on funding infrastructure projects. However, China has yet to see definite progress in reducing its unprecedented rate of savings, nearly half of GDP, which is largely due to precautionary savings by households due to a poor social safety net. Whether or not China will correct its imbalances and adjust its economy towards a more stable path of consumption driven growth will depend largely on Beijing's commitment to strengthening consumerism. Furthermore, to be discussed in Section Three, the stimulus has largely been funded through a massive expansion of bank credit and lending to local governments, causing inflationary pressures and asset bubbles.

Section Three. Monetary Policy Responses to Global Financial Crisis

Section Three focuses on China's monetary response to the recession, with special attention to the effect of a (quasi) fixed RMB on the ability to utilize monetary policy and the banking sector's expansion of credit in 2008-2009. China's policy of keeping the RMB stable vis-à-vis the US dollar has reduced the government's ability to utilize traditional monetary policy to adjust the economy, and forced the central bank to bear real costs in order to maintain an environment of low inflation. Since the onset of the financial crisis, the authorities have slashed interest rates and greatly reduced the amount of currency banks are required to keep on hand. The banking sector has been pushed to greatly increase loans, providing credit to drive the economy. The banking sector's expansion of credit has been shaped by the non-market influences on monetary policy, will likely increase the future

level of non-performing loans, and may have resulted in a real estate bubble. There is no doubt that the Chinese authorities successfully reacted to the financial crisis in the short-term, but the long-term cost is ambiguous.

Section Four. Achievements of Chinese Policy and the Current Economic Situation

Based on the conclusions of the previous two sections, Section Four attempts to objectively rationalize the Chinese government's response to the financial crisis. In the aftermath of the crisis, many firms in China's export sector have suffered while others have continued to earn year-end profits. In addition to helping mitigate the harmful effects of the recession, recent structural changes in China's banking sector are also an extension of China's 2004 "Go Out," which provides cheap credit and tax incentives to encourage Chinese firms to invest abroad. In the context of the recession, trade imbalances will continue to grow in greater Asia and bi-laterally between China and the US due to the RMB's peg to the dollar. Trade imbalances also have implications on the sustainability of agreements that spur regional economic integration and fiscal policy coordination in the Asia Pacific, such as the Chang Mai initiative and the China-ASEAN Free Trade Area. This section will seek to answer whether China has leveraged the global financial crisis to give artificial competitive advantage to some of its export industries, or gain more influence in both the regional and global economy.

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Immediate Effects in China:

Contagion Through Trade Channels, Not the Banking Sector

Elizabeth Lyons

Summer to Fall 2008: Subtle Impacts, Chinese Exports Remain Strong

During 2008, the US economy was gripped by a tightening recession. As job loss became pandemic, containment of the financial crisis became more and more improbable. Fuel and food prices rose steadily, provoking concerns of downturns in commodity markets globally. From the second half of 2008, the US economy entered a period of stagnation, which spiraled to -3.6 GDP growth rates in the first half of 2009.¹ The crisis that originated on Wall Street would not be limited to the banking and financial sectors. Integration of global financial activity contributed to an evaporation of liquidity internationally. In much of the developed world, banking sectors experienced severe liquidity traps. Politicians and central banks struggled to offset complete implosion of their financial systems. The European Central Bank, Bank of England and US Federal Reserve Bank “tried to stem panic by flooding financial markets with liquidity.”²

Critics argued that a root cause of this economic catastrophe was policymakers’ “misguided reactions to globalization” that promoted massive trade imbalances and the “rapid build up of reserves in the emerging world.”³ Accordingly, “the increasing economic heft of the emerging world” became a new characteristic of the global economy previously unknown to world leaders.⁴ At a time that developed countries’ banks were struggling to remain afloat, “capital [remained] plentiful outside of Western finance” for the most part.⁵

The Chinese banking sector remained largely unscathed from the toxic assets and non-performing loans that led to the multi-country banking crisis.⁶ As leaders in the developed world battled to underscore the severity and scale of the crisis, “China, the biggest, most resilient emerging economy and the one with the deepest pockets, [stood] quietly

on the sidelines.”⁷ The Chinese banking sector remained “fairly healthy, well-capitalized, and endowed with ample liquidity.”

⁸ External demand continued to drive exports during 2008.⁹ Chinese policymakers officially voiced concern for a more balanced growth path. In a March 2007 press conference after the National People’s Congress, Chinese Premier Wen Jiabao said that “China’s economic growth is unsteady, unbalanced, uncoordinated, and unsustainable.”¹⁰ This statement voiced concern that China’s growth was overly dependent on increasing investment spending and a rising external surplus, and structurally suppressing household consumption. As discussed in the introduction of Chapter Two, the Chinese Communist Part Central Committee formally called for a rebalancing of growth sources as early as 2004.¹¹ However, these attempts to increase household consumption largely failed among more aggressive ambitions for a continuation of rapid investment growth.¹²

The continuation of rapid investment growth ambitions throughout 2004-2008 is exemplified by increasing PBoC intervention in foreign exchange markets. In August 2007, the central bank attempted to dissipate foreign exchange holdings throughout local banks by requiring some banks to “meet the increases in required reserves by placing foreign-currency rather than domestic-currency funds at the central bank.”¹³ This policy reduced the frequency of PBoC intervention in foreign currency markets, but did not reduce the magnitude of reserve holdings by the central bank. The policy served to dissipate liability holdings of foreign exchange throughout local banks across the country.¹⁴ The argument can be made that such a policy enforced the structural importance of foreign reserve holdings in the Chinese banking system, serving to intensify structural imbalances in growth policy. It was not until external demand shocks impacted the output of Chinese industry in late 2008 that policymakers decisively

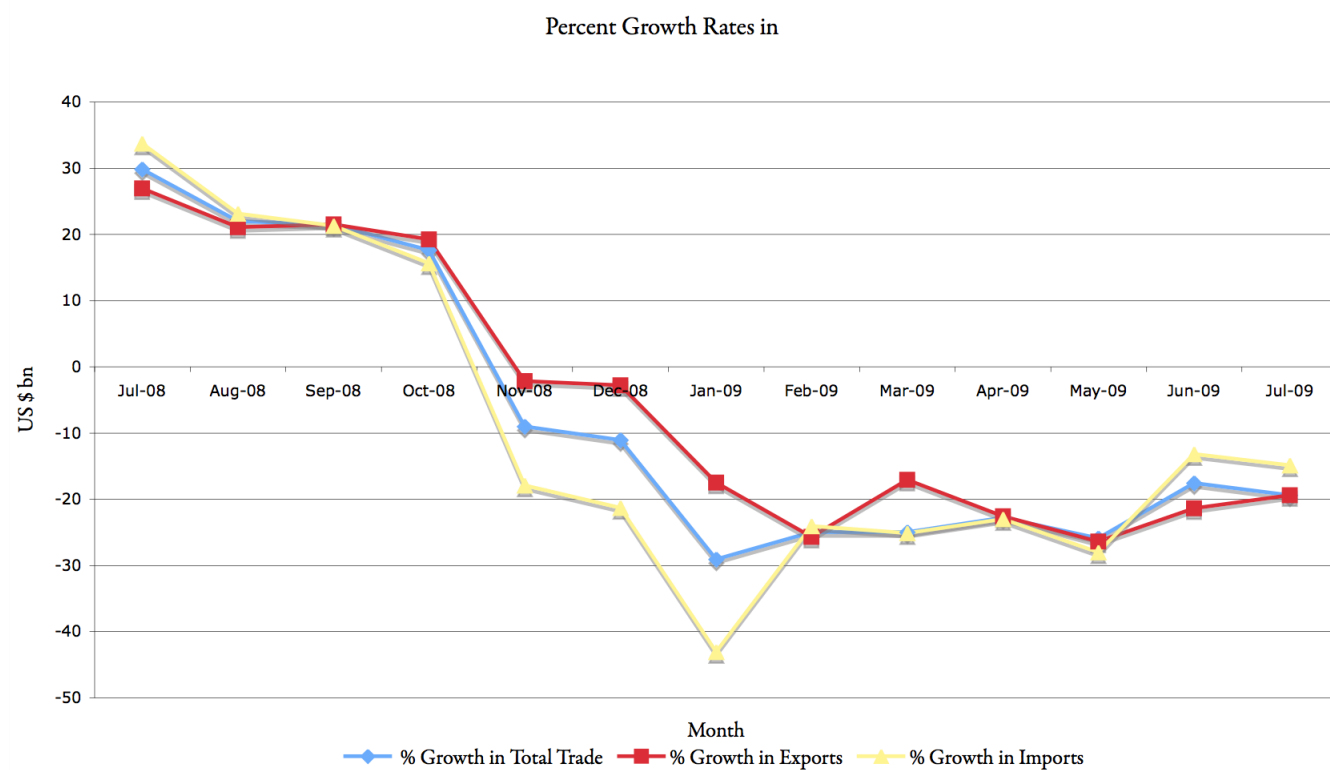
reversed their economic growth strategies.

During the first three quarters of 2008, Chinese officials pursued much of the same policy objectives they favored prior to the credit crisis and investment banking implosion in the US.¹⁵ As late as June 2008, the PBoC raised commercial bank reserve requirements twice in an attempt to further restrain monetary growth.¹⁶ Increasing reserve requirements reduces the amount of money available for lending, contributing to lower consumption levels. In the summer of 2008, there was no indication of a slowdown in export growth. In fact, exports in fact increased 26.9 percent in July 2008.¹⁷ Overheating, not declining, growth remained a serious concern with inflation at 6.3 percent above the year previous level.¹⁸ Beijing remained committed to preserving rapid growth rates through exports, while controlling for inflation and overheating.¹⁹ Housing prices began to decline in 2008, however some economists contributed declining prices to the success of anti-inflationary policies, not to a global economic declines.²⁰

Beginning in July and August of 2008, economic indicators in China began to fall substantially below expectations. Chinese stock indexes experienced precipitous declines, as did two separate purchasing managers' indexes measuring business confidence.²¹ From December 31,

2007 to December 31, 2008 the Shanghai Stock Exchange Composite Index lost nearly two-thirds of its value.²² Electricity production peaked in July 2008 and then began a long, slow decline, reflecting a fall off in Chinese demand.²³ Initially, some of these indicators were difficult to interpret due to a post-Olympic slowdown. However, by November 2008, declines were undeniably a result of global economic contractions, not a windfall from post-Olympic slowdown. Construction of new projects declined by about 4 percent during 2008.²⁴ This decline can largely be attributed to falling external demand, resulting in losses in "private investment particularly in machinery and equipment sectors that have an export orientation."²⁵ Consequently, these initial declines produced concentrated impacts on the export-oriented production hubs in Guangdong and Zhejiang. During the second half of 2008, the impacts of the global financial crisis could readily be witnessed in the Chinese economy through trade channel contagion.²⁶ Beginning in November 2008, both exports and imports witnessed a sharp decline for nine consecutive months until July 2009 (see Figure 2.1.1).²⁷

In response to these changes, the contractionary policies pushed up until June of 2008 were relaxed through an increase in banks lending ratios (a reduction of reserve requirements). Efforts to restrain investment and inflation



(Table 2.1.1.) Source: General Administration of Customs of the People's Republic of China (2009)

were dropped and policymakers became “intently focused on propping up and expanding investment to maintain growth in the face of free-falling internal and external demand.”²⁸ After the collapse of Lehman Brothers in mid-September 2008, the People’s Bank of China cut interest rates for the first time in more than five years. To encourage lending, the PBoC reduced the reserve requirement rate by 216 and 200 basis points respectively.²⁹ In comparison to the 2007-2008 financial havoc that western institutions experienced, Chinese banks had limited exposure to sub-prime mortgage accounts, toxic assets and non-performing loans.³⁰ Bank lending in China steadily increased throughout 2007-2008 and more than doubled from 14.3 % in August 2008 to 34.4% in June 2009. Furthermore, Chinese banks and households were capital secure. The loan-to-deposit ratio was only 66% in 2008 compared to a nearly 100% in US counterparts. Chinese household debt in 2007 amounted to less than 30% of disposable income in China, compared to 120% in Japan and even higher levels in other developed countries. With lending levels up and in the context of the deflationary environment, Chinese consumers experienced a spike in real purchasing power and a growth in household consumption.³¹ Increased liquidity conditions were favorable

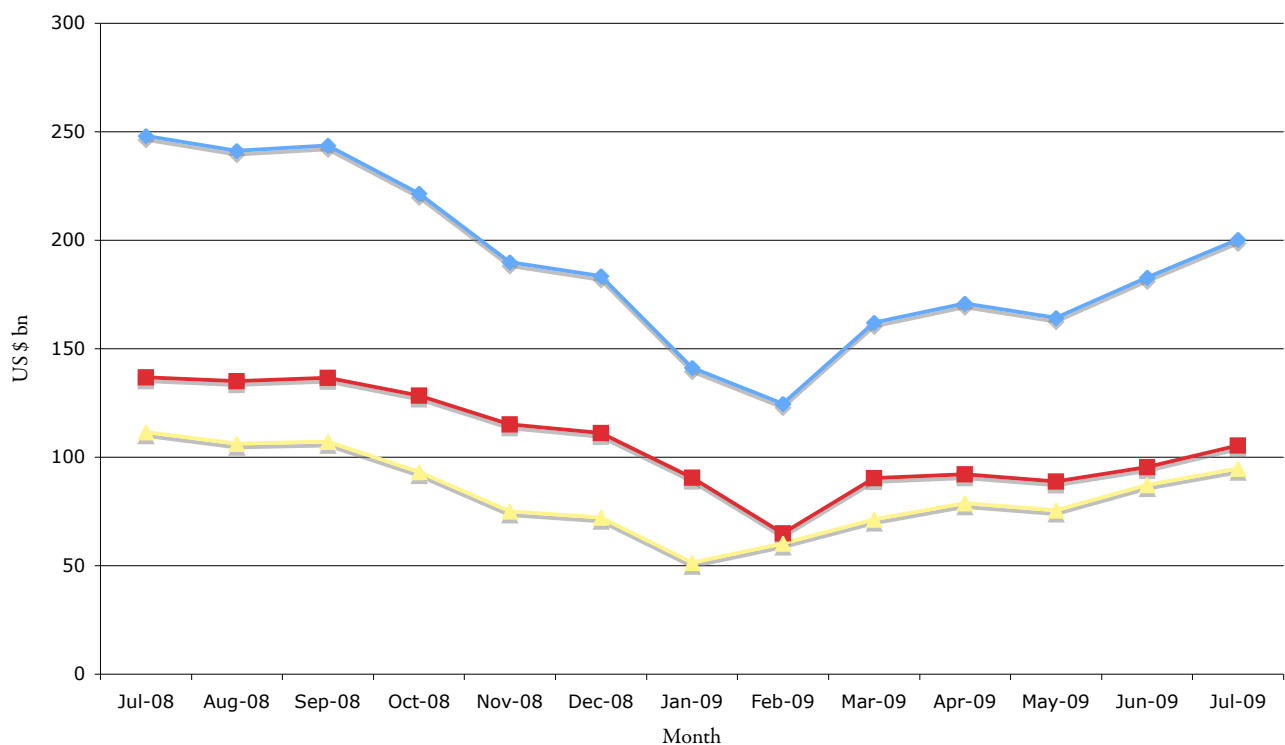
for the Chinese banking system, but did not unanimously provide ample credit for small and medium sized firms. Please refer to Chapter Three on Monetary Policy and the Chinese Banking Sector for a discussion on the inefficient allocation of capital by the Chinese banking sector. Evidence suggests that small and medium sized firms experienced higher frequencies of bankruptcy due to manipulated lending practices by the central bank at this time.

Reduced Demand via International Trade Channels

By the fourth quarter of 2008, any illusion that the Chinese economy would remain partially protected from the global financial crisis dissipated. Fourth quarter growth rates in China conveyed significant contraction of economic activity. The 9.0% growth rate in 2008 “was not representative of the annualized quarter-on-quarter growth rate of 2.6% in 2008: 4Q.”³² The deepening of the US recession contributed to a decline in international capital flows throughout 2008. Refer to Figure 2.1.2 demonstrating declining monthly trade growth near the end of 2008.

Global investors pulled money out of projects and investments in China, resulting in job loss and firm bankruptcy.

Trade Growth (Total Value), 2008-2009



(Table 2.1.2) Source: General Administration of Customs of the People’s Republic of China (2009)

Bankruptcy gripped Chinese firms unable to compensate for the drop off in demand for their exports. As orders for exports fell, large-scale companies in manufacturing and light industry sector were hit the hardest. The garment industry in particular, centered in Fujian, Hebei and Guangdong provinces, experienced a severe decline in operation rate. As early as December 2008, the domestic textile industry was one of the first to experience a structural adjustment and re-shuffling as a result of the global recession.³³ Increasingly, garment export companies that survived re-oriented brand-identity and target markets toward exploiting the domestic markets in China. Even many foreign trade companies looked to re-invent product lines as a result to declines in demand for exports. The final section of this chapter will expand on these market re-orientations and how it is re-shaping domestic consumption in China.

The slowdown in business environment reversed inflation and overheating trends that had dominated policymakers' concerns. In the first half of 2009, deflation emerged: "the CPI took on a negative trend, and government fiscal revenue also suffered negative growth."³⁴ Small and medium sized firms were hit more significantly and experienced higher bankruptcy rates than large private or SOEs especially in coastal export hubs such as Guangdong and Zhejiang. In the beginning of 2008, some firms producing low-margin commodities (shoes and garments) were wiped out as RMB appreciation and rising domestic inflation depleted their low profit margins. From mid 2008 to February 2009, the decline in demand hit heavy industrial production harder than light industrial production.³⁵

Firms faced falling profit margins and slowed capacity as a result of the global financial crisis. A serious decrease in foreign, fixed-asset investment for non-state linked companies has stagnated business ventures and contributed to a slowdown of growth rates.³⁶ Contracted business activity was reflected in household income declines, which also contributed to reduced fiscal revenues beginning in October of 2008.³⁷ Plummeting FDI flows further stagnated Chinese business activity, falling 22.5% between April 2008 to 2009. Reaching a peak of nearly 14% in June 2007, real GDP growth rate declined to 6.1% in the first quarter 2009, the slowest quarterly growth in ten years.³⁸ This rate is dangerously lower than the 8% growth rate needed to maintain employment rates in the expanding urban populations.

Pingyao Lai (2010) explores the output industry collapse epidemic that hit China's coastal provinces due during the November 2008 to July 2009.³⁹ The China's export-oriented structure dependent on rapid investment growth left it particularly vulnerable to external declines in demand. As previously discussed, this over reliance on net exports and investment made China's industries vulnerable to output and employment declines in a short time period. Chapter four of this section discusses Chinese industry collapse in detail, clarifying industry and province specific data.

By February 2009, China's exports and imports were down 25.7% and 24.1% respectively on a year-by-year basis, signifying the biggest monthly decline ever recorded.⁴⁰ Overall, exports were down 15% in 2009. The declines significantly contracted the business operations, forcing layoffs, re-structuring and downsizing. Many foreign firms were the first to revoke subsidiary business contracts and reduce operations in China. The foreign sector in China employs some 80 million people. Many of these jobs quickly evaporated as foreign firms downsized during the global financial crisis. Despite unemployment typically acting as a lagging variable of a recessionary environment, the strong presence of foreign firms in China preemptively reduced employment rates before growth declines gripped the Chinese economy on the whole. In 2008, 20 million migrant workers alone lost their jobs.⁴¹ Job loss presents a serious concern for Chinese policymakers. Job loss could potentially harm social stability due to the lack of social services and benefits and the rapidly increasing number of migrant workers seeking employment in urban centers.

The property market in China faced declining asset values well into 2009. Construction slowed and many urban cities experienced a higher percentage of unoccupied buildings.⁴² Housing is an important asset market in China, accounting for 25% of fixed investment in China. Consequently, instability in the housing market has harmed the equity values of many household assets. Property sales slowed throughout 2008 and 2009, lead by the hesitation of cash-strapped developers anticipated lower prices.⁴³

The fall in imports into China has produced a disastrous ripple effect for neighboring South East Asian economies. About 70% of Chinese imports from its neighbors are components used as intermediate goods for export-oriented industries.⁴⁴ For countries including Korea, Japan, Taiwan, and Vietnam, the recessionary fall in demand has

been twofold; both worldwide and from declining need for their exports in China. China is Korea's largest export market. Korean exports to China plunged 32.9% between November 2008 to November 2009.

Initial Policy Responses: RMB Internationalization

In July of 2008, policymakers acknowledged stress in export-oriented industries and suspended all RMB appreciations.⁴⁵ In an effort to maintain the competitiveness of exports despite the reduced purchasing power of western consumers, Chinese officials conveyed an interest in RMB internationalization. Previously committed to a highly controlled currency regime, Beijing became more "enthusiastic about RMB internationalization" in September of 2008.⁴⁶ Beijing officials have pursued the prospect of regional currency and financial cooperation denominated in RMB. Since June 2007, "five mainland financial institutions have issued seven batches of RMB-denominated bonds in Hong Kong, pooling a total value of RMB 22 billion."⁴⁷ In addition, the Chinese Government has signed bilateral currency swaps worth a total of US \$23.5 billion with other East Asian countries as part of the Chiang Mai Initiative. "Since the eruption of the current global financial crisis, the process of East Asian currency and financial cooperation has accelerated."⁴⁸ This movement toward East Asian economic integration independent from western involvement has been an underlying prerogative of the Chinese government. As the global financial crisis began to shake the Chinese economy, Chinese officials pursued this alternate currency regime focused on Asian regional economic integration. The dependence on the U.S. dollar and the trade imbalance it fosters unsettled policymakers in Beijing seriously in October of 2008, and an unmistakable shift in overall direction was announced later that month.

Shift in Policy Approach: The Stimulus Package

Tensions surrounding the deteriorating economic condition culminated in October, 2008. The Third Plenum of the 17th Party Congress met in Beijing under the proclamation to address strengthening property rights in rural areas. The topic of the meeting was quickly diverted to the growing economic crisis. Premier Wen Jiabao laid out ten policies intended to

"increase domestic demand, prop up investment and exports, and sustain growth."⁴⁹ These policies indicated a marked shift in Chinese policy approach to the crisis. No longer was it maintenance of export-oriented growth, but a "complete U-turn from its June [2008] orientation."⁵⁰

On November 5th, 2008. Premier Wen Jiabao announced a four trillion RMB stimulus package, 16% of 2007 GDP.⁵¹ The announcement initially caused sensation worldwide but was received with skepticism in the US. Initially, US economies and policymakers believed a stimulus of only \$586 billion would not produce significant changes, especially given the unclear spending breakdown. Investment and distribution of the package would occur over the next two years, with an emphasis on provincial government distribution and rural infrastructure projects including rail transport, affordable housing, and earthquake reconstruction. One questionable objective for these projects is to raise living standards, contributing indirectly to greater household expenditure in an effort to increase domestic demand.⁵² The central government's direct RMB contribution to the stimulus package is 1.18 trillion RMB, which is "supposed to elicit 2.8 trillion of complementary investment from 'society'."⁵³

The contagion of the financial crisis to the global economy had a significant impact on global trade and investment flows. China, a country heavily dependent on international investment flows, experienced downturns in manufacturing sectors due to a decline in capital flows and demand for exports. The Chinese government recognized these immediate effects astutely and acted quickly to prevent a potentially disastrous economic recession. While negotiations stalled western bank bailouts and the introduction of stimulus packages, the Chinese government responded decisively. In November, 2008, just months after the beginning of FDI drops, Beijing introduced a \$586 billion stimulus package to restore growth. Focused on infrastructure projects, boosting domestic demand and encouraging bank loans, the stimulus package addressed many of the immediate effects discussed in this chapter head-on. Some argue "the global financial crisis will be an opportunity for China to decisively address its existing structural imbalances and return its economy to a sustainable path."⁵⁴ Additionally, because China's finance and banking sector were largely protected from the crisis, they will play an important role in restructuring the global financial architecture to protect against future imbalances.

Given China's favorable fiscal position and tight monetary policy during the global recession, China is actually "well positioned to use both fiscal and monetary policy instruments to stimulate the economy."⁵⁵

While this chapter reveals the economic contractions that rippled through the Chinese economy as a result of the global financial crisis, I argue that certain sectors of the Chinese economy remained secure, mainly the banking sector. The global recession in the developed world was characterized by a collapse of the banking sector, freezing liquidity, and gripping recession. In China, the banking sector remained flushed with capital and strong. It was not until the decreased global demand reduced manufacturing orders did the Chinese feel economic tightening. The global recession filtered into the Chinese economy through commodity market networks and linkages. Coastal manufacturing centers were experienced spikes in unemployment, declines in construction and building, FDI outflows and firm bankruptcy. In light of these impacts, the rapid investment growth structure no longer support rapid growth.

Policymakers in Beijing astutely recognized the instability and vulnerability of this imbalanced trade system. Prior to the fall 2008 downturns in exports and growth rates, the Chinese government made motions to insulate parts of their economy from full vulnerability to external demand (see Introduction of Chapter Two). However, policy attempts to increase domestic consumption and household spending rates largely failed. The stimulus package directly seeks to boost domestic markets. In addition, movements to improve regional integration with other East Asian countries, through RMB internationalization, also signal Beijing's desire to advance its regional economic predominance in the global system.

The subsequent chapters will discuss the policies of the Chinese stimulus package in detail, their intended effects, and the degree of success Beijing achieved in implementing these policies. Success will be considered in terms of reversing the economic downturn and improvements upon previous weaknesses in Chinese economic, social and political structure. The global financial crisis revealed the blatant instability of the global economy. Through the implementation of their stimulus package and future policies, China has the opportunity to secure a more central and dynamic position in geo-political affairs.

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China's Fiscal Stimulus and Implications for the Future

Stefan Myers

Introduction

As the global economic crisis began to affect China in July and August of 2008, the Chinese government initially responded through monetary policy, cutting interest rates several times and reducing reserve requirements in September and October. This was a reversal of the contractionary policy enacted earlier that year.¹ However, by late 2008 it was apparent that the effects of the crisis on China would be much deeper than initially anticipated. China's export-led growth had been greatly put at risk by a collapse of global demand, and the government's policy was expanded to include strong fiscal measures. In November 2008, Chinese leaders announced a massive fiscal stimulus amounting to RMB 4 trillion, or \$586 billion, and 14 percent of GDP in 2008.² This was the world's second largest fiscal response to the crisis after that of the United States.

This chapter will examine China's stimulus package and analyze its effectiveness thus far as a response to the crisis. At the time of writing, more than a year has passed since the package was introduced. The stimulus was remarkably successful in addressing the short-run affects of the crisis. Due to ambitious, decisive fiscal and monetary measures, China has made a striking recovery from the global economic downturn, achieving GDP growth above the targeted 8 percent for 2009. However, long-term prospects are unclear, and there may be problematic, lasting effects on China's economy.¹

1 A Note on Transparency and Source Selection

In an effort to contain panic that could worsen market confidence and the effects of the global downturn on China, Beijing has made an effort to put a strong face on the stimulus, and portray its fiscal response as consistent and well planned. Official information on the package is limited, and the components are quite vague. Also, due to heavy criticism of the stimulus, the Chinese media has been required to portray the package in a positive light.

Furthermore, much of the stimulus will go to projects that exist largely outside of the stimulus effort. For example, earmarked

The fiscal response was funded mostly through a massive expansion of bank lending to local governments. This injection of credit was excessive, and exceeded the government's initial intentions.³ China is now using tighter monetary policy in response to signs of instability and overheating. The central focus of the stimulus is infrastructure investment, and since China's economy may be over-invested with excess industrial capacity, this focus may have exacerbated China's imbalances and done little to reduce export-reliant growth. In pursuit of this goal of reducing export reliance, the Chinese government has expressed its intention to strengthen domestic consumption. The stimulus was successful in propping up domestic demand in 2009, however this effect may disappear when fiscal support is withdrawn. China's low rates of consumption and high rates of precautionary savings reflect a deteriorating social safety net. In fact, the stimulus has largely neglected social spending, and as of yet few improvements have been made in this regard. However, Beijing recently announced that it would focus more on social spending during 2010.

Amidst the crisis, China is in a unique moment to shape and secure its economic future, advance its position as a global economic power, and take strides towards becoming a mature, developed economy. It is likely that the Chinese government will use the crisis to follow through with long-held goals. This detailed examination of the stimulus will

spending on China's rail network is much greater than the proposed stimulus allocation. Moreover, the expansion of lending to investment projects has far exceeded RMB 4 trillion. It is often not clear how much funding is actually put towards these projects, making it more difficult to understand and to analyze the stimulus package.

The purpose of this paper is to provide an up-to-date assessment of China's fiscal policy response, however there are limitations on the availability of recent, high quality sources. This paper will cite academic sources when possible, but also use online newspapers, publications and blogs, both US and China-based, which reference important economic conferences, commissions, and other meetings of China's policy makers when primary sources of information are not available.

suggest that the Chinese government is working to reaffirm its grip over the direction of the Chinese economy, strengthening its peculiar orientation as a market based but state-directed economy. This section will assess China's fiscal response to the crisis in this light, laying the foundation for following chapters, which will explore wider implications of China's response in relation to its global ambitions.

The Stimulus Package

The National Development and Reform Commission (NDRC) of China is responsible for planning and implementation of the stimulus. The package has been modified many times, and is sure to change at the government's discretion throughout the implementation period, which in total will last over two years. The initial plan was proposed in December 2008 at the Economic Work Conference, considered to be the most important gathering of Chinese leaders to discuss economic policy goals. The plan was later modified in March 2009, putting slightly higher emphasis on social spending.⁴ The immediate goals of the package were to address the effects of the economic crisis on China by providing aid to key industries, creating jobs to offset unemployment and falling FDI, and achieving 8 percent GDP growth in 2009.

As well as addressing the immediate affects of the economic crisis on China, the Chinese government has used the stimulus as an opportunity to allocate considerable effort and resources to already existing goals and projects. The Chinese government has long intended to reduce reliance on exports and increase domestic consumption. Such rebalancing would stabilize growth by making the Chinese economy more self-reliant and less susceptible to the conditions of the global economy. These goals were announced as pertinent to China's economic future at the Central Economic Work Conference of 2004, however in the years afterwards, policy lacked commitment.⁵ In fact, from 2004 to 2007, China continued to neglect consumption spending and continued investment-driven growth.⁶

Stimulus Components (as of modifications in March 2009)

Components:	RMB billion	Percent of funding
Transport/Power	1,500	37.50%
Rural Infrastructure	360	9%
Environment	210	5.25%
Housing	390	9.75%
Technology/Structural Adjustment	360	9%
Health and Education	150	3.75%
Earthquake Recovery	1,000	25.00%
Total	3,970	99.25%

(Table 2.2.1.) Liu, 2009

Funding of the stimulus package can be broken into four sources. According to the announced plan, the central government will directly provide RMB 1.18 trillion, around 30 percent of the stimulus money, and local governments are responsible for the rest. Local government budgets are estimated to be able to provide about RMB 300 billion directly. The central government will issue RMB 200 billion in bonds and the remaining portion will be financed through the commercial banking sector. The central government has taken substantial measures to encourage a massive increase in bank lending,⁷ to be detailed in the following section on China's monetary response to the crisis. The result of these encouragements has been an explosion in bank lending to fund investment projects.⁸

Implementation of the stimulus began shortly after its proposal. The RMB 1.18 trillion of direct central government funding has been disbursed in tranches. In November and December of 2008, the central government allocated the first tranche of RMB 100 billion. Funding went to major transport (25 percent), rural infrastructure (34 percent), health and education (13 percent), urban infrastructure (12 percent), affordable housing (10 percent), and technology (6 percent).⁹ The second tranche, RMB 130 billion, was dispersed in late February of 2009, with slightly more emphasis on social spending.¹⁰

To receive loans, local governments submit applications for approval of various projects to the NDRC. Once approved, funding can be obtained, largely through banks but also in the form of direct funds from the central government.¹¹ The central government's actions to direct

banks to increase lending provided local government an unprecedented opportunity to fund investment projects. Local authorities eagerly submitted a torrent of applications, and by early 2009, proposed projects amounted to RMB 18 trillion in value.¹² The NDRC assesses proposed projects and then decides how much funding local governments will receive along with a list of approved projects.¹³ Despite the announced threshold of RMB 4 trillion, total lending for just 2009 was far above this amount. Lending to infrastructure projects was 30 percent of GDP, double the initially announced target.¹⁴ With excessive funding at their disposal, local authorities may be funding projects with poor prospects of high returns, and, as to be discussed in detail in the following section, China's banks are protected from such risks and local governments are taking on excessive debt burden. Also, the majority of stimulus lending has been through China's state-owned banks, and, consequently, state-owned enterprises (SOEs) have had access to the majority of funding, while the private sector has been starved of credit. The following section will discuss why this has occurred. This section now turns to the individual components of the stimulus package.

The largest part of the stimulus package, investment in transportation and power infrastructure, accounts for RMB 1.5 trillion. Projects include construction of highways, airports, ports, nuclear power plants, city subways, and high-speed rail lines.¹⁵ A large portion of this funding has been concentrated in a massive effort to expand China's rail network. This is a process that has been underway for many years, however due to the stimulus package, far greater resources are being allocated to rail construction. In 2009, China spent RMB 600 billion or \$88 billion on rail construction, up from \$49 billion in 2008 and \$26.2 billion in 2007.¹⁶

By 2012, China plans to have completed 42 new high-speed rail lines. One of these will cut the trip from Shanghai to Beijing by half, to just 5 hours. China plans to extend its total track mileage by 19,000 miles by 2015, and 8,000 of this will be high-speed. Also the number of urban subway systems is to be doubled from 11 to 22.¹⁷ The total cost of rail construction projects is estimated to reach \$750 billion, and a large portion is funded by the stimulus (RMB 1 trillion, or \$146 billion).¹⁸

China's two biggest construction enterprises, China Railway Engineering Corporation and China Railway Construction, are directing the projects. However, foreign

firms are heavily involved, including Bombardier Sifang, a Canada-China joint venture, which was awarded a \$4 billion contract in September 2009. Other foreign enterprises include Siemens, Kawasaki Heavy Industries, Alstom, Hitachi, and IBM.¹⁹ In order to win contracts, foreign firms must agree to provide Chinese firms with considerable technical knowledge.²⁰ Through involvement of foreign enterprises, China is gaining the technical knowledge necessary to undertake similar future projects on its own.

There has been much concern that stimulus infrastructure projects will worsen overinvestment and excess capacity in the Chinese economy. However, there could potentially be great returns to expanding the rail network, as the current rail network does not meet China's needs in terms of capacity to transport people or freight. China currently has the busiest, most congested rail network in the world, with a higher density of traffic than the US, Europe, Russia, India, and Japan.²¹ Due to insufficient rail transport, China endured economic losses in the early 2000s. Amidst high export growth, rail networks could not provide sufficient coal for electricity generation, resulting in blackouts and closed factories in 2004.²² In pursuit of its goal of becoming a developed economy, China, a country of vast size, will certainly benefit from the greater mobility of labor and resources that a world-class rail system will provide. China will enjoy these benefits if rail projects are implemented efficiently. However, if rail lines and new infrastructure in general are duplicative and unnecessary, China will waste resources on projects of little benefit. Though China has much to benefit from improved infrastructure, the outcome of China's precarious surge in infrastructure investment remains to be seen.

The technological innovation and structural adjustment priority accounts for nine percent of total stimulus funding. The Chinese government has chosen to use the stimulus package to support ten industries seen as vital to China's economic future. These industries are textiles, iron and steel, automobiles, shipbuilding, equipment manufacturing, electronic information, light industry, petrochemicals, logistics, and nonferrous metals. Beijing's interests are to protect these industries from the effects of the crisis, and also increase their long-term competitiveness through technology upgrading and structural adjustment.²³ This will accomplish China's wider goal of strengthening domestic producers of consumer products, and also improve competitiveness in higher-

value exports. The plan includes firm consolidation, direct funding to support innovation and technology upgrading to improve China's prospects of developing high-tech industries, improved access to bank finance, government procurements, tax incentives and rebates, funding for investment overseas, and consumer subsidies.²⁴

Consumer subsidies, which especially target rural households, will support these key industries. As of February 2009, around 900 million rural residents are eligible for a 13 percent rebate on up to two household appliances and electronic items, including TVs, computers, cell-phones, and refrigerators.²⁵ The central government will directly fund 80 percent of the cost of these programs, with the remaining 20 percent covered by local governments. Further consumption boosting programs include subsidies for home appliance and electronics replacement in cities, agricultural machinery, preferential tax rates on purchase of small vehicles, "vehicles to the countryside" subsidies on rural vehicle purchases, and eased payments on social pensions and insurance fees for individuals and businesses.²⁶ Such subsidies will accomplish the dual goals of supporting the ten industries and increasing rural consumption, although the effect on consumption may not outlast the stimulus.²⁷ Furthermore, industry support will help to reduce unemployment. Beijing estimated that it would create three million jobs in light industry by supporting small and medium sized firms.²⁸

The technological innovation and structural adjustment portion of the stimulus is an area where there is a clear effort on the part of the state to strengthen its long-term influence over economic activity in China. Beijing seeks to build a self-reliant China by increasing China's productivity and competitive advantage in a wide range of industries, from textiles to high tech manufacturing. By supporting light-industry and manufacturing, the government is also working to strengthen the ability of domestic firms to provide goods for Chinese consumption.²⁹ Furthermore, consolidation in manufacturing will create large companies with sufficient links in international trade and finance to perform the entire production process.³⁰ Also, China can further secure its future in international trade by becoming a leader in high-tech industries and an exporter of such expertise and products.

Other components of the stimulus package include rural infrastructure, housing, earthquake recovery, environmental improvement, education, and healthcare.

Rural infrastructure spending will include irrigation, drinking water, electricity, and transport infrastructure.³¹ The housing portion includes construction of affordable housing, slum clearance, and reduced down-payments on house purchases, from 30-40% to 20%.³² Although earthquake reconstruction spending represents 25 percent of the stimulus package, it is the most ambiguous portion.³³ The Sichuan province was struck by a 7.9-magnitude earthquake on May 12, 2008. An estimated 70,000 people were killed, and 15 million reside in the affected area, which includes Chengdu, a city with a population of nearly 4 million.³⁴ The stimulus will fund reconstruction of homes, schools, hospitals, factories, and public infrastructure destroyed by the quake. Education and healthcare spending will involve construction of schools, hospitals, clinics, and improved access to healthcare in rural areas.

Economic Model of Country Income

In order to understand how the stimulus will affect China and to assess Beijing's strategic intentions, it is useful to consider a simple Keynesian model for country income in an open economy.

A country's national income (Y), is the sum of consumption, investment, government spending, and the trade balance, exports minus imports:

$$Y = C + I + G + X - M$$

Expanding these variables to their individual components and rearranging reveals the following equation for country income:

$$Y = (C - cT + I + G + X - M)/(s + m)$$

The new sum (fixed consumption, the propensity to consumer multiplied by tax revenue, investment, government spending, and fixed exports minus fixed imports) is multiplied by $[1/(s+m)]$, the income multiplier.³⁵

The multiplier determines the amount of income actually created from a change in any variable that increases income, Y. An example of the multiplier effect is that an increase in government spending, such as a large stimulus package, will create jobs, raising the incomes of consumers,

who will then spend this income on consumer goods, boosting domestic industries and further increasing national income, Y . In this model, the multiplier, $[1/(s+m)]$, takes into account the propensity to save and the propensity to import. If a higher percentage of national income is saved, then the propensity to save, s , will be higher, and the multiplier will be a lower value. This is because when less income is spent, there is less support of industries that could generate further income. The propensity to import also affects the multiplier. If m is higher, then a higher amount of income spent on goods will go to support foreign industries. Income effectively leaves the country, and the economic benefits of spending are felt elsewhere.³⁶

China would thus maximize its income multiplier by maintaining a low propensity to import and reducing the propensity to save, and within the stimulus there are signs of this intention. China's behavior with the stimulus suggests that it wants to encourage spending by consumers and simultaneously discourage imports of manufactured consumer products. China is supporting its domestic producers of consumer goods such as appliances, automobiles, and electronics, and bringing these industries to urban and rural settings via subsidies. The Chinese government wants to assure that domestic industries are competitive, before an RMB revaluation occurs. This strategy discourages imports and maximizes the multiplier, in preparation for a future revaluation of the RMB, which would reduce the cost of imports for Chinese citizens. China could impose tariffs to protect domestic industries, but this would be an aggressive tactic, which would deteriorate its relationship with international trading partners. China would be far more prudent to be prepared with competitive domestic industries that can compete with foreign products, before revaluation, to avoid the need for more aggressive forms of protectionism.

Impact of the Stimulus on the Chinese Economy

Shortly after the introduction of the stimulus, China's economy quickly began to recover. By the end of 2009 it was clear that the stimulus had been a great success. China grew at over 8 percent in 2009, and domestic demand was strong. The total value of imports and exports fell by 13.9 percent in 2009, however began to recover by November 2009. In January 2010 imports were up 44 percent over the previous

year and trade had restored to 2008 levels.³⁷ With exports and imports having recovered greatly from the initial slump, other nations began to look enviously upon China, with its undervalued, fixed currency. With the stimulus, Beijing achieved the imperative goal of shielding China's economy from the collapse in global demand by supporting industries with infrastructure projects, expanded credit, and consumer subsidies.

Subsidy programs have been highly effective at boosting consumption. According to the National Bureau of Statistics of China, consumption contributed 4.6 percentage points to GDP growth in 2009.³⁸ Due to stimulus subsidies, auto sales surpassed the US in 2009 and rose 53 percent from the previous year.³⁹ The sales value of new home appliances was up as well, and was predicted to exceed RMB 11 billion (\$1.61 billion) in 2009.⁴⁰

The massive injection of liquidity that was used to fund the projects, however, currently poses dangers to the Chinese economy. Concerns have risen, especially in the early months of 2010, of overheating in the economy, asset bubbles, and high inflation.² In 2009, housing prices rose 88 percent in Beijing, 95 percent in Shenzhen, 43 percent in Shanghai, and 42 percent in Guangzhou,⁴¹ and prices levels in major cities have risen by 25 percent on average.⁴² Also, to be discussed in detail in the following part of this section, the effectiveness of the stimulus at strengthening domestic markets and consumption remains ambiguous.

At the Central Economic Work conferences in December 2009, China's central and local government leaders met to discuss fiscal and monetary goals for 2010. They decided that fiscal and monetary policy had been very successful in 2009, and to continue spending to achieve 8 percent target growth for 2010. However, given the recent signs of the effects of excessive lending, the government will enact monetary tightening as needed. Most importantly, the focus of stimulus measures for 2010 will shift, with less emphasis on infrastructure investment and more on social services such as healthcare and education. This shift will reduce risk of overheating from overinvestment and also redirect stimulus measures to target building incomes of lower and middle classes, with the goal in mind of raising consumption and reducing China's reliance on export-driven growth.⁴³ China

2 The following chapter will discuss the rise of non-performing loans (NPLs) as a result of excessive lending.

will continue subsidy programs that began in 2009. Also the government intends to further modify the Hukou residency registration system, which currently restricts many migrant workers in urban settings from eligibility for social benefits.⁴⁴

Monetary tightening will impact infrastructure investment in 2010. Beijing raised the reserve ratio requirement for most banks twice in the first months of 2010, to 16.5 percent. Since infrastructure projects are funded through local government borrowing, the frequency of new projects will decrease as local governments find it more difficult to get funding and approval. Many sources suggest that Beijing will cut back on rail construction projects. Because of the increase in lending after the crisis, funding was available for massive construction of rail, and almost 10,000 kilometers were completed in 2009. Now, with increased restrictions on lending, it is becoming difficult to obtain funding for projects.⁴⁵

The ambitious lending to rail construction is posing further difficulties. High-speed lines are much more expensive to build and operate than regular lines. Problematically, especially with the tightening of credit, high-speed rails come with high fares. To many workers such trains are not affordable, and many revert to the regular lines.⁴⁶ The Guangzhou-Wuhan bullet train, which has the fastest average speed in the world, runs a three hour, 664 kilometer journey from Guangzhou, a southern coastal manufacturing center, to Wuhan, a populous city in China's interior. However, the fare is \$72, which is several weeks' pay for a typical Chinese worker, compared to a \$20 fare for the regular trains, which make the journey in 11 hours.⁴⁷ Overall the stimulus package was successful in that China achieved its 2009 growth target and protected sectors that were put at risk by the crisis, but the increase in lending was excessive and will not be sustained in 2010, which will limit infrastructure investment in the immediate future.

Effect of the Stimulus on China's Imbalances

One of China's most critical ambitions with the stimulus package is to boost consumption to strengthen domestic markets and domestically-oriented industries, in order to reduce reliance on investment and export-oriented growth. It is not clear that China has made significant progress in achieving these ends. The stimulus was heavily focused on

infrastructure investment, and less so on improving the social safety net, which would strengthen the domestic economy by encouraging spending. Subsidies helped to boost domestic demand, however improvements in consumption and spending may not sustain once the stimulus is withdrawn.

China's savings rates are highest among the world's major economies. Private domestic consumption as a percentage of GDP for 2008 was 37 percent for China, as compared to 71 percent for the US, 67 percent for the United Kingdom, 62 percent for Russia, 55 percent for Japan, and 54 percent for Germany.⁴⁸ The total rate of savings was 50 percent of GDP in 2005, and rising investment accounted for half of China's economic growth from 2001-2005.⁴⁹ High rates of saving in China reflect low rates of social spending. In 2006, spending on welfare, healthcare, education, and pensions was only 3 percent of GDP.⁵⁰ Furthermore, consumption as a percentage of GDP in 2007 for China and the US were 35 percent and 70 percent, respectively.⁵¹

Chamon and Prasad argue that low levels of consumption in China worsened with the deterioration of the "iron rice bowl" in the 1990s, which was the social safety net historically provided to urban residents.⁵² Consumption as a share of GDP was above 50 percent in 1990, compared to 37 percent in 2008.⁵³ Under the Hukou system before the growth of private industry in the 1990s, urban residents were entitled to significant benefits and access to public goods, such as education, healthcare, housing, employment security, and retirement benefits.⁵⁴ With the deterioration of the social safety net in China, households have felt a much greater need to insure against risk, and so despite rise in income, relative precautionary savings have risen since the early 90s. From 1995 to 2005, the rate of urban household savings in China rose by 7 percentage points to 24 percent of disposable income.⁵⁵ The trend of higher savings applies to young and old households. The authors attribute the rise in savings to the privatization of house ownership and SOE restructuring. With housing privatization, families must save to afford housing that the state would have provided or subsidized beforehand.

Chamon and Prasad find that the most important factors that influence household savings rates in China are expenditures on healthcare, education, and housing. Among these three, saving for health risks and education expenditures account for the majority of precautionary saving.⁵⁶ Higher social expenditure will reduce precautionary savings for

medical crisis and higher education expenditures; also better financial markets should reduce saving trends for families seeking better housing.⁵⁷ According to Sharma, another reason for high levels of saving is that Chinese consumers do not own property or collateral assets, and so have not felt the “wealth effect”, in which people spend more due to higher perceived wealth.⁵⁸

Figures on healthcare coverage and unemployment and retirement benefits are dismal. In 2003, half of urban residents had basic healthcare coverage, along with one fifth of rural residents. Furthermore, in 2005, 14 percent of Chinese workers had unemployment coverage, 11 percent had worker’s compensation coverage, and 17 percent of state workers had retirement pensions.⁵⁹

If China’s stimulus package improves access to education, healthcare, and housing for the general population, then patterns of household savings should fall, along with a rise in consumption, raising domestic demand and strengthening domestic markets. According to Lardy, providing access to healthcare could reduce household savings by 4 percent.⁶⁰ Government expenditure on education and healthcare has a large effect on consumption patterns, and China is in need of improvement on deteriorating quality of services provided by the state.⁶¹

The stimulus boosted domestic consumption in 2009, and will do so in 2010. However, this was accomplished through subsidies on consumer products and not through a reduction of incentives to save against risk. Subsidies may have only temporarily increased demand for electronics, cars, and household appliances, and consumption may revert to previous trends once the stimulus measures are reduced.

The package has largely been criticized for its minor focus on social spending. Despite the fact that a drastic change in healthcare has long been on the table in China, spending on healthcare reform has so far have lacked commitment. However, social services, like other long-lasting projects such as rail construction, can receive stronger attention during a period of high fiscal spending. According to Naughton, “the economic crisis has opened a window in which a more aggressive fiscal approach to social policy has become possible.”⁶² In April 2009, Beijing announced that it would spend RMB 850 billion or \$124 billion on a substantial overhaul of healthcare provision in China. The goal is to provide basic healthcare services to the majority of the population, with a

plan to provide training to doctors and the construction of 5000 clinics and 2000 hospitals.⁶³ The successful expansion of healthcare coverage will greatly determine whether or not Beijing will achieve its goal of shifting stimulus focus towards social spending and precautionary savings reduction. China must improve patterns of consumption through higher social spending if it hopes to move away from export-reliance and achieve an economy with strong inward orientation.

What the Stimulus Implies About China’s Ambitions

It is apparent from the stimulus package that Beijing is using the economic crisis as an opportunity to strengthen its grip over the direction of the Chinese economy and shape its future orientation. Although domestic demand is strong, the China is heavily export-oriented, and Beijing is promoting domestically oriented industries in a rebalancing effort. Beijing is working to strengthen domestic producers of consumer products in order to meet the demands of an emerging consumer society, with the intention of exporting these goods eventually. It is likely that Beijing will eventually allow the RMB to appreciate, either in pursuit of its own interests or in the face of economic or international pressures. This will raise the purchasing power of Chinese consumers, which will bring greater international competition to domestic producers of consumer goods. By strengthening these domestic producers now, China is preparing its domestic industries, to ensure a favorable trade position in the future.

Furthermore, China is working to promote the competitiveness of its high-tech industries. China’s current economic boom gives it leverage over foreign high-tech engineering firms, who are hungry for contracts due to economic slowdown at home. By awarding contracts to world-class businesses, and requiring them to be generous with technology transfer, China intends to gather the expertise necessary to become a global leader in high technology industries.

The stimulus has long-term implications for the competitiveness of Chinese industries. In industries where there is overcapacity, consolidation of enterprises will reduce excess supply and increase firm competitiveness. Also, with consolidation of SOEs, it may be easier for Beijing to manage

the direction of the economy by controlling the actions of fewer, larger firms.

Strong support for SOEs indicates that the Chinese government is attempting to strengthen its grip over the direction of the Chinese economy at the expense of the private sector. The majority of stimulus funding was provided by state-owned banks to SOEs, and private sector was heavily neglected.⁶⁴ The following section will explain this phenomenon and analyze the consequences.

If the state sector is over-protected from the private sector, this could damage competitiveness by removing market-driven incentives to innovate and maximize efficiency and product quality. If domestic industries in general, private or state-owned, are overprotected from foreign competition, this will hurt competitiveness in the long run. Perhaps currently high levels of technology transfer will be enough for domestic industries to sustain competitiveness by competing in international markets.

Furthermore, although China is trying to diversify its competitiveness by supporting various types of industries, it may not be feasible to produce everything. Classic economic orthodoxy preaches that a nation maximizes its prosperity by specializing in one or a few specific industries. However, China is a vast nation with diverse resources at its disposal, and can likely do many things simultaneously.

Beijing seeks to develop a stable, competitive market economy over which it has considerable control. Pursuit of these two seemingly conflicting goals has created a further source of tension. China will attempt to perpetuate its ambiguous orientation of mixed state-guided and market-oriented capitalism, and how successfully it will do so and for how long remains to be seen.

Conclusion

This section has argued that China has used the economic crisis as an opportunity. With the stimulus package, China made a remarkable recovery to the economic crisis. The stimulus was heavily focused on investment in infrastructure and improving China's long-term competitiveness, and these actions will greatly influence the direction of the Chinese economy in the coming decades. China intends to build a strong, self-sufficient domestic economy, and increase its

international competitiveness in a diverse range of industries.

Beijing is clearly trying to strengthen its grip over the Chinese economy, and this may come with costs. The strong fiscal and monetary measures may cause long-term problems. Massive monetary injection has created worries of asset bubbles and high inflation. Monetary expansion was far larger than the initial plan and cannot be sustained. Beijing is already taking measures to tighten spending.⁶⁵ There is also the high risk of duplicative projects and possibility that credit will not be allocated efficiently to high-return investments. If China pours money excessively and wastefully into the hands of local governments and SOEs, and neglects private businesses and market forces, perverse incentives and resource misallocation that plagued the socialist command economies in the 20th century may return to haunt China. The following section of this chapter will discuss China's monetary policy, and the implications of the monetary expansion to fund stimulus projects.

The stimulus has made ambiguous progress towards Beijing's goal of rebalancing the Chinese economy. The stimulus package put strong emphasis on infrastructure and relatively little emphasis on social spending and improving the social safety net.⁶⁶ Subsidies have boosted domestic demand, but currently higher levels of consumer spending could subside once government support expires. Beijing reemphasized its intentions to improve social spending, but its actions in the face of spending constraints will reveal its true commitment to this goal. China is an investment driven, export-oriented economy, and a stimulus centered on investment may do little to rebalance growth.

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China's Monetary Response to the Great Recession

Nathan Snyder

Introduction

China's currency policy keeps the renminbi (RMB) artificially undervalued against the dollar and euro. The de facto RMB peg severely constricts the government's ability to use traditional monetary policy and negatively impacts the Chinese banking sector. In order to artificially maintain the value of the RMB, the Chinese central bank buys foreign currency in the economy, resulting in large foreign currency holdings. The need to maintain the currency peg means the government cannot regulate the economy and battle inflation through interest rate adjustments because increases (decreases) in rates too far from foreign rates stimulate huge inflows (outflows) of speculative "hot money" betting the RMB will appreciate (depreciate). The buying of foreign currency using RMB pumps RMB into the economy, increasing liquidity and provoking inflation.

The banking system is also affected by the currency peg because banks are forced to fund the buying of foreign currency by providing cheap funds to the central bank. The use of non-traditional methods to regulate bank lending, specifically administrative methods and window guidance, results in the inefficient allocation of capital. The private sector is starved for credit while excessive credit is extended to large, state-owned firms and China's asset markets are booming. Furthermore, increasing interest rates could result in the bank's loan portfolio going "under water."¹

Despite the issues stemming from the RMB peg, the Chinese government has successfully regulated the economy. However, the Great Recession of 2008-2009 has provided a new monetary challenge. The government's fiscal stimulus and the extension of bank loans have successfully staved off the direct effects of the recession, but the long run consequences are uncertain. The cost to the banking system is unclear.

China's banks have extended enormous amounts of credit, which has resulted in excess liquidity and rapidly rising real estate prices. Non-performing loans will likely increase in the future and could potentially destabilize the banking sector. Historically, a number of countries' banking systems have collapsed as a result of macroeconomic stabilization effects after an external shock, which were followed by investment booms before banking sector collapses.² The government recognizes the challenges but, in the end, it all comes back to the RMB peg. While the government is currently trying to reduce bank lending and deal with inflation, the ability to respond effectively is handicapped by the inability to use traditional monetary policy.

This chapter first examines China's currency policy and finds that the RMB continues to be pegged de facto vis-à-vis the US dollar. The second section examines the effect of the currency peg on China's ability to conduct effective monetary policy. Third, this chapter investigates the effect of currency and monetary policy on China's banking sector, especially in relation to the allocation of credit. The last sections explore China's monetary response to the current recession and the effectiveness of a huge increase in bank credit. To preview the results, despite the external and internal challenges presented, the Chinese government has responded effectively to the current crisis using monetary policy and bank funding to support the fiscal stimulus. However, the future cost associated with the current response is unclear, excessive credit has been pushed onto state-owned enterprises and so non-performing loans are likely to increase.

Currency Policy

From 1995-2005 the RMB was directly fixed to the US dollar. In 2005, the RMB was revalued 2.1 percent vis-à-vis

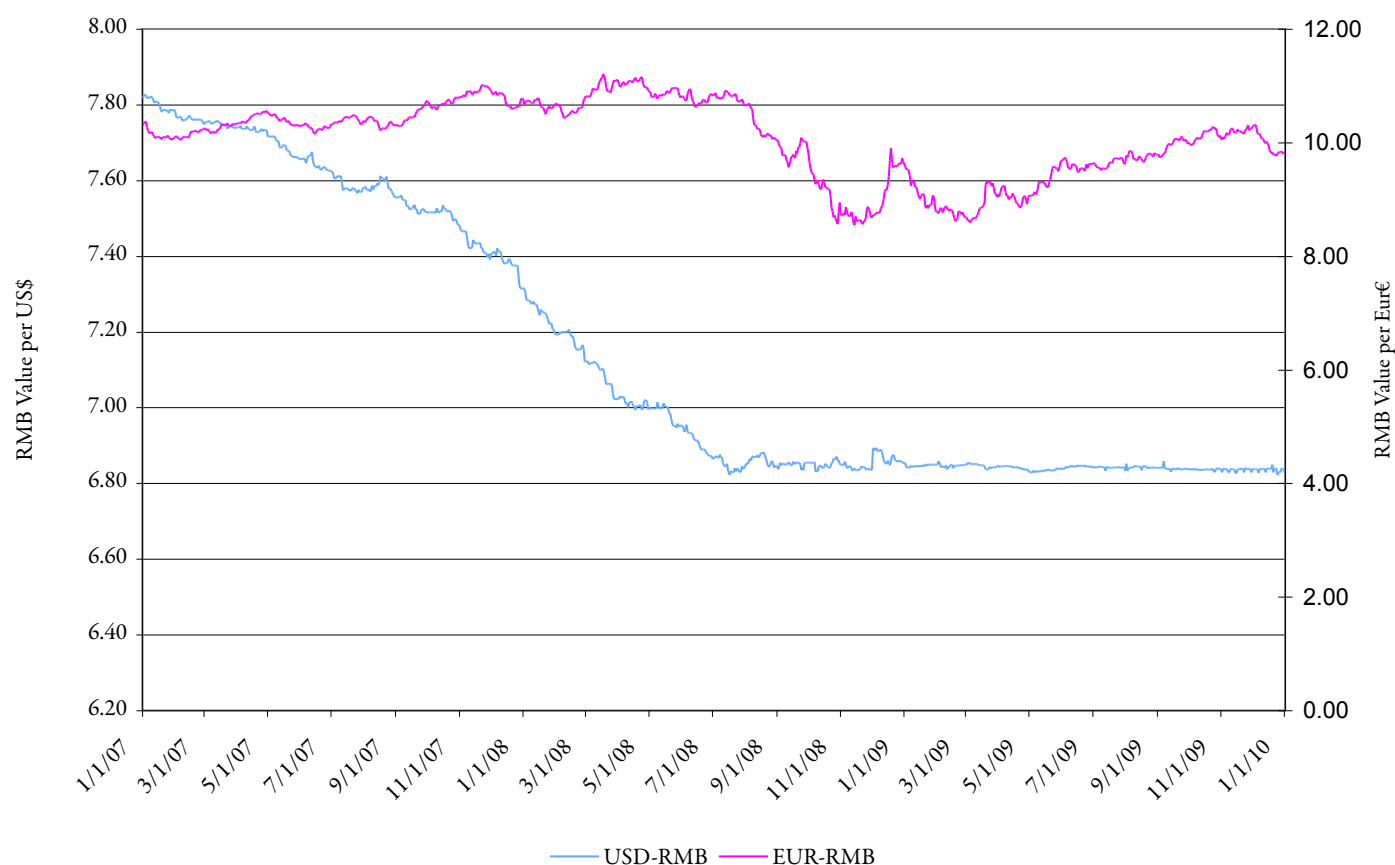
the dollar, and China's monetary authorities promised to float the RMB against a basket of currencies with a 0.3 percent daily fluctuation allowed.³ Despite that promise, the RMB continues to be pegged de facto to the US dollar and the 0.3 percent daily fluctuations have proven to be largely theoretical.⁴ Empirical studies (Eichengreen 2004; Frankel and Wei 2007, 2008) have found that the RMB has tracked the dollar since 2005 with little reference to other currencies. Goldstein and Lardy (2009) updated the empirical studies listed above and found that only the dollar was consistently linked to changes in the RMB's value in a statistically significant way.⁵ However, Frankel (2009) found that the RMB is pegged against a basket of currencies with the dollar as the dominantly weighted currency. By mid-2007 the weight of the dollar was 0.6, the euro 0.4 and the yen 0.2. Thus, Frankel suggests the 2007 appreciation of the RMB vis-à-vis the dollar can be attributed to the appreciation of the euro.⁶

While the rise in the euro's value may explain the

credence to the argument that the RMB is undervalued.

Under a completely fixed exchange rate regime, the central bank must defend the value of the currency by purchasing or selling foreign exchange to eliminate all excess demand for, or excess supply of, domestic currency.⁸ In order to keep the RMB from appreciating, China's central bank, the People's Bank of China (PBoC) purchases excess foreign currency on the Shanghai foreign exchange market in order to hold down the value of the RMB.⁹ If the RMB was on a straight fixed peg as it was before 2005, the PBoC would buy all excess foreign currency. But since 2005, the bank has metered the RMB's rate of appreciation vis-à-vis the dollar depending on the amount of excess dollars they purchase each day.¹⁰ In 2007, the PBoC purchased in excess of \$1.8 billion per day in foreign exchange.¹¹ The accumulated central bank reserves can only be used for specific activities: to protect against external debt crises and currency crises, loaned short-term to banks with insufficient reserves, or as a form of

RMB vs USD and Euro: Jan 1, 2007 - Jan 1, 2010



(Figure 2.3.1)⁷

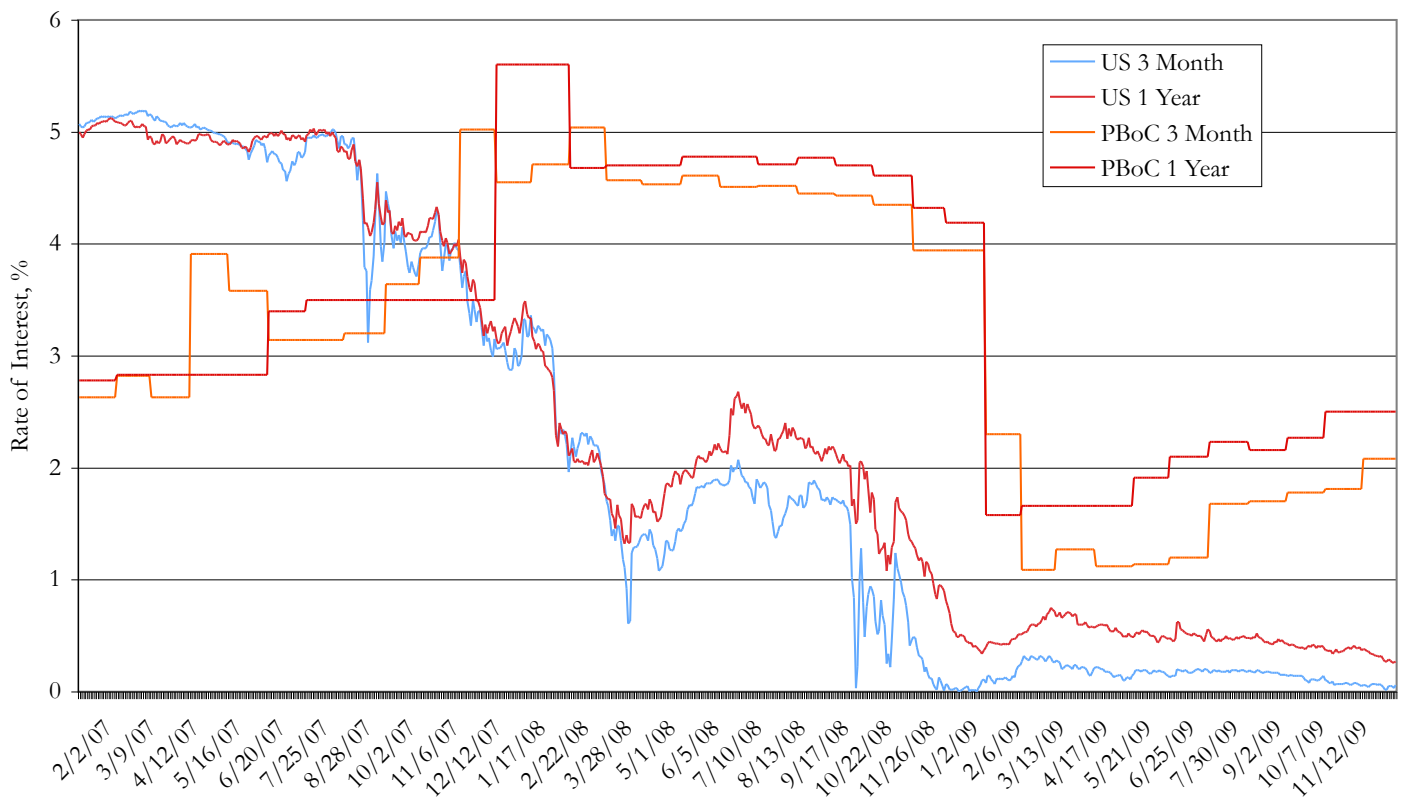
in order to keep the money supply stable and counteract inflationary pressures is known as sterilization, which has been conducted on a large scale since mid-2005.¹³ Since 2003, the central bank has sterilized the money supply primarily through open market operations, specifically selling PBoC bills and bonds to Chinese banks, and also by increasing the deposit reserve requirement ratio.¹⁴

Sterilizing the money supply is not costless. The process has real costs for both the central bank and the commercial banking system. As the currency is increasingly undervalued, the central bank must buy more foreign currency and sell greater quantities of bonds to maintain the price level. Selling more bonds requires increasing the interest rate the central bank must pay on these specific bonds. If the bond's interest rate is greater than the interest earned on foreign currency-denominated financial assets, the central bank will lose money.¹⁵ In the case of China, if the interest rate on PBoC bonds is greater than the amount earned on short term US Treasury bills, the cost of sterilization would be

substantial. However, until this threshold was reached in late 2007, sterilization was essentially a money making process for the PBoC.¹⁶ As figure 2.3.2 illustrates, the interest rate on PBoC bills is now greater than the returns the bank receives on U.S. treasury bonds. Since the end of 2007, steep decrease in U.S. Treasury bond yields have resulted in negative profits for the PBoC. Although PBoC bond yields have been decreased in response to the financial crisis, bond interest rates are still above those in the US. Thus, sterilization is no longer a money making process, but continues despite the costs to the PBoC.

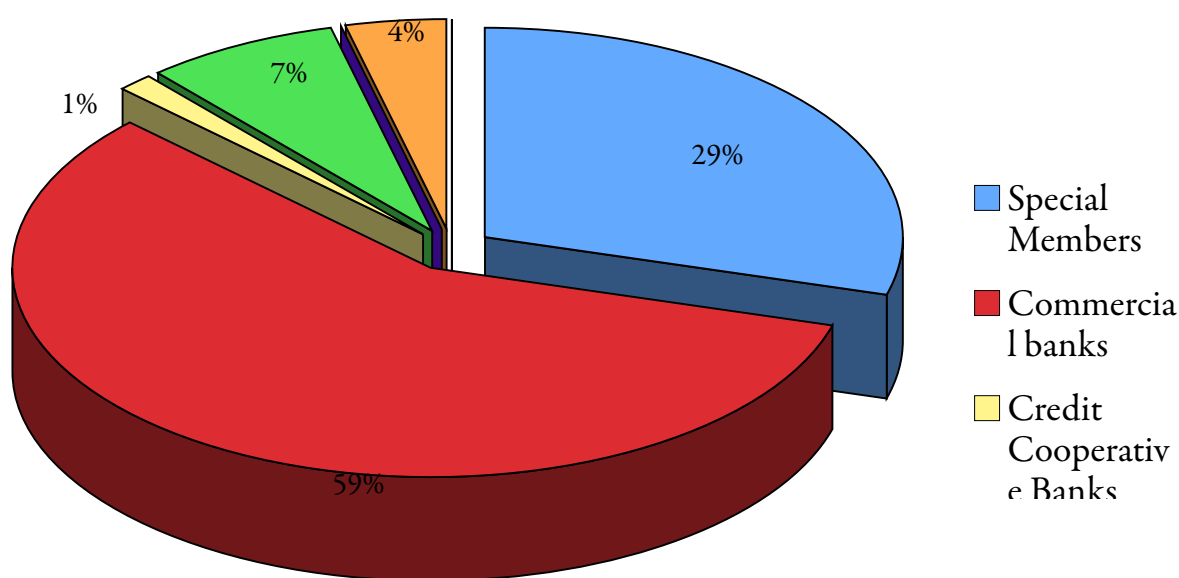
Sterilization generally quickly runs its limits in developing economies, but the case of China has been different. The PBoC has been able to effectively conduct sterilization activities since pegging the RMB to the US dollar in 1995. Private savings (defined as savings by households and corporations) are high in China and flow into the banking system due to a lack of alternatives. China's bond market is underdeveloped and the stock market is still in its infancy. The

PBoC vs U.S. Treasury Bill Interest Rates



(Figure 2.3.2)¹⁷

Chinese Treasury Bond Holdings, December 2009



(Figure 2.3.3)¹⁹

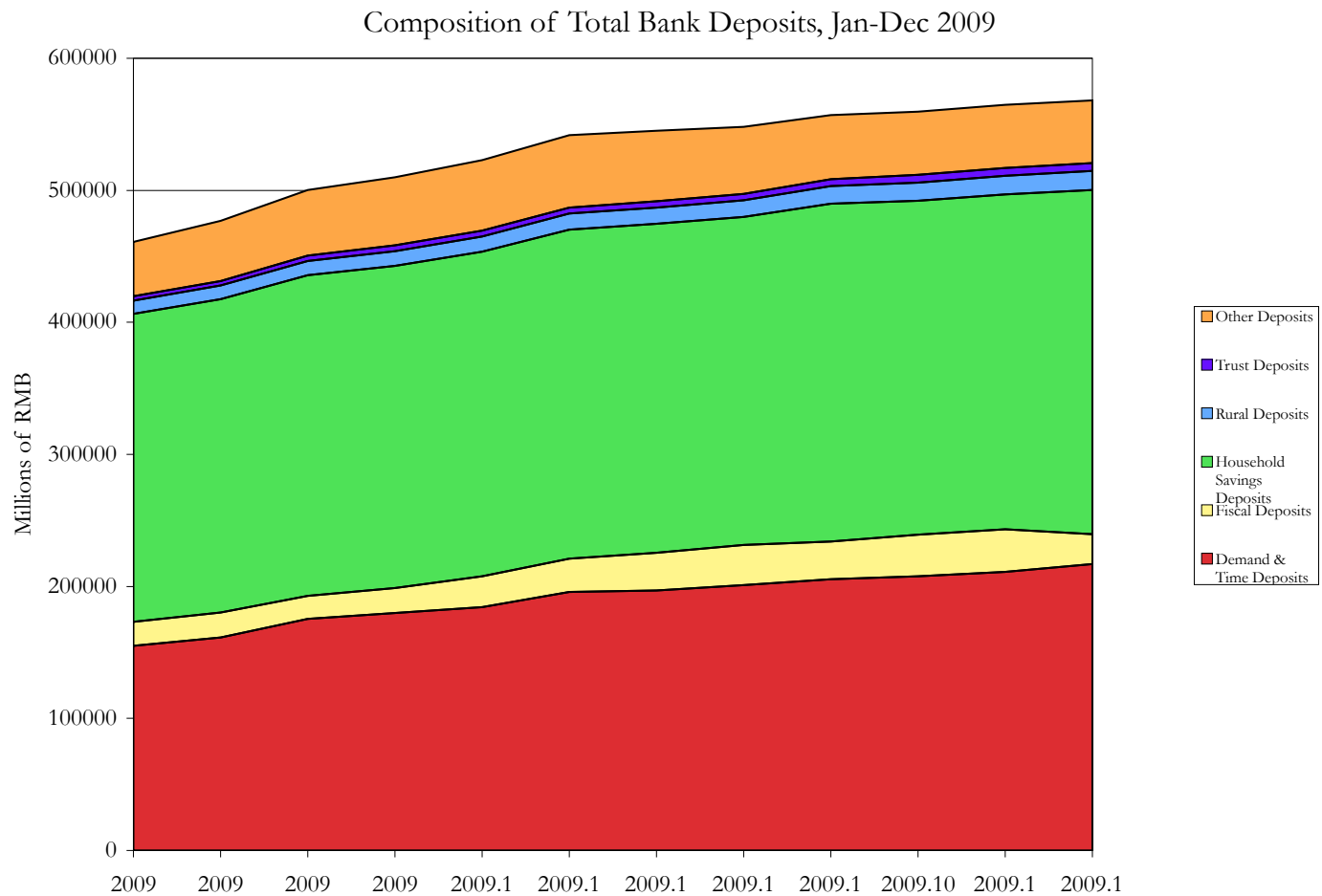
large capital flows into banks result in very liquid banks which have generally been expected to hold down credit growth. State banks have historically had a large chunk of reserves lent to the PBoC which are then used for sterilization. Furthermore, when banks lend to the government there is no capital reserve requirement, whereas corporate lending has a 100 percent capital requirement.¹⁸ These factors combine to produce great demand for PBoC bonds, even when the return on investment from interest is low. Banks are the largest holders of bonds in the Chinese economy. At the end of 2009, 59 percent of Chinese treasury bonds were held by banks, of which nearly 83 percent were held by large commercial banks. The cheap flow of money and high demand for PBoC bonds has allowed sterilization efforts to continue longer than is usual.

Monetary Policy

In developed economies, central banks typically conduct independent monetary policy in pursuit of clearly defined goals. For instance, the United States' Federal Reserve Bank focuses on maintaining low inflation and high employment.

However, the primary goal of the PBoC is different. According to the bank's website, the main objective of monetary policy is working "to maintain the stability of the value of the currency and thereby promote economic growth."²⁰ Maintaining the stability of the RMB, keeping inflation low and employment high are not mutually exclusive policy options, but the primary goal of maintaining the RMB's value places constraints on the PBoC's ability to conduct traditional monetary policy because interest rates cannot be changed due to worries of hot money inflows.

A fixed—or quasi fixed—exchange rate constrains the ability to pursue effective independent monetary policy. Branstetter and Lardy write, "[s]o long as the currency regime remains little changed, the PBOC will remain acutely constrained in its pursuit of prudent macroeconomic policies to restrain excessive growth."²¹ Eichengreen writes that "China might be regarded as a prototypical example of the general pattern that keeping exchange rates low requires keeping interest rates low."²² While China has thus far countered inflation and sterilized large inflows of foreign capital relatively successfully, greater exchange rate flexibility would increase the

(Figure 2.3.4)³¹

ability of the PBoC to conduct independent monetary policy. Currently, the PBoC cannot freely adjust interest rates for fear of attracting large inflows of speculative hot money. China has instituted capital controls, which prevent money from easily moving in and out of the country and insulate monetary policy to some extent. But capital controls are notoriously leaky and tend to become less effective over time, indeed unofficial capital flows in and out of China are very high and provide a testament to the failure of these controls.²³

Interest rates have never been deregulated, often resulting in negative real interest rates during high inflation and positive real interest rates during times of low inflation.²⁴ Consequently, interest rates have tended to act as automatic destabilizers as opposed to stabilizers: during booms low interest rates stimulate the banks to extend excess credit while during busts credit tends to contract.²⁵ Interest rates not regulated by the market result in depositors keeping less money in the form of bank deposits, which many authors have linked to an

increased flow of funds into the stock market.²⁶ Because the PBoC cannot independently change interest rates to regulate bank lending, the PBoC relies on nonmarket-oriented tools, primarily credit quotas and window guidance.²⁷ Since 2006, the PBoC has also relied on changing the deposit reserve requirement ratio, the amount of reserves banks are required to hold as currency. These administrative methods are blunt instruments compared to using interest rates to affect bank lending, which possibly resulting in an inefficient allocation of bank credit as detailed below.

China's Banking Sector

Banks are the predominant mechanism by which savings are tapped for investment.²⁸ Funds flow into the banking system because China's current financial system does not provide many other options. Bank deposits are mainly composed of household savings and enterprises (figure 2.3.4). In the

	Total Assets (Trillion RMB)	Percentage
State-owned Commercial Banks (SOCBs)	40.1	50.89%
Joint-Stock Commercial Banks (JSCBs)	11.8	14.97%
City Banks	5.7	7.23%
Other Banks	21.2	26.90%
Banking System Total	78.8	100.00%

(Table 2.3.1)³²

2000s, banks accounted for around 80 percent of funds transferred through the formal financial system. Neither the stock nor bond market absorbs many funds. The stock market has raised less than 4 percent of total funds since 2003 while corporate bonds accounted for only 1 percent of funds.²⁹ The Chinese banking system accounts for the majority of funds, but the distribution of funds is uneven between different types of banks. There are a number of types of banks in China: state-owned commercial banks (SOCBs), joint-stock commercial banks (JSCBs), city banks, and other banks such as policy banks and rural credit collectives. Only four SOCBs, collectively known as the “Big Four,”³¹ account for the vast majority of funds in the banking system. As of 2005, SOCBs held 53 percent of total banking system assets while the next biggest asset holder, JSCBs, held only 15 percent of total assets.³⁰ At the end of December 2009, the SOCBs accounted for 51 percent of total assets and JSCBs held 15 percent. The differences in bank ownership, and the fact that interest rates do not drive lending decisions, directly impacts how credit is allocated. Administrative controls over the banking system produce different effects based on the type of bank ownership. Since SOCBs are owned by the state, credit quotas tend to regulate loans significantly more effectively than for private banks. Furthermore, since the demand and supply for loans is not based upon the true costs of borrowing, projects and firms that would employ credit most productively do not necessarily receive loans. Instead, political pressure from national or provincial level governments likely steers investment decisions. Boyreau-Debray and Wei (2005) found that “the government (as opposed to the private sector) tends to allocate capital systematically away from more productive regions toward less productive ones” mainly in favor of state-owned enterprises (SOEs).³³ Cull and Xu (2005) write that

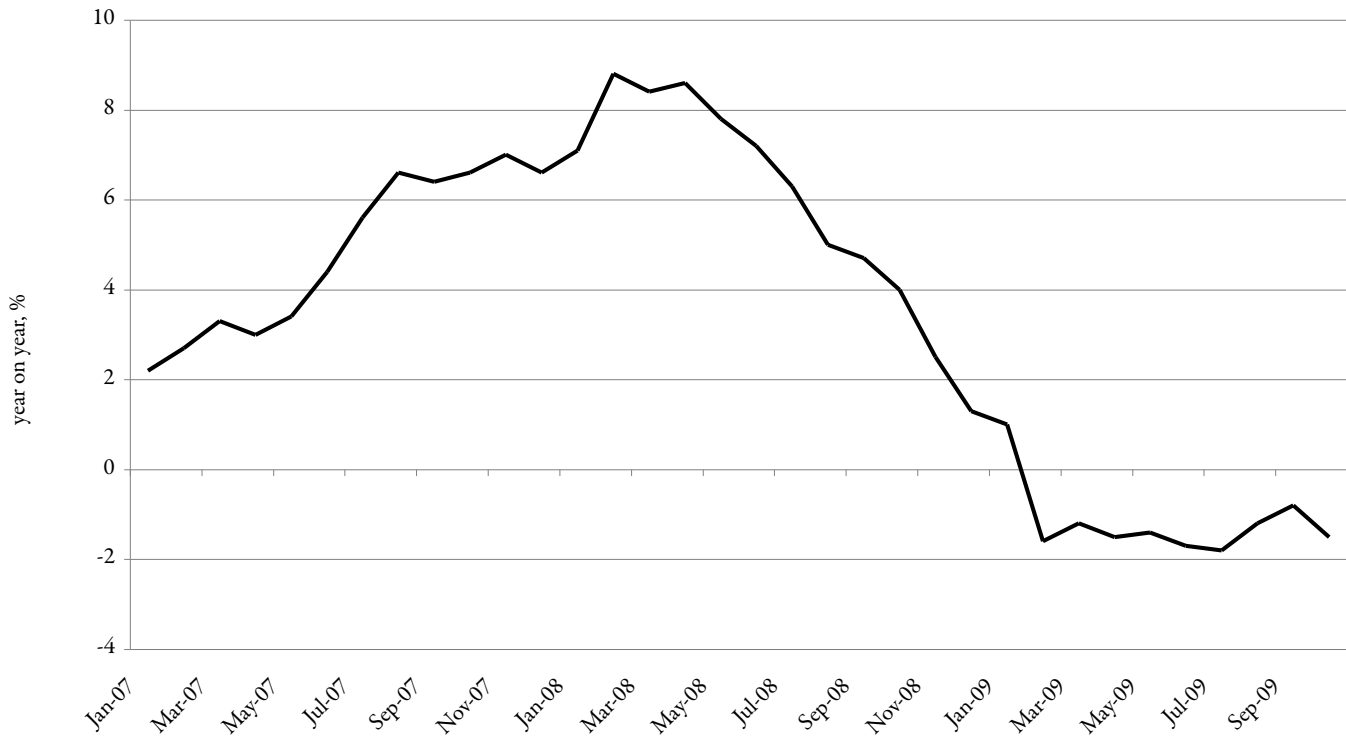
they “view loans extended by [SOCBs] to [SOEs] as having a strong bailout component rather than as true external finance awarded on the basis of creditworthiness.”³⁴

However, recent bank restructuring to prepare banks for public listings and greater competition from foreign banks are thought to have greatly increased bank efficiency, even for SOCBs. Anderson (2006) argued the banking sector discriminates against small borrowers, including smaller SOEs, without visible cash flows as opposed to the private sector *per se*.³⁵ More recently, both Rousseau and Xiao (2007) and Demetriades et al (2008) employed econometric methods and suggest the regardless of possible resource misallocations, the Chinese banking sector played a central role in China’s economic development.³⁶ Furthermore, Du and Girma (2007) find that political bias exists within the allocation to private sector firms as well as SOEs.

While the banking sector’s allocation of capital to SOEs at the expense of the private sector should not be overplayed, the literature tends to agree that misallocation is occurring, which harms the development of private firms. The private banking sector’s allocation of credit was found to be too small to undo the inefficiencies created by the government.³⁷ As a result, small and medium-sized enterprises (SMEs) are forced to pay substantially higher rates of interest in informal credit markets.³⁸ Dollar and Wei (2007) found SOEs had lower returns to capital than SMEs, further supporting the claim that capital is inefficiently allocated by China’s banking system.³⁹ The fact that capital is diverted away from productive uses in the private sector likely reduces economic growth. In 1999, the private sector accounted for a third of economic output, but received 1 percent of bank loans.⁴⁰ In 2003, funding increased to only 2 percent of bank loans for domestic private firms.⁴¹ The formal banking sector

1 The Big Four is comprised of: the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (ABC), the China Construction Bank (CCB) and the Bank of China (BOC).

China Consumer Price Index, 2007 - 2009

(Figure 2.3.5)³²

is clearly not meeting the private sector's credit demand.

Potential economic growth in China is likely dampened by the combination of how the banking sector allocates capital and the firm structure underpinning China's economy. Manova and Zhang (2009) studied Chinese import and export firms and found that in 2005 SOEs accounted for only about 6% of the total number of trade firms, which is not surprising since SOEs are assumed to be larger on average than private firms. Interestingly, SOEs accounted for only 10% of China's exports as compared to 13% for the domestic private sector, 26% for joint ventures, and 50% for foreign-owned enterprises.⁴² China's economic growth has largely been export driven by foreign and domestic private firms. These profitable private firms keep deposits in banks, yet bank credit is primarily allocated to SOEs that primarily focus on the domestic economy. Meanwhile, foreign firms also likely keep a large percentage of profits in Chinese banks due to difficulties repatriating cash and expectations of RMB appreciation. Thus, wealth

is generated in the export oriented economy, but then redistributed by the state using banks to siphon money into SOEs in the domestic economy.

Monetary Response to the Great Recession

The economic conditions China faced just prior to and immediately after the economic crisis were polar opposites, but the tools utilized by the government were similar. During the entirety of 2007 and the first three-quarters of 2008, China's economy was racing ahead. The economy was growing quickly and inflation was high due to rising energy and food prices. The government used monetary policy to try and tap the brakes—to slow the economy slightly without creating a hard stop. Then beginning in September 2008 the economy reversed course, external demand for Chinese exports plummeted, commodity and energy prices slumped in response to the global economic slowdown, food prices leveled, and the Chinese leadership faced prospects of slower growth. In both situations the PBoC mainly responded by changing the required reserve ratio (RRR), the percentage of

Month	USD-RMB Value	Percent Change (Month on Month)
Oct-2007	7.482	
Nov-2007	7.392	-1.2%
Dec-2007	7.314	-1.1%
Jan-2008	7.202	-1.5%
Feb-2008	7.123	-1.1%
Mar-2008	7.022	-1.4%
Apr-2008	6.996	-0.4%
May-2008	6.953	-0.6%
Jun-2008	6.872	-1.2%
Jul-2008	6.840	-0.5%
Aug-2008	6.845	0.1%
Sep-2008	6.855	0.1%

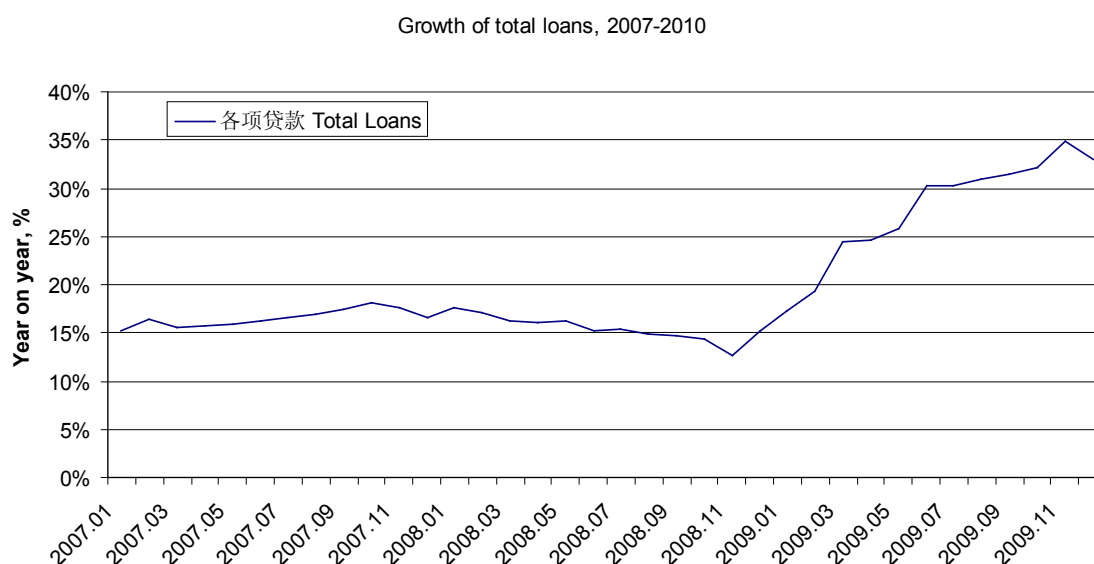
(Table 2.3.2) RMB appreciation vis-à-vis the dollar⁵⁰

deposits banks must keep in the PBoC's vaults. Reductions in the RRR and the resultant increase in the amount of funds commercial banks deposit with the central bank means fewer loans can be extended, reducing the money multiplier and total money supply.⁴³ Interest rates were adjusted, but only slightly, and the course of RMB appreciation was strongly affected by economic conditions.

Prior to the recession, the government raised both the RRR and interest rates. Simultaneously the government allowed the RMB to appreciate in order to combat inflation, and slow both the extension of bank credit and the economy. In 2007 and the first half of 2008 the government continually raised the RRR, raising it six times in 2007 in 0.5 percent increments. The PBoC continued to raise the RRR in 2008, raising it by 0.5 percent in January, March, April, May, and

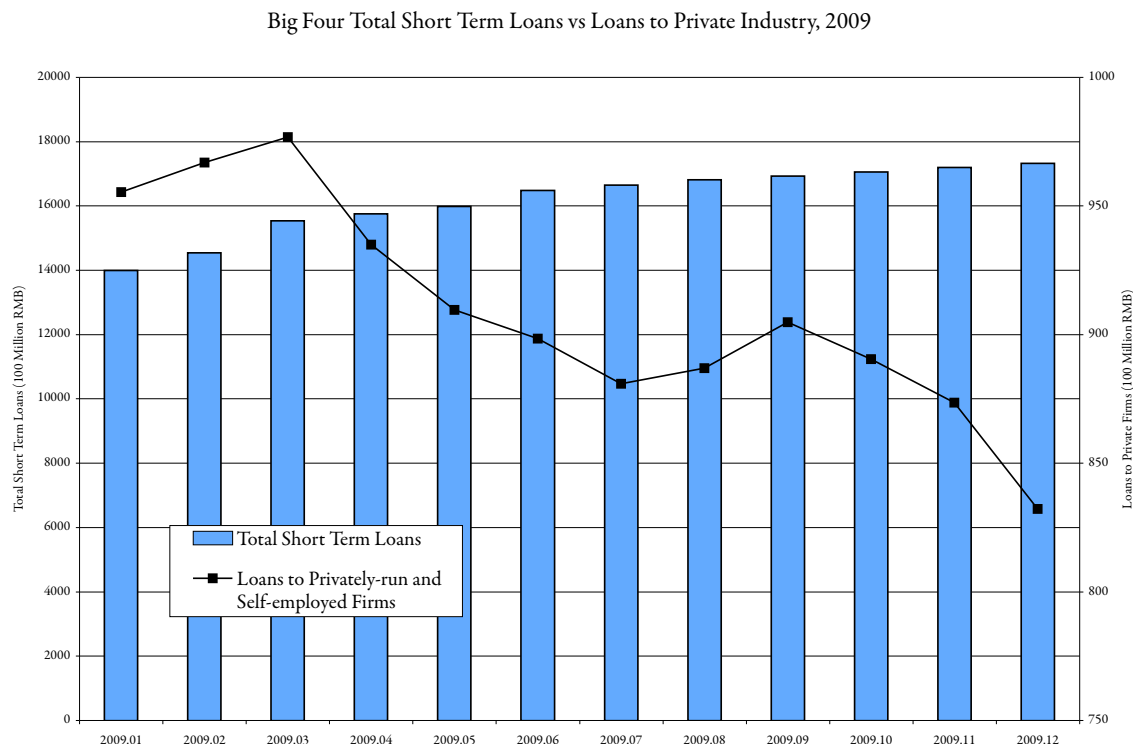
twice in June.⁴⁵ The RRR hit an historic high of 17.5 percent at the end of June 2008. Meanwhile, the PBoC also raised interest rates six times in 2007. But increases in both the RRR and interest rates did not halt the extension of bank credit. In the first quarter of 2008, loans increased by 16 percent as compared to a year prior. Despite increases in the RRR, the money supply did not decline because the PBoC's purchase of foreign currency was greater than effective sterilization, adding to the monetary base and stoking inflation.⁴⁶

The primary method used to cool the economy was RMB appreciation.⁴⁷ Beginning in late 2007 the government allowed appreciation of the RMB to increase. As illustrated by table 2.3.2 below, from November 2007 until March 2008 the RMB appreciated a full percentage point per month, appreciating over 6 percent in five months. Appreciating the RMB reduced inflationary pressures by partially offsetting the price increase of dollar denominated commodities from being fully passed through the domestic economy.⁴⁸ However, the quick appreciation attracted huge inflows of capital, short term hot money from investors speculating that the RMB would continue to appreciate. The Chinese government estimated that despite capital controls, US \$85.1 billion flowed into China during the first quarter of 2008.⁴⁹ After March the RMB's rate of appreciation slowed, continued to appreciate slightly until the end of August, and then maintained a roughly constant value of about 6.85 (refer to figure 2.3.1 above).

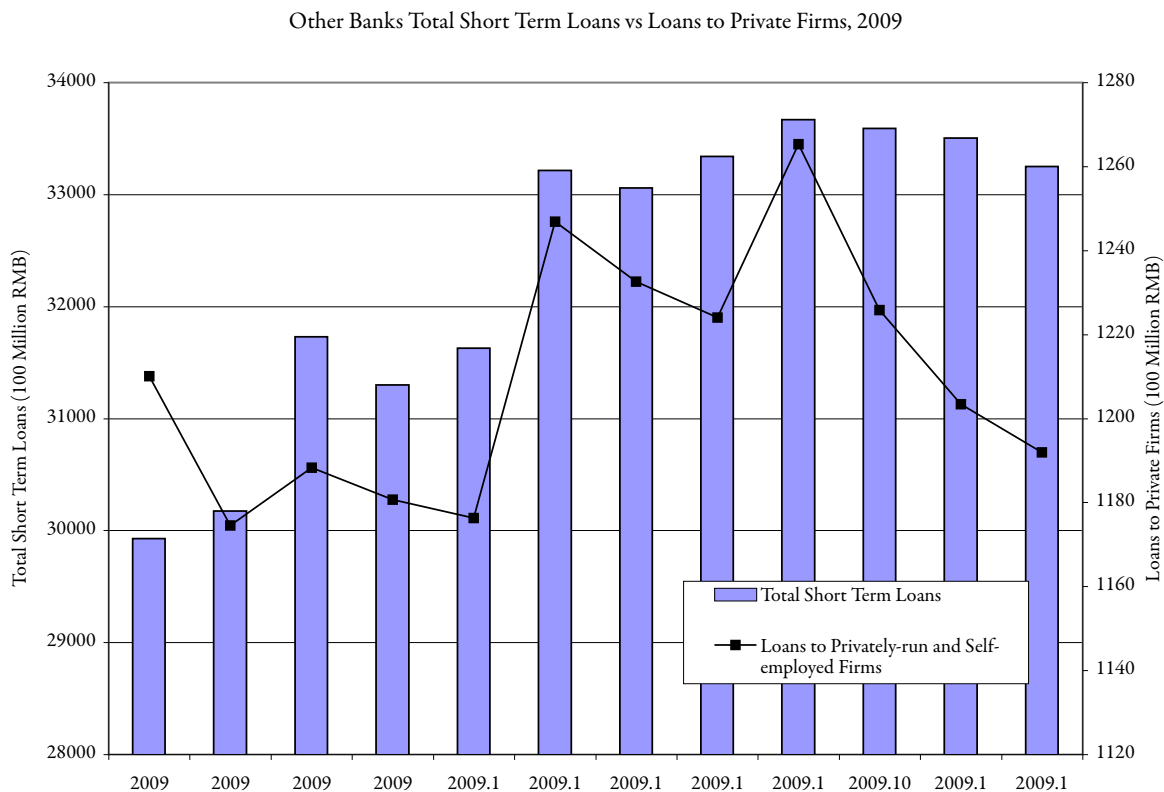


(Figure 2.3.6)

Total Loan Growth for all banks, 2008-2010⁶⁵

(Figure 2.3.7) Big Four Lending to the Private Sector¹⁶⁹

1 Data provided by the PBoC suggests appears to have incorrectly assigned decimals to 2009 data for state banks. Total lending for the first quarter of 2009 was RMB 1.4 trillion, yet PBoC data suggests RMB 14 trillion was lent by state banks in just January alone. As the author recalculated the given data by moving the decimal one space to the left for all 2009 data.

(Figure 2.3.8) Other Bank Lending to the Private Sector¹

1 “Other Banks” are defined by the PBoC includes: Bank of Communications, China CITIC Bank, China Everbright Bank, Huaxia Bank, China Minsheng Bank, Guandong Development Bank, Shenzhen Development Bank, Shanghai Pudong Development Bank, Industrial Bank, Evergrowing Bank, China Zheshang Bank, China Bohai Bank.”

While the PBoC did raise interest rates, interest rate adjustments could not be used as the primary method to cool the economy or reduce bank credit. The PBoC was reluctant to raise interest rates because increases would stimulate greater inflows of hot money, stimulating an need to increase the purchase of foreign exchange and undertake sterilization. The bursting of the sub-prime mortgage bubble in the US resulted in the Federal Reserve reducing interest rates to nearly zero in the fall of 2007. Lower US interest rates meant that RMB denoted assets pay relatively higher rates of interest and, combined with expectations of continued RMB appreciation, resulted in the expected return of Chinese government bonds to be far greater than that of US Treasury bonds.⁵¹

Once the effects of the crisis hit China around September 2008 the government responded quickly and effectively with reductions to the RRR and interest rate. In September, the PBoC cut interest rates for the first time in five years and simultaneously lowered the RRR. Two more interest rate cuts followed on October 15 and 29.⁵² Interest rates were cut again by 108 basis points on November 26. Following the US Federal Reserve's rate cut of US interest rates to near zero on December 15, further rate cuts were inevitable, and another modest reduction was instituted by the PBoC on December 22.⁵³ Following the September RRR cut, the PBoC continued to decrease the RRR on October 15, December 5 and December 25, ending the year at 15.5 percent.⁵⁴ Worried about an excessive outpouring of credit from the banking system, the monetary authorities began tightening monetary policy to decrease bank lending. On January 12, 2010 the RRR was increased for the first time since June 2008 by 0.5 percent.⁵⁵ On January 18 the PBoC issued an administrative order for banks to stop all new lending. At the time of writing, the RRR was most recently increased on February 25 to 16.5 percent.⁵⁶ Despite the RRR increases and administrative orders, credit had continued to flow, but at a slower rate. The government target for total new lending in 2010 is 7.5 trillion RMB.⁵⁷

By far, China's largest response to the financial crisis was an administrative push that resulted in an enormous increase in bank lending. In November 2008, China announced a 4 trillion RMB fiscal stimulus largely funded by bank loans. Central government provided funding is not nearly enough to cover the costs of the stimulus so local governments must match federal funds for projects.⁵⁸ The

government eased the credit environment and pressured banks to ignore lending standards in order to lend as quickly as possible.⁵⁹ In January 2009, a massive expansion of credit followed the stimulus announcement. It was politically safer and easier to lend to big SOEs as opposed to private firms. In fact, many banks implicitly understood that so long as they follow the investment plan, bank officials will not be held accountable for the loans they make.⁶⁰ Government officials even suggested local governments strengthen their ties with local banks. The governor of Guangxi province said: "Government and budgetary authorities of every city and county should strengthen their links with local banks, build stronger government credit platforms, realize the budget's ability to provide seed capital, and fully bring into play the base level banks' enthusiasm for disbursing loan funds."⁶¹ Clearly the fiscal stimulus created a highly politicized environment that encouraged banks to lend.

Given the political environment, it is not surprising lending exploded during 2009. In the first week of January alone banks extended a record 600 billion RMB in loans.⁶² During the first quarter of 2009 bank loans increased by 4.6 trillion RMB, more than the total size of the announced fiscal stimulus.⁶³ Since the government has more administrative authority over the SOCBs, it is no surprise that the Big Four accounted for more than 50 percent of the total lending increase. After the first quarter, the PBoC expected lending to slow, but during the second quarter banks extended another 1.5 trillion RMB in new loans.⁶⁴ During this time new lending by SOCBs declined to 36 percent of total loans, but other banks drastically increased their lending. By September 2009 credit growth finally began to slow and hit PBoC target levels.

The focus on lending to "safe" projects and SOEs worsened the private sector's credit woes. Initially private firms had no choice but to seek non-bank private funding or go bankrupt. During 2009, the Big Four actually reduced loans to the private sector, probably in response to PBoC window guidance, even as total short term loans increased slightly. Meanwhile, other institutions' loans to the private sector fluctuated during 2008-2009, before decreasing in September 2009. When a Chinese government delegation traveled to one of China's largest cities, Chongqing, in March 2009 they received data indicating 82 percent of the cities' SMEs considered a lack of funding to be the main hindrance

to their development. On the other hand, SOEs universally informed the delegation they had access to funds.⁶⁶ Realizing this, the government extended new financial options to SMEs. Beginning in mid-2008, SMEs were given permission to broadly issue corporate bonds, set up real estate investment trust funds, and run private equity funds.⁶⁷ Figures 2.3.7 and 2.3.8 illustrate the allocation of bank credit to private firms, and show how little credit is provided to the private sector compared to total loans extended. In January 2010, one of Peking University's finance professors noted that SMEs have actually outperformed SOEs during the economic downturn as a result of the newly instituted credit options, their ability to respond to the crisis with more flexibility, and indirect benefits from the stimulus package.⁶⁸ However, the long-term impact of the fiscal stimulus on SMEs is still unclear.

Bank Lending: Stimulus at what cost?

The increase in bank lending effectively eliminated China's short term economic woes, but the long term implications are unclear. Commentators both inside and outside of China believe banks relaxed their lending standards in order to quickly expand bank credit. An assistant director at the Chinese Academy of Sciences who often advises China's leaders worried that funds have flowed into "dud projects," asset markets, and the stock market.⁷⁰ Deutsch Bank's chief China economist, Ma Jun, suggests firms were talked into borrowing by banks, instead of drawing on funds for legitimate business reasons. China's largest aerospace company, China Aviation Industry Corp., received 336 billion RMB from 11 banks in the first quarter of 2009, yet the general manager worried how the firm would "allocate borrowings to increase returns."⁷¹ One company official for China Eastern Airlines stated the firm was not borrowing to expand their business, but simply "to make sure our flights can take off."⁷² Bank loans clearly continued to be allocated to SOEs instead of SMEs, indeed Big Four loans to SMEs actually decreased during 2009 even as the total amount of loans increased (figure 2.3.7). In addition to siphoning funds into unproductive industrial uses, State Council researcher Wei Jianing estimated that at least 20 percent of new credit went into the stock and real estate markets.⁷³

It seems likely that some percentage of loans were

not properly vetted and, if those loans go bad, banks will hide behind supporting the stimulus, and ask for a government bailout. Non-performing loans (NPLs) are low during economic booms, but as an economy slows some firms are unable to pay back loans. Historically, China's banking system has suffered a major NPL problem, but the issue was largely resolved around 2005 when many SOCBs were recapitalized and bad assets were removed from their balance sheets by the government. New bank loans during booms initially lower the ratio of NPLs to performing loans, but are likely to increase NPLs in the future. Thus it is unsurprising that NPLs were low in 2009, but the number of NPLs will likely increase in the future. Indeed China's banking sector losses generally have not come from ordinary lending during normal years, but from boom-bust cycles when the banks lend indiscriminately on new, wasteful projects.⁷⁴ Barry Naughton suggests that while NPLs may rise in the next 15 years, the long-term cost is probably "worth it" since massive bank credit has kept the economy growing despite the global slowdown.⁷⁵

In addition to the long-term threat of rising NPLs, the extension of bank credit has apparently contributed to rising prices in China's stock and asset markets. The unleashing of a torrent of credit has increased liquidity in the economy. Many analysts have claimed that recent rises in China's stock and asset markets are bubbles fueled by excess relative liquidity, that is excess liquidity in certain sectors (SOEs, the real estate market) while insufficient liquidity in other sectors (SMEs, agriculture).⁷⁷ The literature linking failed financial liberalization and bubbles is large. In a 2002 speech, Federal Reserve Chairman Ben Bernanke noted "unsustainable increases in asset prices have been associated on a number of occasions with botched financial liberalization, in both emerging-market and industrialized countries."⁷⁸ Banking systems of a number of economies—namely Argentina, Chile, Costa Rica, Malaysia, Norway, Texas, and Venezuela—collapsed not as a direct result of an external shock, but due to macroeconomic stabilization effects which were followed by investment booms before banking sector collapses.⁷⁹ The debate within China is lively as well. Zhang Weiying, economics professor and dean of the Peking University's Guanghua School of Management, warned that excessive credit expansion and low interest rates are the root of all financial crises in history, and cause high inflation and massive toxic assets.⁸⁰

Yet it is unclear whether China's name will be added

to the list of economic collapses. In 2009, housing prices rose 88 percent in Beijing, 95 percent in Shenzhen, 43 percent in Shanghai, and 42 percent in Guangzhou.⁸¹ Shanghai mortgages rose 1,600 percent in 2009.⁸² Vacancy rates in Beijing rose during the second half of 2008 and first half of 2009. At the end of the third quarter of 2009, the vacancy rate for luxury residential apartments in Beijing was 28.58 percent, the rate for retail property was 17 percent, and office property was 18.22 percent vacant.⁸³ Despite high rates of vacancy which suggests real estate supply is outstripping demand. Prices have been rising continuously since July 2009 and the government has noticed. Bank regulators are carefully monitoring the market and actively working to slow it.⁸⁴ The RRR has risen consistently since July 2009, most recently on February 25, 2010 to 16.5 percent.⁸⁵ In the middle of late December the government extended sales tax to houses sold within five years of their initial purchase, and in January the government raised the required down payment on loans for second houses to at least 40 percent.⁸⁶ Since real estate investment contributes an estimated 10 percent to GDP, a slowdown in the real estate market will likely decrease economic growth as well.⁸⁷ But such an outcome is certainly better than a sudden collapse of the real estate market and possible contagion in the banking sector.

Conclusion

The RMB clearly has remained primarily pegged to the dollar since July 2005 and the effects of the peg are real. The PBoC must purchase foreign exchange and then pay to sterilize the money supply to avoid inflation. Inflation has been successfully

managed, but the costs of sterilization will continue to mount. The RMB peg has pushed the Chinese monetary authorities to pursue non-traditional monetary policy. Interest rates cannot be vastly different than those in other countries or capital flows could destabilize the economy. Furthermore, interest rates have never been deregulated and so interest rate changes do not effectively regulate the supply of bank credit and, consequently, the economy. These non-market interest rates have lead to an inefficient allocation of capital and preference toward SOEs, even though private SMEs are increasingly responsible for China's strong economic performance. The Great Recession has amplified these economic issues: RMB appreciation stopped, hot money has flowed into China, and sterilization has increasingly high costs. Non-market interest rates have forced the monetary authorities to attempt to control bank lending by adjusting the RRR and through administrative guidelines for banks. Banks responded by pumping money into the economy, providing more credit than the entire fiscal stimulus itself, which has received the majority of international media attention. However, the credit extended continued the banking sector's tradition of allocating capital primarily to state-owned firms at the expense of the private sector. China's response to the financial crisis successfully coped with the challenges presented in 2008-2009, but at the cost of a clear movement toward more state intervention and direction and unclear future costs.

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
	Balance (余额)	Percentage of Total Loans	Balance (余额)	Percentage of Total Loans	Balance (余额)	Percentage of Total Loans	Balance (余额)	Percentage of Total Loans
2009								
Total NPLs	5495.4	2.04%	5181.3	1.77%	5045.1	1.66%	4973.3	1.58%
NPLs by Institution			Av					
Important Banks ¹	4714.4	2.02%	4435.8	1.74%	4296.9	1.64%	4264.5	1.59%
City Banks	509.2	2.17%	485.1	1.85%	476.6	1.70%	376.9	1.30%
Rural Commercial Banks	197.4	3.59%	192.8	3.20%	197.9	2.97%	270.1	2.76%
Foreign Banks	74.3	1.09%	67.7	1.03%	73.8	1.06%	61.8	0.85%

(Table 2.3.3) Non-performing Loans by Bank Type, 2009⁷⁶

Footnotes

1 Important banks: ICBC, ABC, BOC, CCB, Bank of Communications, China CITIC Bank, China Everbright Bank, Huaxia Bank, China Merchants Bank, Guandong Development Bank, Shenzhen Development Bank, Shanghai Pudong Development Bank, Evergrowing Bank, China Zheshang Bank, China Bohai Bank, Industrial Bank, China Minsheng Bank.

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China Today:

Effects of Stimulus and Chinese Ambitions for Global Growth

Kendall Smith

Introduction

The current financial crisis has undeniably damaged the economies of the long-standing industrial powers of the 20th and early 21st century, and to some extent damaged their reputation for financial stability and fiscal responsibility. All of the developed powers (e.g. the United States, UK, the EU, and Japan) have experienced slower if not negative economic growth since the effects of the recession began to be realized in late 2008. Negative growth, however, is far from being confined to the industrialized economies of the West. Many of the developing economies across East and South East Asia have also suffered greatly as a result of the recession, GDP growth ranging from -3.5 percent in Malaysia to -10 percent in Singapore.¹ Meanwhile, economies of India and China have been able to weather the storm relatively unscathed.² China specifically, has found itself coming out of the financial crisis in an advantageous position to take a more predominant role in the global economy.

In January of 2010, China's GDP growth was estimated at 10.7 percent, slightly faster than the 8 percent average for all of (2009).³ This highlights the resilience of the Chinese economy to the financial crisis from only one economic indicator. As we saw in previous chapters (Chapter 2: Sections 2 & 3), China has mitigated most of the harmful effects of the recession to its economy largely by instituting its own economic stimulus plan at an estimated cost of 4 trillion RMB; which will be used for investing in massive infrastructure projects throughout the country, earthquake reconstruction and rehabilitation, healthcare reform, and increasing domestic consumption.⁴ China has also implemented various tax rebates and credit incentives to encourage the consumption of automobiles and household electrical appliances in the rural countryside, encouraging

the growth of domestic consumption. However, some argue that implementing the 4 trillion stimulus package in reaction to slow domestic growth from sudden "industry collapse" in its export industries will not be as effective in reversing high unemployment as providing financial aid, technical training, or other forms of employment assistance at a much lower cost.⁵

At the same time, in 2008 and 2009 China implemented new programs in banking sector reform that eased capital and foreign exchange controls for its state-owned and private enterprises while expanding sources of lending for foreign investment. These policies have been an extension of China's "Go Out" policy that began to take effect in 2004.⁶ This policy and the series of related reforms after it have encouraged FDI flows that are traditionally known to flow into China, to begin going in the opposite direction by prompting Chinese firms to strategically invest abroad. Most of these projects are bid on by China's state owned enterprises (SOE) or government directed investment vehicles (also known as a special purpose vehicle, or SPVs), investing in infrastructure projects, securing access to natural resources in developing countries in Asia, Latin American and recently Africa, while others stage themselves for market entry into the United States and other developed economies through Greenfield investment or M&A activity. These types of investments commonly seek more vertical integration, the direct transfer of technology, international management experience, and exposure to branding and marketing in the host countries economy.⁷

Through the recession, China has continued to maintain the value of the RMB pegged to the dollar to keep Chinese exports competitive in international markets by restricting "the ability of private investors to move their money either into or out of the country."⁸ However this has many

negative implications for economic relations in Southeast Asia between China and its ASEAN trading partners, especially after the creation of the ASEAN-China Free Trade Area, or ACFTA.⁹ For this reason, the RMB peg to the dollar still remains to be a major point of contention in Sino-Western relations, not to mention the \$2.3 trillion in foreign reserves China has amassed mostly denominated in US security bonds in order to maintain its hard-currency policy.

Given the severity of economic downturn in most of the developed and developing countries around the world, this is an important time in history to analyze China's economic policies before, during and after the global financial crisis, and to ask whether these policy decisions correlate with the greater political agenda of the Chinese Communist Party. Part II of this section will explain how recent changes in China's firm structure and banking policy have come as a result of the financial crisis, and will also briefly outline the history of China's "Go Out" policy reforms in context to China's recent outbound direct investment trends. Part III will describe how the global recession has affected trade imbalances between China and its major trading partners, and how these imbalances reflect China's central role in the Asian manufacturing supply-chain. Given that the rise of a Chinese consumer class has numerous implications on the future structure and sustainability of economic integration within the global economy, it is also important to understand how successful China has been at fostering a middle-income consumer class through the stimulus, or if there have been any limitations to domestic growth due to the RMB being pegged to the dollar. Lastly, Part IV of this section will utilize arguments brought forth in earlier sections of this report to rationalize Beijing's reaction to the financial crisis. An important question needs to be asked, and that is if China has explicitly taken advantage of negative consequences of the recession on other nations economies and capital stocks of multinational firms, in conjunction with its weak-currency policy and its horde of foreign reserves and newly capitalized financial sector, in order to expand its influence and central importance in the global economy. This chapter seeks to answer if there are underlying global ambitions has China yet to reveal, and how could its reaction to the crisis strengthen or threaten the linkages China has built with the global economy over three decades of development and reform.

Major Changes in China's Export Industries and FDI after the Global Recession

There is ample literature on the causes and effects of the Global Recession of 2007-2009 on China and its neighboring countries. The direct effects of declining external demand for China's labor-intensive exports is important to analyze because the impact on China's export sector gives a detailed picture of China's central role as an assembly and export platform for the rest of the Asian network of production based on G3 demand. However a detailed analysis of this relationship between China and other Asian countries must begin by explaining the impact of the financial crisis on particular provinces and industries within China. This section will then discuss policy changes Beijing implemented regarding OFDI in response to the recession.

The most popular explanation for the decrease in Chinese economic growth in late 2008 and early 2009 is due to sudden "industry collapse."¹⁰ This phenomenon occurs when manufacturing industries witness a traumatic and unexpected decline in output and employment in a relatively short period of time due to decrease in external demand factors. China's economy is especially vulnerable to industry collapse because its dependence on exports for stable growth. Net exports have increased from 5 percent of GDP growth between 2001-2004 to nearly 20 percent of growth by 2005-2007.¹¹ China's reliance on exports for growth has given rise to international calls to "rebalance" China's growth towards an economy more dependent on domestic consumption and investment.¹² However, industry collapse due to declining demand for exports explains why China's economic growth did not slow until the contagion of the recession had already spread beyond the United States and into Europe and other developed countries. When developed countries faced banking sector collapse, this meant that enterprises and consumers could not obtain credit necessary for consumption. It was not until demand in China's major export markets declined that manufacturing industries in its southern coastal provinces suffered, spurring negative economic growth.

According to Lai (2010), industry collapse in China did not surface until November of 2008 and lasted well into the middle of (2009). A large decline in export growth during this time can be seen in Figure 2.4.1 below. In the July and August

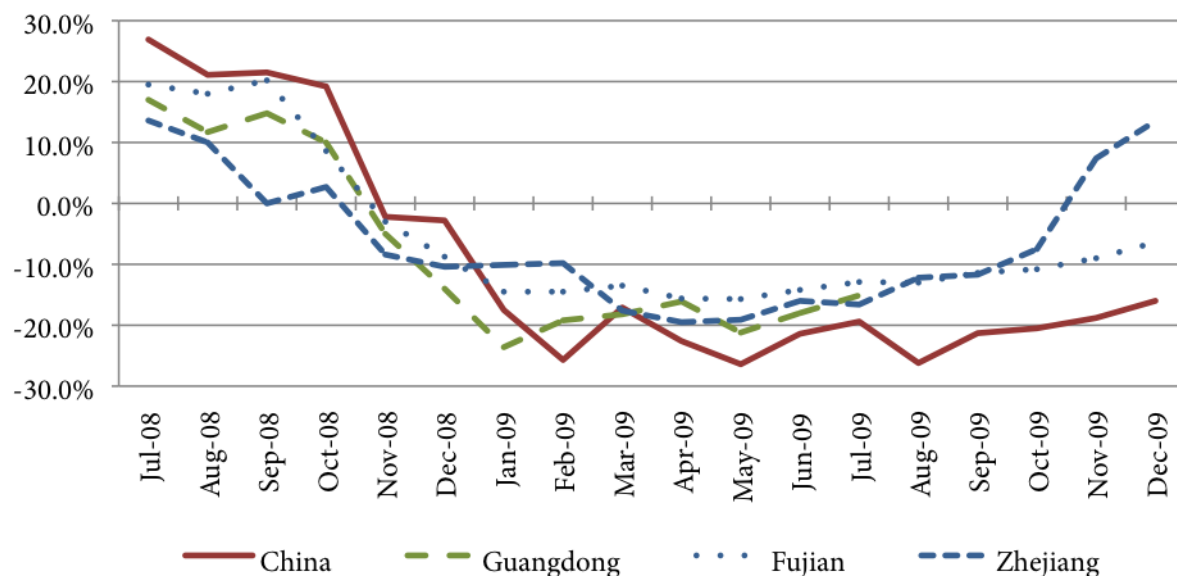
of 2008, both import and export growth was still strong in all of China as a whole, averaging over 20-25 percent growth on the previous year. Then beginning in November of 2008, there was obvious fallout in the growth of exports peaking in February of 2009 around -25 percent. Lai (2010) argues that a large component of declining demand for exports during this three-month period in all of China was concentrated in the provinces of Guangdong, Zhejiang, and Fujian. These three are all export-oriented provinces, where many small and medium-sized firms (or SMEs) went bankrupt, causing some 20 million peasant workers to go unemployed and migrate back to their rural hometowns. Meanwhile in the first half of 2009, deflation emerged in China as the CPI decreased (see Figure 2.3.5). This negative trend in income is a direct result of falling exports and export price; both income and price elasticity in China's exports are 4.7 and -.5 respectively.¹³ This implies that a fall in foreign income will have a greater effect on declining exports than export price. In other words, because the value of the RMB is pegged to the dollar, a drop in US income will have a larger impact on volume of exports from China to the US than a slight appreciation in the RMB (thus an increase in export price.)

The estimated impact of export decline on different sectors of China's economy indicates that export decline was

most severe in manufacturing. In both 2008 and 2009, China's manufacturing experienced a nearly 2 trillion RMB decline in GDP, which accounted for approximately 75 percent of GDP growth decline and 38 percent of reduction in employment in both those years.¹⁴ However, for many of China's export-oriented provinces (e.g. Guangdong, Zhejiang, and other coastal SEZs), negative effects of the recession on exports had already begun to reverse by mid (2009). Zhejiang province especially has witnessed a rapid return to high export growth after October of (2009).¹⁵ Unfortunately, export data for some provinces like Guangdong are spotty during the recession, and in some cases entirely not available after June of (2009). This highlights the difficulty that can arise when attempting to find reliable aggregate statistics on China's economy and provinces.

Manufacturing was obviously not the only sector in China's economy impacted by the recession. Harmful effects of the recession have made the disparities between state-owned and private SME much more apparent, forcing officials in Beijing to consider a massive wave of consolidation in certain industries where firms have gone bankrupt, have failed to operate at full potential, or have lagging productivity. In general, "Chinese industries have too many SMEs relative to large firms, and the largest firms are still too small".¹⁶ Large

Figure 2.4.1 Export Growth During the Recession



(Figure 2.4.1)

Source: Data for China from Liu 2009; <http://www.TradingEconomics.com>; respective provincial data from Zhejiang Provincial Bureau of Statistics <http://tjj.zj.gov.cn/>, Statistical Bureau of Guangdong Province <http://www.gdstats.gov.cn/>, and Fujian Provincial Bureau of Statistics <http://www.stats-fj.gov.cn/>

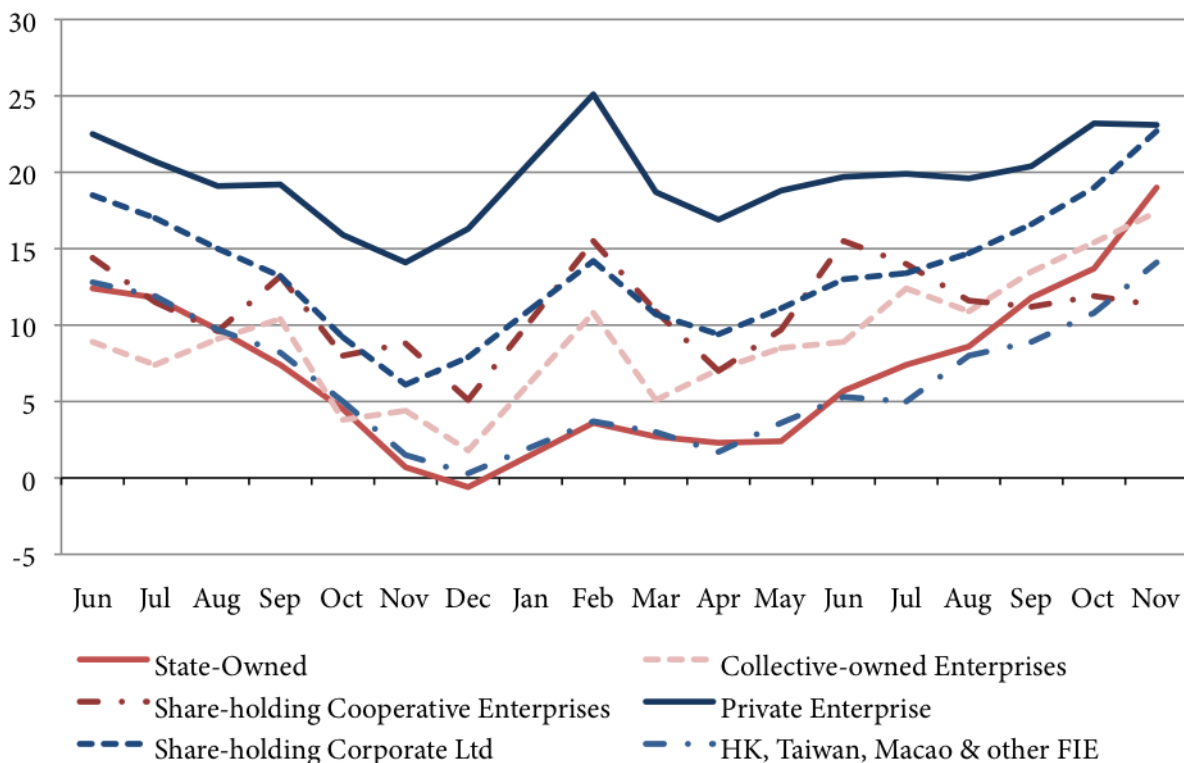
SOEs are still too small in the sense that they are not vertically integrated enough to take advantage of economies of scale to produce goods at competitive costs. There are five primary industries targeted for consolidation by Beijing, in other words, sectors slated for industrial shakeout and restructuring. These include bituminous coal, cement manufacturing, auto parts, motor vehicle manufacturing, and metal shipbuilding.¹⁷ However, recent pressure on certain industries, such as steel and other heavy industries, to consolidate has not only come as a result of the recession, but also from high levels of overcapacity and capital inefficiency.

Many other sectors of the Chinese economy, from agricultural and pharmaceutical to steel industries, will experience similar industry shakeouts in order to remain competitive and profitable. Consolidation in these sectors will also encourage Chinese firms to begin to seek more control of the value-added chain both upstream and downstream via mergers and acquisitions as a way to diversify product lines and increase their economies of scope. It is estimated that Chinese manufacturers are only able to catch less than 20 percent of profit margins for any typical product manufactured in China¹⁸; in other words there is more than 80 percent of

the value-added chain left for Chinese firms to grab a greater share of by integrating vertically both upstream into R&D and branding as well as downstream into distribution and sales. If Chinese firms now have adequate capital and market knowledge in conjunction with support and encouragement of the government, it seems the recession will only accelerate the rate at which Chinese firms integrate vertically and control more value-added of the production process.

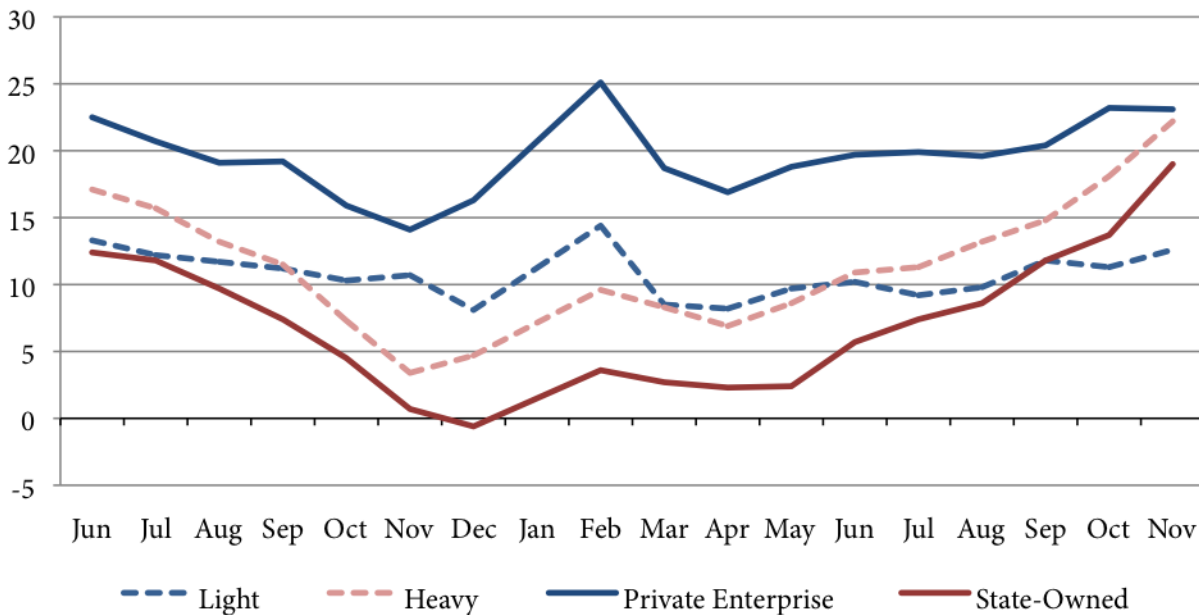
One interesting feature of China's industrial structure is the relationship between value-added of output and the type of firm or enterprise. Data on value-added in various sectors gathered from the National Bureau of Statistics of China reveal that the recession impacted state-owned, collective and cooperative enterprises in a different fashion than private and foreign invested or owned enterprises (see Figures 2.4.2 and 2.4.3 below). It is apparent that SOEs and export-oriented foreign invested firms (FIE) in these regions suffered the greatest decline in value-added during the recession, followed by share-holding cooperative and collective enterprises (Figure 2.4.2). The value-added component of private industry was impacted least by the recession. The trends in value-added for light and heavy industry (see Figure 2.4.3) highlight that

Figure 2.4.2 Growth in Value-added by Industry



(Figure 2.4.2)

Source: National Bureau of Statistics of China <http://www.stats.gov.cn>

Figure 2.4.3 Growth in Value-added Light vs Heavy Industry

(Figure 2.4.3)

Source: National Bureau of Statistics of China <http://www.stats.gov.cn>

China's heavy industry is dominated by SOEs, where light industry is predominantly private or foreign-owned. Given China's inefficient allocation of capital to SOEs, the fact that private enterprises, and thus light manufacturing, were able to maintain a substantially higher level of value-added throughout the recession implies that private industry (mostly comprised of SMEs) is able to remain competitive and react more efficiently to adverse economic conditions with a limited supply of capital compared to their state-owned counterparts. This implies that if capital were allocated more efficiently in the country, private firms would be a lot more profitable and the Chinese economy would undoubtedly benefit from a private sector that is able to compete on a level playing field with SOEs.

So why did China's manufacturing industries in coastal provinces suffer the greatest drop in export growth and industry collapse? There are three primary reasons industry collapse occurred in these regions: demand decline-caused industry collapse is attributable to industries that are (a) labor-intensive, (b) export-oriented, and (c) where a large share of goods produced for export are processing exports.¹⁹ Fujian, Guangdong, and Zhejiang are all traditionally known for being labor-intensive manufacturing centers, and their geographical location in conjunction with China's low labor costs have

made them advantageous for enterprises from countries like Taiwan, Hong Kong and Korea to set up factories for import processing and re-export of goods destined for countries with large domestic consumer markets. For more information on this topic, see Chapter 1, Section 2 & 3.

This industry transfer of low value-added and labor-intensive manufacturing from other established industrial powers in East Asia complements the "Flying Geese Model" to development (Chapter 1 Section 2), fitting into a natural progression in "product life-cycle" theory, and represents China's evolving position in the global supply-chain since the mid to late 1990s.²⁰ Furthermore, industry transfer of this nature has caused processing exports in China to have a strong correlation with imports from other Asian countries. Figure 2.4.4 below shows how processing exports had recovered by the end of the year after the financial crisis bottomed-out. Unfortunately, monthly data of processing imports and exports was unavailable for the time period leading up to the recession. However we can still see that as exports decreased, declines in import growth were even more dramatic. Conversely, once processing exports began to show positive growth, import growth began to accelerate even faster than processed exports. Intraregional trade between China and other Asian economies like Japan, Korea,

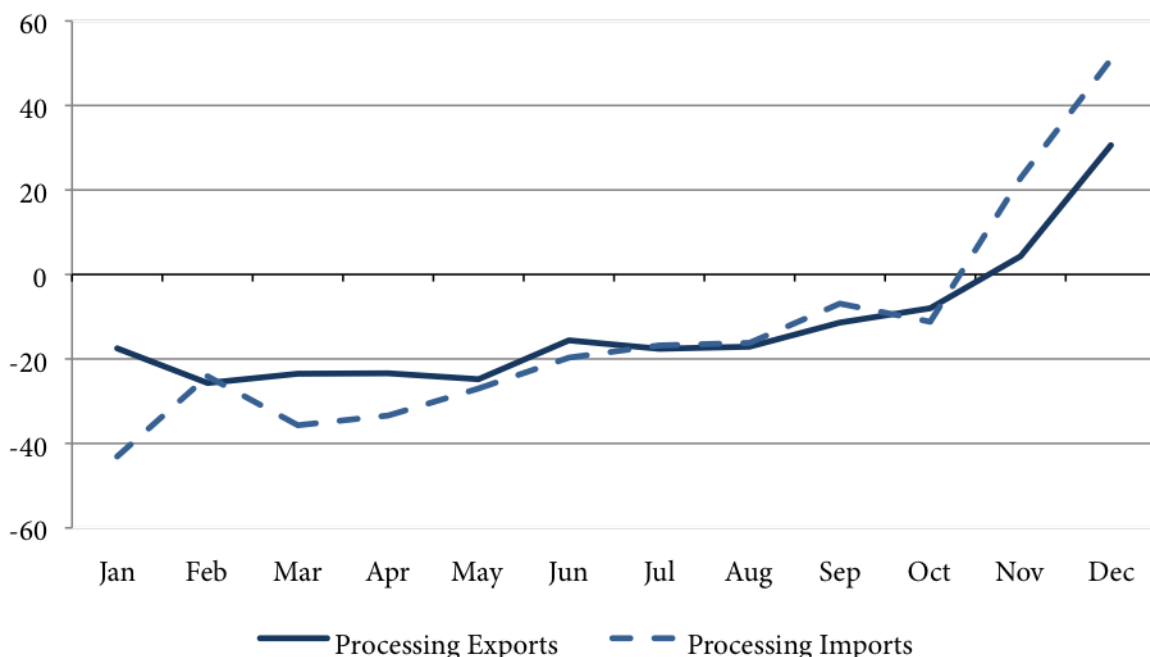
Singapore, Taiwan, and Hong Kong, dominates a large share of the import and re-export manufacturing in China's southern coastal provinces. For example, between 1979 and 2006, the above five countries accounted for 67.4 percent of accumulated inward FDI in China.²¹ In 2006, China's share of manufactured exports as a percentage of GDP was 33.7 percent,²² where the total share of processing trade of exports was about 53 percent.²³ FIEs accounted for approximately 84 percent of China's processing exports and 85 percent of processing imports in the same year.²⁴ It is apparent that Asian FIEs are responsible for the lion's share of China's processing trade. The implications of China's role as assembly center for the world on trade imbalances and economic integration in East Asia is an important topic, and will be discussed in further detail in Part III of this chapter.

From Chapter X in Section I and the explanation above, we can see that demand decline-caused industry collapse impacted export growth and manufacturing in China's southeastern coastal provinces worst, because these provinces are attractive locations for the production of labor-intensive processed goods. The financial crisis has caused global drops in demand for consumer goods. These are the types of industries that suffered the worst demand decline abroad in developed nations. For this reason, some

believe that Beijing's implementation of the 4 trillion RMB economic stimulus package, discussed in Section 2 of Chapter 2, while effective in maintaining high annual GDP growth rates, has not addressed the issue of high concentration of unemployment in the manufacturing and agricultural sectors.²⁵ In practice, the stimulus invests heavily in rural and transport infrastructure, earthquake reconstruction, among many other social, environmental rehabilitation and energy projects. Liu (2009) states that China already has a high capital-output ratio, and the investment share of GDP will expand to almost 48 percent if the stimulus is implemented as planned. This massive amount of investment in the construction sector exacerbates an already inefficient allocation of capital between state and private sectors in the Chinese economy, risking overheating and inflation among other issues.

Although there will be some long-term benefits to domestic consumption derived from the current plan of action, both Cai et al (2010) and Lai (2010) argue that domestic consumption would be more responsive to the stimulus if the 4 trillion RMB were to be utilized to stave off high levels of unemployment in coastal provinces and the manufacturing sector by formulating an "industry stabilization policy" that is suited to structural changes in China's export industry and offering employment aid programs that give employees

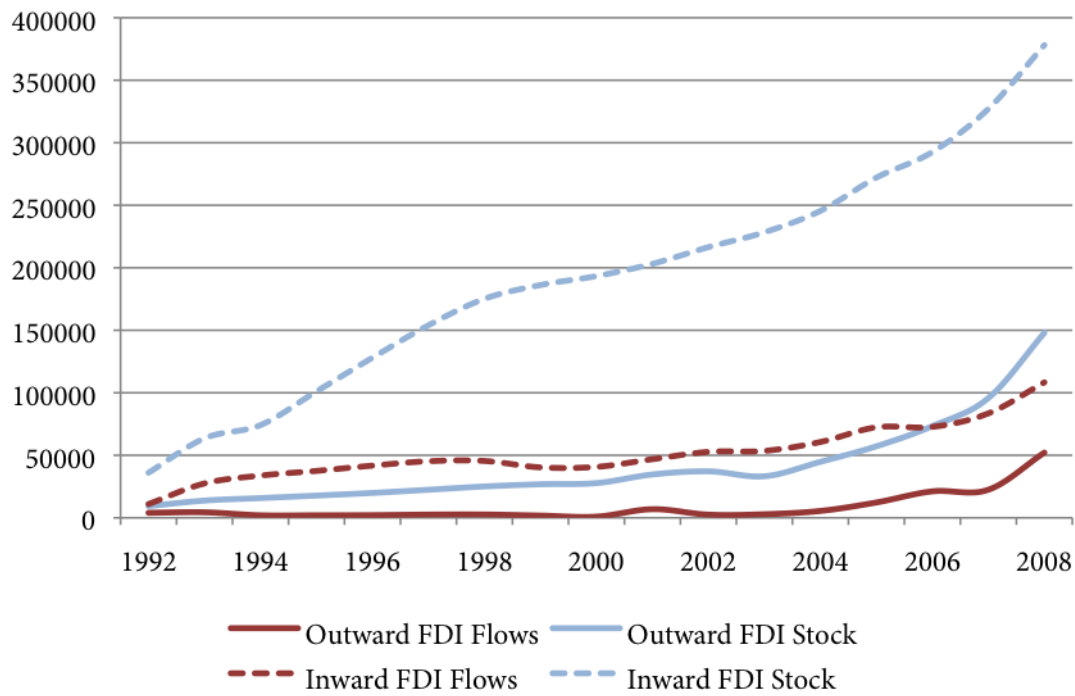
Figure 2.4.4 Growth in Processing Exports after Recession



(Figure 2.4.4)

Source: CIECC 2009 Monthly Processing Export Statistical Data <http://jm.ec.com.cn/>

Figure 2.4.5 China's History of Inward and OFDI
(in US\$ millions)



(Figure 2.4.5)

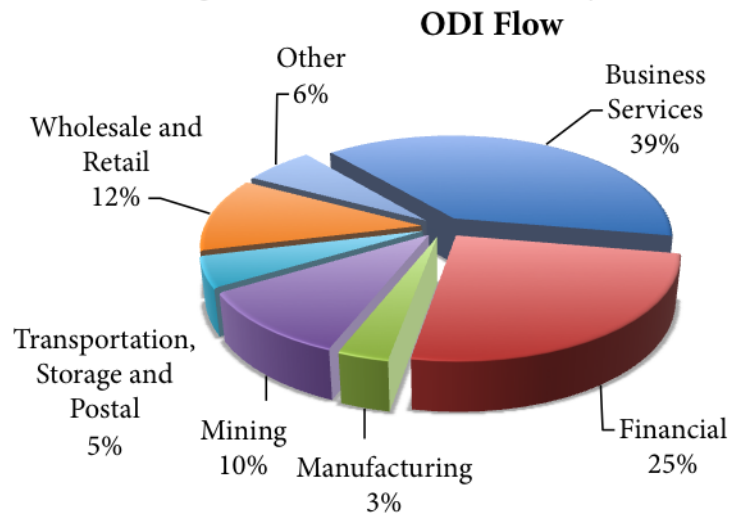
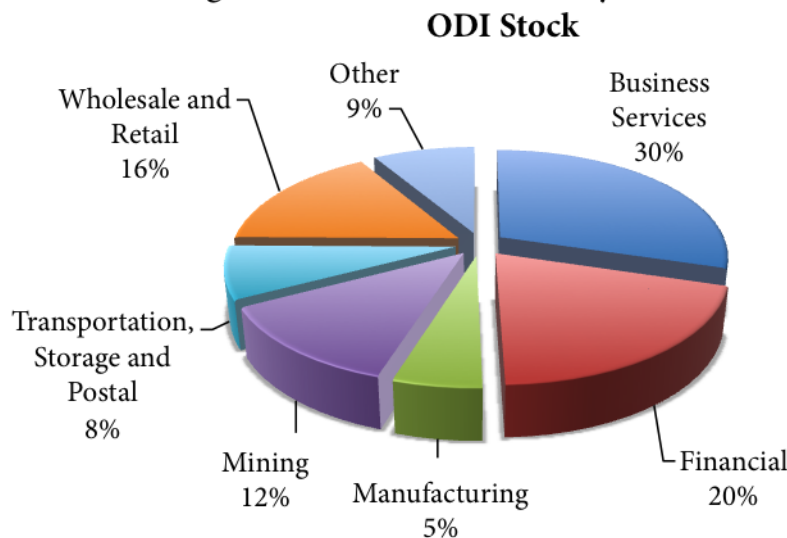
Source: UNCTAD FDI Statistics Database; MOFCOM 2009b, Figure 1

direct access to temporary financial assistance and technical training in between jobs. These programs would also need to benefit the high population of informal rural migrant workers in urban areas. Thus investment in public services such as employment, education, and healthcare would provide more long-term stability to China's economic growth and the fostering of a domestic consumer middle-class.

As we saw in previous chapters, Beijing's response to the Global Recession of 2008-2009 was not limited to the implementation of the 4 trillion RMB stimulus package, but also included many policy changes in the banking sector as well as massive extensions in bank lending and credit, lowering the Required Reserve Ratio (RRR) and lending interest rates; in other words, loosening monetary policy by easing lending. This loosening of monetary policy has restricted the ability of the government to reign in inflationary pressures from overcapacity and a potential housing bubble. Given that 2/3 of the stimulus funds are to be provided by large state-owned banks, as well as local and provincial commercial banks, banking sector reform, has been central to mandating the stimulus by encouraging banks to ignore lending standards just to expand lending and available

financial capital as quickly as possible. On the other hand, recent reforms including two policy changes in 2009 directly related to access to foreign exchange, lending and remittances of overseas investments have been an extension of the central governments "Go Out" or "Go Global" policy.²⁶ Even though the global investment strategy began in 1999, official policy changes didn't occur until in 2003 and 2004 when the National Reform and Development Commission (NDRC) and State Administration of Foreign Exchange (SAFE) began to relax the approval process of outbound foreign direction investment (OFDI) while offering investment incentives in targeted industries such as natural resources.

Until recently, Chinese OFDI has historically played an insignificant role in the global flows and stocks of FDI. However, China has been remarkably successful in attracting FDI since the early 1990s, as can be seen in Figure 2.4.5 above. In 2003, China became the largest destination for direct investment for the first time, receiving FDI inflows of about \$53.5 billion, just slightly above both FDI inflows to France and the United States with \$47 billion and \$29.8 billion, respectively.²⁷ By 2008, China's inward flows²⁸ of FDI had grown to about \$108 billion, while inward FDI

Figure 2.4.6a China's OFDI by Sector in 2008**Figure 2.4.6b China's OFDI by Sector in 2008**

(Figure 2.4.6a) (Figure 2.4.6b)

Source: MOFCOM 2009b, Figure 3 & Figure 6

stock²⁹ reached approximately \$380 billion.³⁰ China's OFDI, conversely, went from practically zero in 1978 after the beginning of the reform era, to \$4 billion by 1992. They remained level before rising first to over \$12 billion in 2004.³¹ Then OFDI flows grew rapidly to \$52.1 billion in 2008, which was double the amount of OFDI in 2007, and stocks grew to nearly \$150 billion.³² Compared to developed economies, China's total OFDI flows are comparable to that of Austria or the Netherlands, accounting for less than 1 percent of global flows annually between 2000 and 2007.³³ Flows of U.S. FDI are nearly 6 times larger than that of China's, with an estimated \$312 billion in 2008.³⁴ China's preliminary estimates for the first three quarters of 2009 on

the Chinese Ministry of Commerce Department of Outward Investment and Economic Cooperation website state that non-financial OFDI reached \$32.8 billion, of which the third quarter accounted for over \$20 billion, or approximately 2/3rd of total outward FDI in 2009 to date.³⁵

According to some estimates, Chinese outward FDI flows are expected to grow to between \$170 billion and \$380 billion in the next five years.³⁶ The Ministry of Commerce has yet to release official data for the entire year of 2009, so it is impossible to make any accurate predictions of Chinese OFDI in the short-term after the recession. In response to global economic turbulence, the total value of approved overseas projects through outward FDI in the first quarter of 2009

dropped to \$3.7 billion, which was more than a 60 percent drop in FDI from the same quarter of the previous year.³⁷ Despite short-term anxiety and cautiousness in approving deals, policies like “Go Global” put Chinese outward FDI in a position to exceed FDI inflows in the medium to long run.³⁸

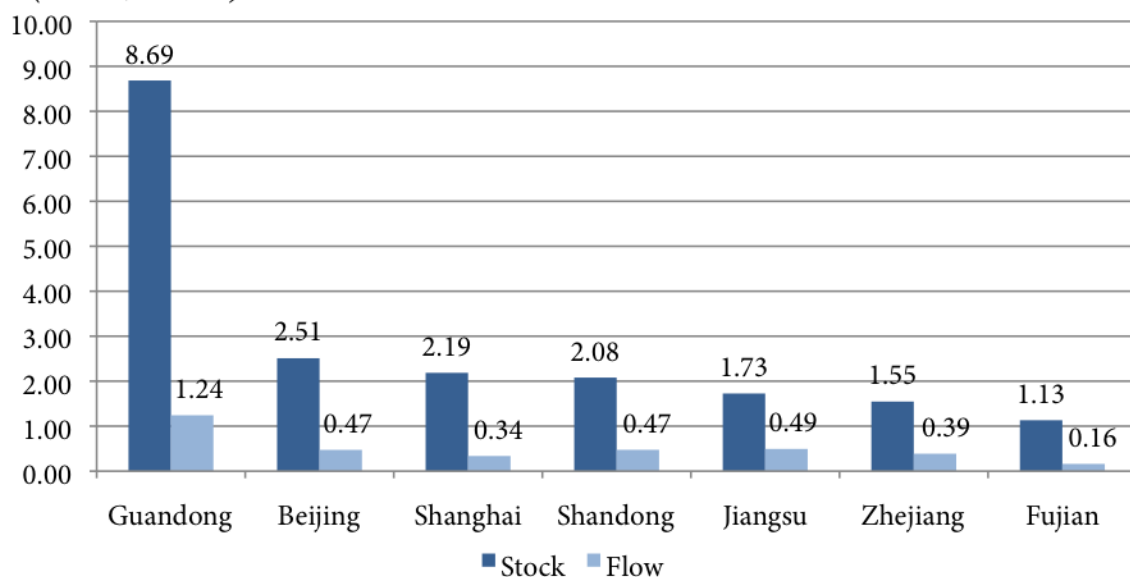
It is noteworthy that between 1990 and 2002, the sectoral composition Chinese OFDI outflows was strikingly similar to the FDI composition of South Korea in the 1980s and Japan in the 1960s and 1970s, thus supporting claims of intraregional industrial transfer from other industrial powers in East Asia to China. In 2005, 40.3 percent of Chinese OFDI was in business services, while 18.6 percent was in manufacturing, 18.4 percent in wholesale and retail, and 13.7 percent in mining and petroleum³⁹ (see Appendix 1 Figures for OFDI by Sector 2008). However, by 2008 business services and the financial sector accounted for 64 percent of Chinese OFDI flows and 50 percent of OFDI stock (see Figure 2.4.6a and 2.4.6b below), where mining and manufacturing combined share of FDI had shrunk to 13 percent of OFDI flows and 17 percent of OFDI stock. This indicates a gradual strategic shift in outbound investment away from securing natural resources and transportation projects in the Asian Pacific, Latin American, and Africa, to providing business and IT services while gaining market access in developed economies (mainly OECD). This shift could also imply that

Chinese investment in the US is moving away from sectors commonly associated with national security and towards sectors that require more openness and transparency to stay internationally competitive.

Taking into account the top sources (e.g. cities and provinces) and destinations of Chinese OFDI are important for understanding how and where industries cluster domestically and overseas. Figure 2.4.7 below shows that in 2008 Guangdong was the largest source of Chinese OFDI, accounting for nearly \$8.7 billion or about 6 percent of total OFDI stock and \$1.2 billion or 2 percent of FDI flows, of which half to 2/3rd originates in Shenzhen. In total, the five largest sources for Chinese OFDI account for approximately 12 percent of Chinese OFDI stock and only 6 percent of OFDI flows. If only 6 percent of China’s total OFDI originates from the five largest sources, then wheredoes the rest of the \$52.1 billion come from?

To answer this, it is important to understand the difficulty in obtaining reliable data for Chinese FDI. First, Chinese data in MOFCOMs yearly statistical FDI bulletins collect information on enterprises from local commerce bureaus, and many Chinese companies do not report foreign earnings reinvested as OFDI. Second, over 80 percent of all of Chinese OFDI is first routed through tax-havens, and Chinese firms do not report final destinations of investment, only the first

Figure 2.4.7 China's OFDI Source by Province, 2008
(in US\$ billion)



(Figure 2.4.7)

Source: MOFCOM 2009b

stop when submitting for registration and approval process.⁴⁰ So issues of underreporting due to utilization of tax havens and what is known as “round-tripping” can occur (as will be discussed below), thus available data on sectoral composition and destination of investments can be unreliable. Third, corporate governance in many of China’s major firms and industries remain rather opaque to reporting FDI motives, where shareholders do not have the same power as in western style governance structures. Lastly, data is difficult to obtain because many firms use special purpose vehicles (SPVs) of the central government when making cross-border acquisitions, thus leading to misconceptions of a state directed outward investment regime.

According to MOFCOM data in 2008, the central government accounted for nearly \$36 billion of OFDI flows and \$120 billion of OFDI stock.⁴¹ The provincial total, on the other hand, accounted for \$5.9 billion of flows and \$27.5 billion of stock. Added up that still only equals \$42 billion of the total \$52 billion in FDI flows reported in 2008. So there is a \$10 billion discrepancy in the total reported OFDI flows and the sum of OFDI reported by the central, provincial, and municipal authorities.

Understanding the destination locations of Chinese OFDI is equally important as understanding where the investment originates. In 2008, 83.4 percent of total Chinese

OFDI flows went to Asia, followed by 10.5 percent of flows to the African continent, 7.1 percent to Latin American, and 3.7 percent to Australia.⁴² Western economies, like the United States and the EU surprisingly have a very insignificant share of reported FDI, accounting for only \$1.24 billion of reported FDI, or about 2.4 percent of total flows. However when added up, Hong Kong, South Africa, British Virgin Islands, Australia, ASEAN+5, and the Cayman Islands account for almost 95 percent of total Chinese OFDI. Of these flows, a majority of FDI that went to Hong Kong, South Africa, and tax havens in Latin America was in business services or wholesale/retail, where as FDI to Australia was concentrated in mining and wholesale/retail.⁴³

Table 2.4.1 illustrates the potential distortion in aggregate Chinese OFDI for destinations, given that Hong Kong, the Cayman Islands, the British Virgin Islands, and potentially South Africa are all considered tax havens. When Chinese firms register for overseas investment, they only notify the government authorities of the first destination in investment, instead of the final.⁴⁴ This leads to “round-tripping” which is a phenomenon when Chinese firms report FDI in Hong Kong or other tax havens and then bring the funds back into China where they can enjoy preferential tax and investment treatment. Therefore, when using Chinese OFDI statistical data, it is almost impossible to disaggregate the

Table 2.4.1 Top Destinations for Chinese OFDI, 2008 (US\$ billion)				
Country	Flow	% of FDI	Stock	% of FDI
Hong Kong	38.64	74.09%	115.845	78.30%
South Africa	4.808	9.22%	3.049	2.06%
ASEAN	2.484	4.76%	6.488	4.39%
British Virgin Islands	2.104	4.03%	10.477	7.08%
Australia	1.892	3.63%	3.355	2.27%
Cayman Islands	1.524	2.92%	20.327	13.74%
Kazakhstan	0.496	0.95%	1.402	0.95%
United States	0.462	0.89%	2.390	1.62%
Russia	0.396	0.76%	1.838	1.24%
Zambia	0.214	0.41%	0.651	0.44%
Germany	0.183	0.35%	0.846	0.57%
Nigeria	0.163	0.31%	0.796	0.54%
South Korea	0.097	0.19%	0.850	0.57%
Japan	0.059	0.11%	0.510	0.34%
United Kingdom	0.017	0.03%	0.838	0.57%
Canada	0.007	0.01%	1.268	0.86%

(Table 2.4.1)

Source: MOFCOM 2009b

real amount, source and destination, or sectoral composition of these investments. Despite this, activity of Chinese firm cross-border investment activity is becoming a significant and real contribution to total percent of global FDI.

So what are the driving motivators in Chinese outward FDI? In the most abstract sense, there are two explanations for the emergent trends in Chinese OFDI: overseas investment prompted either purely by industry and business related motives, or from government related incentives or in some cases instructions. First we will discuss the former motives. According to Cheng and Ma (2007), literature on Chinese OFDI indentify six clear business-oriented motives: (a) market access through sales and distribution, and in some few cases building manufacturing plant (b) securing access to natural resources, (c) transfer of technology and management skills and international experience, (d) financial capital, (e) obtaining strategic assets to a competitive business like branding and marketing networks, and (f) product diversification. Others have narrowed this to only four clear categories of motivations in investment: (a) resource seeking, (b) market seeking, (c) efficiency seeking, and (d) strategic asset seeking.⁴⁵ It goes without saying that up until recently, resource-seeking OFDI, often associated with government concerns for resource security, has been the priority of many foreign invested SOEs or state-related enterprises in particular sectors of the economy such as mining, petroleum, and transportation.

Although not a major component of Chinese OFDI, market-seeking investments have become popular with Chinese firms especially after the financial crisis because crisis has given rise to some minimal forms of protectionism of domestic markets world-wide, and this market entry approach allows foreign firms in a host country to avoid certain export barriers and/or high transportation costs involved in manufacturing trade. For example, Haier has been an active player in the United States housing appliance market for over a decade; Suntech Power Ltd., a Chinese firm from Jiangsu Province in China decided last year to build a solar PV wafer manufacturing plant in Arizona⁴⁶, will become a domestic competitor to American solar power industry and a pioneer for other internationally competitive Chinese solar power firms to follow suite⁴⁷; or Huawei, which ranks as one of the world's ten largest telecommunications equipment vendors, invests about 10 percent of its revenues into R&D. Huawei's

regional headquarters are located in Dallas, but they also have R&D facilities in Atlanta as well as sales offices throughout the US⁴⁸.

When relocating R&D facilities abroad, firms often take advantage of labor or factor prices and gains from economies of scale by locating in cities with a high concentration of related industry clusters. GCL Solar from Hong Kong, for example, invested in Richland, WA for the purpose of locating its R&D facilities in proximity to Pacific Northwest National Laboratories and taking advantage of lower labor costs compared those of wages at firms in Silicon Valley. Other firms in sectors from clean technology, advanced manufacturing, or information and communication technologies (ICT) to life science have all invested in cities across the US, setting up operations for R&D or sales and distribution that take advantage of technological transfer and geographical proximity to related industrial clusters. To name a few of the locations of regional HQs and R&D facilities of Chinese firms in the US; Lenovo located near IBM in Raleigh, NY, iSoftstone in Seattle, WA, Mindray Medical International in Redmond, WA, Hisense Corporation in Atlanta GA, ZTE Co. located in Los Angeles, CA, or Chinese automobile firms like the Shanghai Automotive Industry Corporation USA (SAIC USA Inc.) and BYD Auto American Corporation Ltd in Detroit and Chicago, respectively.

So it is apparent that even though there is a distinction between market-seeking and efficiency-seeking, the two forms of investment are complementary and often both are necessary when catering to a niche market in a foreign countries domestic economy or when trying to stay competitive with MNCs from the US or in Europe. Strategic asset seeking investments, such as those that increase supply chain and factor price stability, or in foreign marketing and branding, product diversification, technology transfer etc., can all be effective ways of monitoring if or how Chinese firms have begun to work their way up the value-added chain in the global economy. Yet further research would be required to offer a detailed analysis of all Chinese firms invested overseas and the forms of investment they engage in, whether they make cross-border investments via Greenfield projects by building new facilities, or merger and acquisition through the purchase of foreign assets.⁴⁹ Unfortunately, Chinese authorities do not release data on the share of entry mode, however it is estimated 60 to 70 percent of Chinese OFDI

deals abroad are in the form of mergers and acquisitions.⁵⁰

Government related driven motivations for growing levels of Chinese OFDI through the implementation of the “Go Global” policy are equally as important as business related incentives. According to Wang (2008), the “Go Global” policy first announced in 1999 encompasses a series of policy changes concerning cross-border investments, rules for access to capital and foreign exchange for investment purposes, financial support mechanisms and tax incentives for investment abroad in key strategic sectors. In general these policies have resulted in more government support and encouragement for Chinese firms to make overseas investments. For example, the “Provisional Measures on Administration of Foreign Investment Projects” in October of 2004 passed by the NDRC abolished government approval rights of outbound investments and relaxed restrictions of the approval process.⁵¹ Then in May of 2005, China’s State Administration of Foreign Exchange (SAFE) issued a “Notice to Issues Related to the Expansion of Overseas Investment and Reform of Foreign Exchange Management”. This notice increased the amount of foreign exchange available for use in foreign investment from \$3.3 billion to \$5 billion, and raised the registration rights limit for foreign exchange used per source from \$3 million to \$10 million.

Two cornerstone policy changes that occurred in 2009 were (1) MOFCOM implemented the “Administrative Measures on Regulation of Outbound Investment” which was effective on May 1st; and (2) SAFE implemented the “Notice on the administration of cross-border loans by domestic enterprises” which became effective on August 1st. The former policy, restructured how overseas investments are approved. If the investment is between \$10 million and \$100 million, or if made in energy and natural resource sectors, then investment approval is made by provincial-level authorities.⁵² Conversely, any investment above \$100 million is still subject to approval process by central government level MOFCOM authorities, while under \$10 million qualify for special electronic application approval procedure. The latter policy, removed restrictions on sources of funding for companies and simplified the application process for access to foreign exchange for overseas investments, such as domestic institutions providing loans and financial guarantees, while allowing remittances to stay abroad and be reinvested in the host country as long as firms don’t transfer more than

30 percent of total equity value to offshore subsidiaries.⁵³ A detailed breakdown of the “Go Global” policies from 2003 until 2009 is available in Appendix 3 of this section.

There are many recurrent factors that impede Chinese cross-border investments. First of all, profit margins of Chinese firms are largely derived from their domestic supply chain and production processes rather than considering distribution and services beyond China’s border.⁵⁴ Therefore the growth strategies of many Chinese executives highlight the deficiency in management experience and market knowledge necessary for handling manufacturing and distribution operations in a variety of regulatory environments across international borders. Chinese firms with approval from MOFCOM and the necessary financial capital to invest abroad frequently go abroad without having first considered the regulatory environment, environmental standards, or cultural knowledge of the host countries economy. This can be seen from failed investments by China Investment Corps \$3 billion stake in Blackstone Group and \$5 billion stake in Morgan Stanley before both of the global financial institutions were hit hard by the recession. Such failed investments have forced other SOEs to more carefully consider how they invest and understand domestic market conditions in the host country.

To date, the single largest barrier to Chinese OFDI is China’s lack of a legal regulatory framework for cross-border investments that abides by OECD rules and guidelines for investment reporting and corporate transparency. MOFCOM authorities have not created any institutions for risk assessment or the protection and guarantees of financial capital and assets, and has failed to offer any form of consulting services that should give advice to Chinese firms on foreign markets before making final investments.⁵⁵ Rosen & Hanemann (2009) point out that most OECD countries have homogenous regulatory mechanisms, yet in recent years investment rules have actually tightened in response to the emerging role of China and the Middle East in natural resource M&A activity. In theory these policies are a legitimate means of avoiding potentially harmful investments which endanger national security. However, in practice these policies are sometimes influenced by domestic interest groups, and are themselves often nontransparent and discriminatory towards investments originating in countries that do not abide by OECD rules. Because of issues of transparency and corporate governance with Chinese firms, there has been a lot of suspicion about

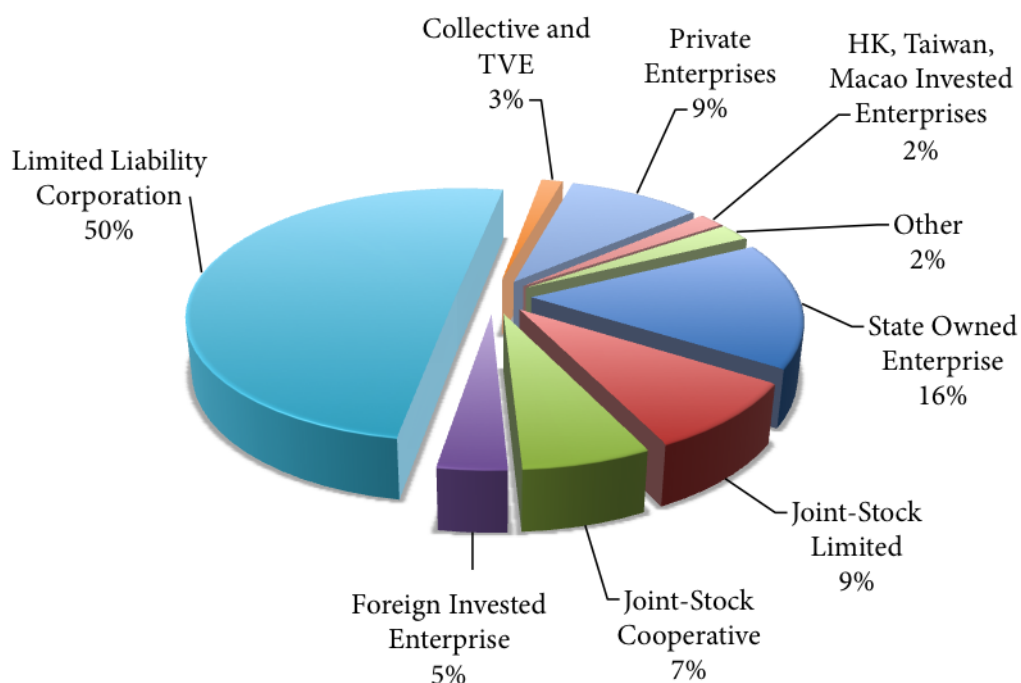
China's intentions in overseas acquisitions in the natural resource, energy, and technology sectors. This has also led to misconceptions that China's "Go Global" policy is a ploy by the CCP to buy up the world.

There have been many concerns over recent years claiming that China's strategic "Go Global" policy has been apart of a broader agenda to encourage large state-owned enterprises to secure access to natural resources and gain influence in regions with geopolitical advantage for China's economic growth. Protectionist sentiment against China's state owned enterprises rapid integration into the global economy can be seen by China National Offshore Oil Corporation's (CNOOC) failed attempt to acquire the US UNOCAL in 2005, Chinalco's bid for Australia's Rio Tinto and Haier's bid to acquire Maytag in 2007, and Huawei's bid for 3Com. These failed attempts at investment are largely attributable to protectionist misconceptions, anxiety over national security, and SOE's lack of transparency and corporate governance. However there have been many successful investment activities in the high-tech, manufacturing and life-science sectors, like Haier's successful market entry into the US's appliance manufacturing industry since the 90s, Lenovo's acquisition of IBM's personal computer department in 2004⁵⁶, recent

acquisitions of some American life-science firms like Mindray Medical International and Modern Dental Laboratories, or Greenfield investments from firms like Suntech Solar. Therefore, it is risky to be presumptuous about the intent, much less the level of influence the CCP actually has in firm investment decisions.

When considering the influence the government has on investment decisions of Chinese firms investing abroad, it is important to first analyze the composition of OFDI by company type, then to look at the actual share of equity varying levels of the government have in LLCs and joint-stock enterprises. As can be seen from Figure 2.4.8, in 2008 Limited Liability Companies were 50 percent of total outward FDI; SOEs had the second largest share with 16 percent of total overseas investment. The FIE firms (including those from HK, Taiwan, and Macao) were responsible for only 7 and 9 percent of outward investment, respectively (MOFCOM 2009). According to other estimates, SOEs made up an average of 80 percent of Chinese OFDI between 2003 and 2005.⁵⁷ It is apparent that SOEs are a significant share of outward FDI, yet it is nearly impossible to delineate if the state's share of equity in these types of firms is large enough to influence investment decisions abroad. By the end of 2004, there were 30 Chinese

Figure 2.4.8 China's OFDI by Company Type 2008



(Figure 2.4.8)

Source: MOFCOM 2008 Statistical Bulletin of China's Outbound Foreign Direct Investment

MNCs that made up 80.4 percent of China's total FDI stock, of which 20 were SOEs directly administered by the Central Government.⁵⁸ The remaining ten listed companies, those like Lenovo, TCL, Haier, Huawei, and Beida Jade Bird are companies owned by the regional and municipal governments in Beijing, Shanghai, and Guangdong. Unfortunately, many Chinese firms do not make it clear what percentage of their shareholders are members or affiliates of the CCP. Therefore further analysis of this topic deserves research beyond the scope of this paper. Despite this, politicized investment regimes both inside and outside of China remain a critical issue for Chinese investors.

Given that SOEs account for approximately 80 percent of Chinese OFDI, it could be assumed that a majority of the FDI funds originating in Guangdong, Beijing, and Shanghai are investments made by firms reporting directly to provincial governments and/or the central government. However, Woetzel (2008) argues that the line between SOEs and private enterprises has been blurred considerably, and companies in both the public and private sector equally must gain approval from government officials at the respective level of government for cross-border mergers and acquisitions as long as the investment totals \$10 million or more.⁵⁹ The frequent use of SPVs also distorts the actual intent of investments made, which are increasingly driven by business and profit-oriented motives, not government directive. In addition, international and domestic market forces alike are forcing state-owned companies to become more open and abide by some level of OECD standards; things like international IPOs, global supply chain management in vertically integrated organizations, and integrating different cultures of an expanded workforce from acquisitions.⁶⁰ Therefore, the openness and transparency in profit reporting, business practices and management has become a more valuable measure of a Chinese firm's corporate responsibility, ability to compete internationally, and form sound investment partnerships than the ownership structure of SOEs.

Inward investment to China's southern and eastern coastal provinces has been very significant since the early 1990s, and would have not been possible without Beijing's decision to institute policies that are attractive for FDI. China's role in outward FDI, conversely, has historically been limited and relevant only since 2005. Even then, the amount of Chinese OFDI relative to the world is miniscule,

accounting for only .6 percent of global OFDI in 2007 and around 1 percent by (2009). A basic examination of Chinese OFDI's composition by sector and geographical destination reveals that investments are increasingly in the financial sector and business services, and that Hong Kong is the destination for 80 percent of OFDI.⁶¹ However, given that over 9/10th of OFDI flows to tax havens like the British Virgin Islands, Cayman Islands, Hong Kong, and increasingly South Africa, it is impossible to trace the true final destination or sector of overseas investments by Chinese firms.

As seen in the analysis above, business and profit-oriented directives have increasingly motivated China's outward investment strategy over the past decade or more. Although Beijing's direct influence in investment decisions beyond sectors like natural resources and energy have been rather opaque, it is apparent that Chinese managers' decisions in overseas investment are increasingly for the purpose of absorbing technological capital, international management experience, and access to markets through branding and marketing in developed economies necessary for China to upgrade its position in the value-added production chain. However, anti-Chinese protectionist sentiment has become popular in recent years, and remains a significant barrier to entry by certain Chinese firms. It would be beneficial for the US government to suggest the following reforms to Beijing:

1. Create a legal environment and intermediary institutions for overseas investment that (1) ensure transparent and reliable data of accounting and management structure that abides by OECD guidelines; and (2) provide necessary guarantees and protection of international assets and property, as well as providing financial assistance and guidance to Chinese firms. This would ease much anxiety over unclear investment motives by SOEs and other state-related firms in developed countries, while strengthening the confidence and knowledge of Chinese managers before they make decisions to invest abroad.
2. Create a nondiscriminatory OFDI framework while enhancing financing opportunities. Current financing and foreign exchange policy reform seems to have only benefited large SOEs while discriminating against many private and joint stock SMEs. Limitations in foreign exchange and financing might be effectively

hurting China's long-term OFDI growth.

3. Completely abolish system of government approval for investment, shifting from system that relies on approval to registration. A reduced role of the state in overseas investment activity would allow companies to develop their international business acumen and make better investment decisions based on their own commercial assessments and interests. However the absence of government intervention should be compensated by the implementation of effective corporate governance.

According to the research provided in this report, there are no China-specific policy recommendations that should be made to the government of the United States or American firms. Concerns related to financial transparency and corporate governance are better addressed through international institutions since governments of both emerging and developed countries alike have mutual partisanship in maintaining openness in international capital markets.⁶² In regards to issues of national security and the monopolization of natural resources, preexisting US antitrust laws and the Exon-Florio Amendment to the Omnibus Trade and Competitiveness Act of 1988 give the US government the power to intervene in any acquisition that threatens national security.⁶³ Therefore, Chinese firms should not be seen as a dangerous and aggressive intruder into the domestic market not only because laws already in existence mitigate serious concerns, but also because most acquisitions, Greenfield and portfolio investments have had little to no security implications.

The motives of OFDI are increasingly driven by China's economic growth model and less by political considerations. Many of China's large SOE's corporate structure are becoming increasingly open and transparent, and undoubtedly have greater global ambitions and access to capital than their private-sector counterparts. Therefore these types of firms should be deemed as worthy partners in business capable of adding value to joint ventures in particular industries, such as ICT, clean technology, and life-sciences.⁶⁴ Open SOEs are also more likely to be able to readily increase their R&D spending. In 2006, China became the second largest investor in R&D, passing Japan for the first time.⁶⁵ Therefore MNCs should carefully consider the benefits of trading older technology in exchange for access to the growing domestic Chinese market. The following quote highlights that Chinese

firm's engagement in international business activity has changed the way they function in order to be profitable and compete with MNCs from developed countries:

"The more China operates abroad, the more its firms are met on a level playing field, rather than on their skewed home turf. The experience from this overseas interaction will make Chinese firms worldlier and, if well handled by leaders, will make China less threatening to its economic partners."⁶⁶

Politicized investment decisions, both within China and from anti-Chinese sentiment in the US and other developed countries, are a dangerous obsession and can potentially lead to protectionist backlash. Improving Sino-American relations, as well as Sino-world relations, are better served by making investment decisions transparent for both sides, and recognizing China's legitimate rise and importance in the current global economic system. China's recent attempts to catch up to OECD countries in terms of its presence in global investment should be contemplated in light of China's growing importance in a number of other economic and political fields of interest beyond FDI.

Global Trade Imbalances and Asian Economic Integration

Over the past decade or more, global imbalances have taken on two noticeable characteristics. Imbalances in the real economy, or the trade of tangible goods and services, have become trans-Pacific in nature, while financial imbalances have become trans-Atlantic.⁶⁷ China's economic interaction with East Asia and its achieved position in the real economy as global factory explain why trans-Pacific imbalances are trade related. However, Beijing is limited in its ability to use interest rates to control inflation and overheating of the economy because the RMB is pegged and income per capita remains relatively low despite a high aggregate savings rate (as discussed in Section 3 of Chapter 2). Therefore as long as China's state dominated banking sector remains underdeveloped by international standards, financial imbalances will remain trans-Atlantic.

According to McKay and Song (2010), the de facto high Chinese savings rate is dominated by increasing gross

corporate savings rate over the past five years. This is due to excess capacity in heavy industry and the ability of these SOEs to overcome negative profit margins associated with excess capacity via preferential access to bank funding and assistance from the state for investment domestically and overseas. The

emergent danger is that China is expropriating the place of other developing countries in Asia as well as other regions of the world through its weak currency policy while overinvesting in heavy industrial capacity.⁶⁸ This section of the paper will show that the financial crisis has exacerbated global trade

Figure 2.4.9a Global Trade Imbalances after the Global Crisis
Current Account (in US\$ Billions)

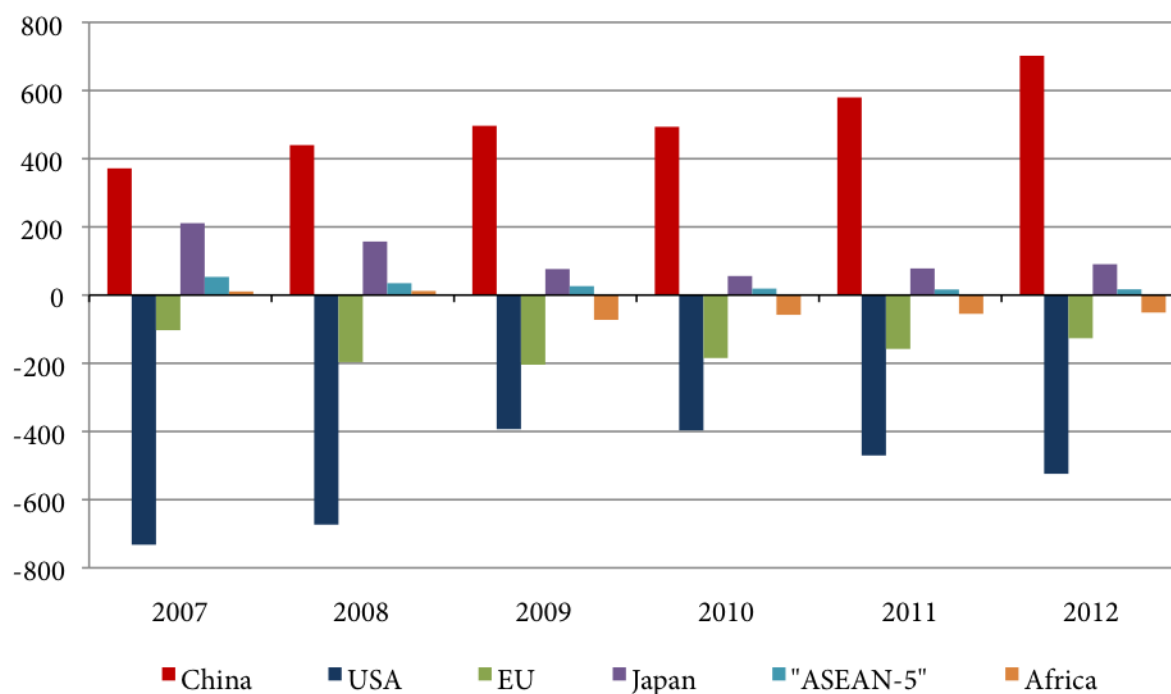
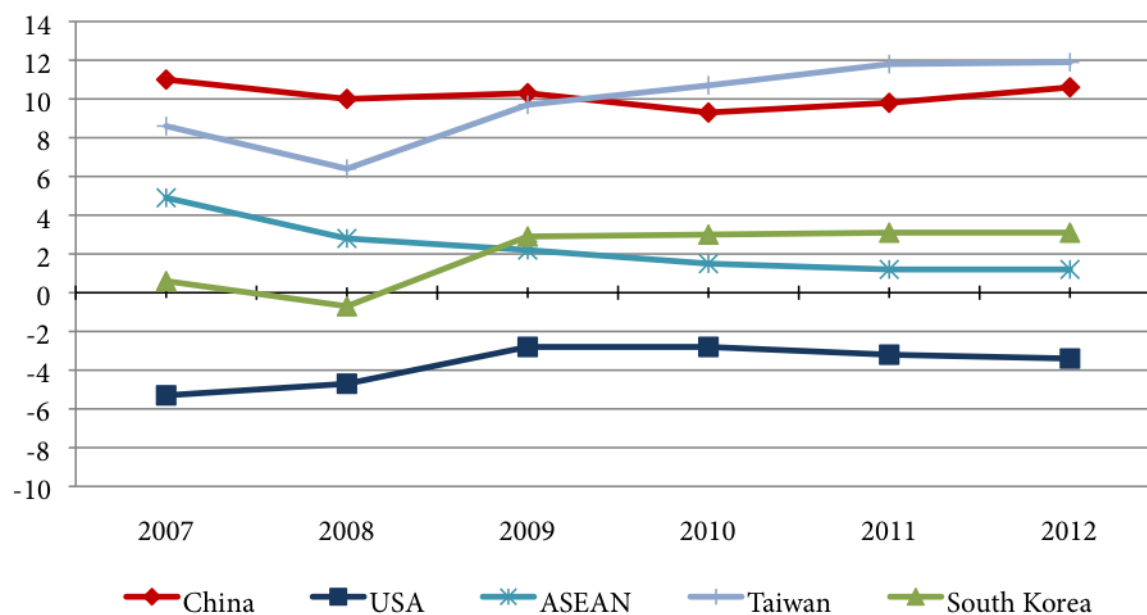


Figure 2.4.9b Global Trade Imbalances after the Global Crisis
Current Account (as % of GDP)



(Figure 2.4.9a) (Figure 2.4.9b)

Source: IMF WEO Database, <http://www.imf.org/external/pubs/ft/weo/2009/01/weodata/index.aspx>

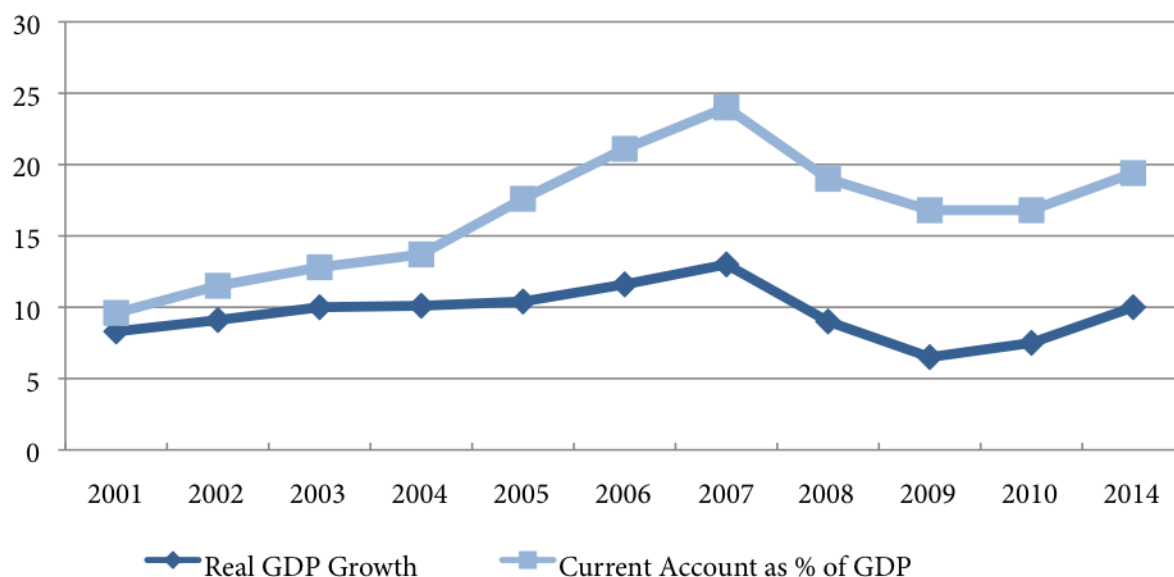
imbalances, especially between China and its largest trading partners. Once the ASEAN-China Free Trade Agreement is realized in 2010, shifting trade imbalances will further deepen as different sectors will be subject to varying levels of adjustment costs to economic integration and increased intraregional competition. Last, this section will discuss how appreciating the RMB would actually cause processed exports to decrease; conversely this will cause processed imports to decrease even more dramatically, leading to a rise in China's current account surplus. Therefore, the implications of RMB appreciation on intraregional Asian trade as well as US-China trade relations must be more carefully considered.

In July of 2009, the IMF estimated that credit losses from US loans and securities after the crisis totaled \$2.9 trillion. Most of these losses were concentrated in trans-Atlantic trade relations given that a majority of trade between US and Europe is financial by nature.⁶⁹ As seen in Section 1 of Chapter 2, it was not until credit institutions collapsed and demand for consumer products declined that demand for Asian exports rapidly declined. By February of 2009, global exports had declined by 27 percent from 2008.⁷⁰ It has been noted that emerging Asian economies with a higher value added of GDP in advanced manufacturing suffered most from demand decline-caused industry collapse; reaching a peak-to-trough decline of 47 percent in exports.⁷¹ Earlier in

this chapter we saw how industry collapse occurred in Chinese export industries. Yet other East Asian and ASEAN economies suffered significantly higher rates of negative economic growth compared to China because they have limited foreign exchange reserves with which to maintain currency stability, not to mention that NIEs account for a larger share of value added in the Asian production chain. However by the second quarter of 2009, many economies in Asia such as Singapore, Korea and Indonesia also began to experience positive GDP growth.⁷² This highlights that emerging Asia will mostly likely have the largest current-account surplus in (2009).

Figures 2.4.9a and 2.4.9b show trade imbalances of select economies during the recession and IMF's predictions for future imbalances. Using IMF and US Census data, it is apparent that the financial crisis has caused a temporary decrease in the trade deficit of the US, yet the surplus of China with the world has increased. Foreign trade data obtained from the US Census Bureau shows the US trade deficit with China decreasing from \$268 billion in 2008 to \$227 by the end of (2009).⁷³ The current account deficit of the US is predicted to increase to around \$500 billion annually between 2012 and 2014, while China's surplus will rise to approximately \$800 billion. The deficits of the US, EU and Africa are expected to increase over the next five to ten years. Current-account surpluses of the NIEs and Japan have declined, yet are not

Figure 2.4.10 China's GDP and Current Account



(Figure 2.4.10)

Source: IMF WEO Database, <http://www.imf.org/external/pubs/ft/weo/2009/01/weodata/index.aspx>

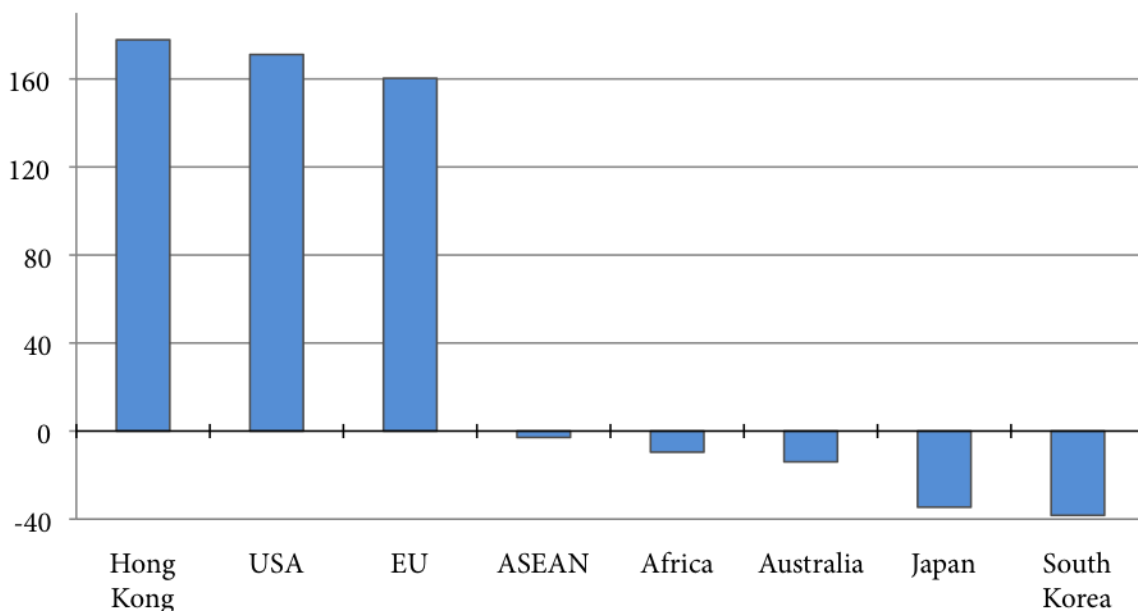
predicted to turn into deficits. This shows how the effects of the financial crisis on trade imbalances vary based on a country's role in the global economy.

Analyzing current account as a share of GDP illustrates a slightly different story, yet trends are overall strikingly similar to trends for the real value of these countries' current accounts. Given China's rapid and stable economic growth, growth in the current account surplus will stay more or less stable relative to GDP growth (see Figure 2.4.10 above). However, China's current account's share of GDP does not increase relative to the estimated \$200 billion rise in its surplus. By 2012, current account's share of GDP for Taiwan and South Korea will increase in the short-term to 12 percent and 3 percent respectively, while that of ASEAN countries will decrease from 5 percent to nearly 1 percent. Interestingly, despite a growing deficit the US current account's share of GDP will drop from -5 percent to -3 percent over the same period. China is unique because its investment share of GDP is exceedingly high, around 43 percent in 2008⁷⁴; whereas its net exports share in GDP is only 8 percent. This is far below the net export share of other Asian countries like Japan (35 percent), Singapore (20 percent), Taiwan (17 percent), Thailand (15 percent) or Malaysia (13 percent). However in these countries, domestic consumption also has a

larger share in GDP, investment averaging around 15 percent of GDP.⁷⁵ The volatility in growth experienced by these countries throughout the recession can be explained by their high dependence on exports.

As noted above, China's trade surplus with the US grew from \$170 billion in 2008 to nearly \$210 by the end of (2009). China's total imports and exports have been steadily increasing to over \$2.5 trillion in 2008. By July of 2008, total imports and exports was \$248 billion then declined rapidly over a four-month period from \$243 billion in September of 2008 to \$141 billion in January of 2009⁷⁶, bottoming out above \$130 billion in February. The same month China's monthly trade surplus was only \$4.8 billion.⁷⁷ This is supported by findings earlier in this chapter. February of 2009 was also when China's trade with the US bottomed out, when the US has a \$14 billion monthly trade deficit.⁷⁸ This deficit rose back to about \$20 billion where it has stayed since. Given the strong correlation between China's imports and reprocessing for exports, China's trade surplus with the world shrunk in 2009 because imports have grown faster than exports. Figure 2.4.11 below highlights the basic composition of China's trade balance with key economies. It is evident that China's exports go to Hong Kong, the USA and Europe, while capital inputs and processed goods come from China's trading partners in

Figure 2.4.11 China's Trade Balance with select countries in 2008
(in US\$ billions)



(Figure 2.4.11)

Source: IMF Direction of Trade Statistics Database, <http://www2.imfstatistics.org/DOT/>

Asia and increasingly from Africa and Australia.

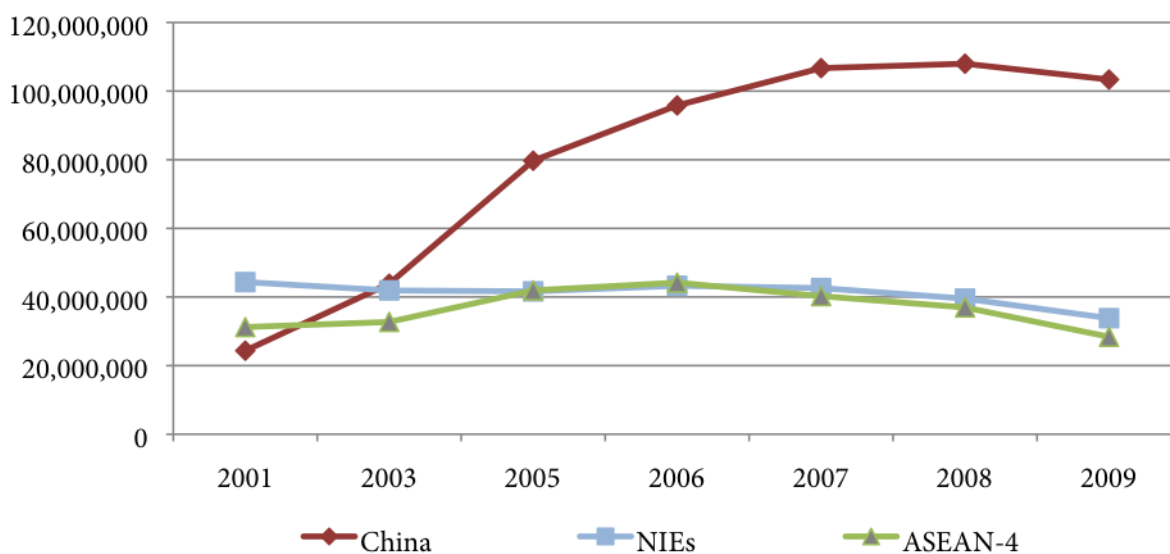
Section I of this report showed how China has become increasingly integrated into the world by becoming manufacturing and export platform for MNCs from a number of developed and emerging economies. NIEs have accounted for a predominant share of this investment and industry transfer of labor-intensive manufacturing into China. Industry transfer of this magnitude is characterized by the “Flying Geese Model” of development discussed in previous sections of this report. Analysis of recent trends and impact of the financial crisis on China’s economic relations with its largest trading partners suggest that this relationship has deepened, China’s industrial structure now closely resembles some high-tech and capital-intensive industries of the countries invested in China. This implies that economic integration has caused China’s industrial structure to become competitive, not complementary, with its East Asian and ASEAN trading partners. Therefore the institution of an ASEAN-China Free Trade Area (ACFTA) in conjunction with China’s weak currency policy mean that political relations in Asia could be strained until the short-term adjustment costs of integration on various sectors in these developing countries has taken their course.

The creation of an ACFTA was first discussed in the early 2000s after the wake of the Asian Financial Crisis.

Since then, Asian countries have worked to build a network of bilateral swap agreements worth over \$70 billion now known as the Chiang Mai Initiative (CMI).⁷⁹ Foreign reserve holdings in the region have tripled from around \$1 trillion to nearly \$3 trillion over the eight-year period from 1999 to 2007.⁸⁰ Intraregional trade between China and ASEAN countries has been increasing lately from \$39.5 billion in 2000 to over \$190 billion by 2008.⁸¹ Prospects for successful economic integration is very high. There have also been prospects at creating an Asian Monetary Fund, however those hopes were crushed in 1997 when China vetoed the Japanese initiative. Competition for financial and political leadership in the region between China and Japan is the primary reason an Asian Monetary Fund seems unlikely. Despite this prevalent rivalry between powers, the ACFTA was drafted and on the eve New Year’s 2010 was put into action.

The ACFTA is the third largest free-trade area in the world in terms of trade with an aggregate GDP of \$2 trillion, yet it is the largest in the world by population with over 1.7 billion people.⁸² It is estimated that the free-trade area will increase ASEAN’s exports to China by 48 percent, and China’s exports to ASEAN countries by 55.1 percent, increasing the annual GDP of ASEAN and China by .9 percent and .3 percent, respectively.⁸³ The current agreement calls for the reduction and elimination of 7000 commodities

Figure 2.4.12 US Imports of Computer and Electrical Goods from East Asia (in US\$ thousands)



(Figure 2.4.12)

Source: US Census Bureau International Trade Statistics Division, <http://www.census.gov/foreign-trade/statistics/country/>

traded in the region between China and ASEAN-6 (Brunei, Indonesia, Malaysia, Philippines, Thailand, and Singapore).⁸⁴ The remaining four ASEAN countries – Vietnam, Laos, Cambodia and Myanmar – will join the zero-tariff FTA by 2015. Integration will not only increase intraregional investment within each others markets, decreased market risk in many of ASEAN's developing countries will hopefully attract investment from the US, Europe and Japan. Yet Bergsten (2007) estimates that the US could lose as much as \$25 billion in annual exports to the region as a result of tariff discrimination to countries outside the Asian trading bloc. It is argued that trade liberalization will be beneficial to industries in all countries under the agreement from increased trade, investment flows and cross-border competition; it is likely that liberalization will highlight the noncompetitive nature of manufacturing industries particularly like steel and textile industries in Thailand and Indonesia while most advantages of integration will go to China.⁸⁵

During the rationalization of firm structure as adjustment costs shake out uncompetitive industries within the free-trade area, many firms will be attracted to China because of the agglomeration of manufacturing industries and economies of scale to be gained by locating near suppliers and business services in China's coastal provinces.⁸⁶ ASEAN countries generally lack a base of supporting industries. China conversely has gained a strong and integrated industrial base of "processing equipment, intermediate parts, and electronic components needed for manufacturing" from being the center for processing imports and re-export.⁸⁷ The structure of trade between China and ASEAN over the past two decades has shifted from mineral and primary commodities to machinery and electrical components, again highlighting the processing nature of trade between these countries, accounting for nearly 50 percent of each other's trade in electronics.⁸⁸

Figure 2.4.12 above shows how from 2001, China was still only 11 percent of world exports of computers to the US, yet by 2009 China accounted for nearly 40 percent. Therefore the effects of integration and the ACFTA has increased China's share of computer and electronics exports to the US, while NIEs and ASEAN share of exports to the US has steadily decreased since the 1990s.

The free-trade area is expected to help ASEAN exports in commodities in which Chinese demand is high, such as natural resource, while other industries will suffer.

There is already considerable resentment towards the ACFTA in some ASEAN countries like Indonesia and Thailand whose steel and textile industries cannot compete with China's seemingly unlimited supply of cheap labor and unfair wage competitiveness derived from the RMB peg to the dollar. Southeast Asian manufacturers fear that Chinese goods will flood their markets once tariffs are removed in 2010.⁸⁹ China so far has pursued a "half open" model for international trade in which China agrees to reduce tariffs and then neglects to do so.⁹⁰ Aside from a few primary commodities like oil, metals, and rubber, after tariffs are removed from thousands of commodities this year, this "half open" strategy will hurt the agricultural sectors in Indonesia, Malaysia, the Philippines, Thailand and Vietnam alike.

As noted earlier in this report, Chinese steel industries have overcapacity, and therefore are able to sell basic steel products for very cheap on international markets. This overcapacity comes from too many Chinese steel mills and state-run bank support to the industry with cheap credit.⁹¹ Reducing tariffs on such goods will only exacerbate this issue. It is estimated that between 1.8 and 2.5 million Indonesian workers will be laid off in various industries, notably textiles, clothing production and steel, while one senior official for the Indonesian Employers Association warns of layoffs as much as ¼ of the Indonesian work force reaching as much as 7.5 million workers.⁹² However, some note that Indonesian firms will not be able to compete with their Chinese counterparts in certain sectors because of high production costs derived from outdated manufacturing equipment and high interest rates on capital loans.⁹³ Therefore liberalization and increased competition might actually be good for many ASEAN manufacturers, despite short-term adjustment costs⁹⁴, by increasing efficiency and decreasing production costs as long as inward flows of FDI from developed and emerging economies are utilized to upgrade old equipment.

Krugman (2009) and Wines (2009) argue that China's exchange rate controls are hurting the exports of these countries, and thus prospects for development. China is effectively siphoning away demand from these countries by pursuing a weak-currency policy. So it seems contradictory that on one side China wishes to keep its exports competitive with the RMB peg, while at the same time wishing to expand its exports to ASEAN countries, who absorb only 8 percent of China's exports.⁹⁵ Recent pressure for China to revalue

it's the RMB primarily stems from China's massive trade imbalances with the US and Europe. However some argue that a revaluation of the RMB would only modestly affect these countries deficits with China.⁹⁶ Appreciating the RMB would not alleviate the US of its gargantuan trade deficit with the world, as deficits could transfer from China to other countries in Asia. The rise of Chinese consumer class would help to offset these large trade imbalances in US-China trade and around the world.

Careful analysis of the relation between the value of the RMB and China's exports show that a 10 percent appreciation of the RMB would result in a 3 percent decline of processed exports and 1 percent decline in ordinary exports, only reducing the Chinese trade balance by \$75 billion to \$92 billion.⁹⁷ Using this estimate, processed exports would drop 9 percent if East Asian currencies appreciated along with the RMB. Therefore a RMB appreciation actually has the potential to increase China's trade surplus in the short-run if imports for processing decrease more than processed exports. By other estimates, a 10 percent real appreciation would result in a 14 percent reduction in export volume; these calculations, however, do not take into account pass-through effects that exchange rates have on export and import prices.⁹⁸ Even if the Chinese trade imbalance with the US was effectively reduced by up to \$30 billion from a 10 percent appreciation, the US trade deficit could very easily be reallocated to other countries in the region. The current deficit the US has with China was in large part transferred to China by NIEs when export-oriented industry transfer and investment in China took place. Deng et al (2007) point out that for every 1 percent increase in FDI in China from East Asia or the world, US manufactured imports from China increase by the same amount. This shows how sensitive US imports from China are to FDI inflows into China. Assessing the real US-China trade imbalance takes more careful consideration of the historical context into which China became the US's largest trading partner. Resolving this issue also requires an understanding of how China's industrial structure has come to resemble those in developed economies like the US. Therefore a more effective US strategy should be to mitigate economic costs and job loss from industrial transfer and outsourcing by reflecting these changes in industrial policy, such as implementing worker retraining programs or a system of value-added taxes (VAT) as the rest of the developed economies have.

There are three noticeable trends in how Chinese exports have been replacing East Asian labor-intensive and some capital-intensive commodities in the US market.⁹⁹ First, on an aggregate scale, US share of imports from Asia was around 32 percent from 1983 to 2004. China's share of these imports over the same time increased from .9 percent to 13 percent. Second, US imports of capital-intensive goods from East Asia have remained steady around 43 percent; however China's share of these imports has increased from nearly 0 percent at the onset of reform to roughly 15 percent in 2004 due to the transfer of capital-intensive industries into China from FDI. Third, US imports of labor-intensive goods from Asia have remained between 32 percent and 40 percent, however China's share has increased to over 25 percent. Thus in recent years, China has supported East Asian exports of labor-intensive goods to the US. US imports of capital-intensive and labor-intensive goods from China were 25 percent and 49 percent by 2006, respectively.¹⁰⁰

It was mentioned earlier in this chapter that Chinese exports have a positive elasticity to foreign income and negative to export price. Therefore a fall in foreign income in China's major export markets has a stronger effect in reducing export volume than by increasing the export price from RMB appreciation. This implies that Chinese export volumes would continue relatively unchanged because demand from consumers in developed countries would continue despite modest price increases. Claims that the RMB is undervalued are not unfounded; however, the effects of RMB appreciation will not have the desired result in resolving China's massive trade surplus until China is able to successfully balance its economy by fostering a consumer middle class and the concomitant industry transfer from China to other developing Asian countries is complete. Policy makers in the US need to more carefully consider their close trade relationship with China before falling victim to revaluation rhetoric.

Global Ambitions of the "Hidden Dragon"?

The Chinese economy has weathered the effects of the global financial crisis relatively unscathed in many sectors of the economy. Although China's export industries in coastal provinces suffered from industrial collapse due to declining demand for consumer goods in developed markets such as

in the US and EU, the banking sector and financial services have experienced little impact from the recession. Negative growth in Asian exports bottomed out in February of 2009, and negative economic growth in China and in many other Asian economies has reversed. The positive growth in Asian exports has been steady since the summer of (2009). As we saw earlier in this chapter, China has become the central export platform for Asia's emerging economies like Japan, South Korea, Taiwan, and Hong Kong. At the same time, the Chinese economy has become more intimately integrated with ASEAN countries, as can be seen from the creation of an ASEAN-China Free Trade Area that other Asian economies, and possibly the US, will join within the next five years. Therefore the response of the Chinese government during and after the recession to stabilize growth will be important for not only China's economy but also important for intraregional growth in trade and the growth of China's East Asian and Southeast Asian partners.

Macro trends in China's economic revival after the recession highlight the advantageous position China is in to secure a more dynamic and central role in the global economic order. However, China seemingly has yet to fully exploit those opportunities. Despite the effects the global credit crunch has had on most international industries and firms, severely limiting the availability of capital for financing trade and equity investment, analyzing trends in OFDI and "reforms" in the banking sector illustrate that China has been reserved in its approach to expand government investment in these sectors and to strengthen their control over supply and prices of natural resources abroad. However, implementing 4 trillion stimulus package by loosening its grip over the flows of investment in the country has given rise to early signs of overheating in certain industries and could lead to a potential housing bubble. However, the fear of protectionist backlash in Europe and the US has forced Beijing to be very careful to not unleash its overcapacity of industry, especially of the steel sector, onto international markets.

The State Asset Supervision and Administration Commission (SASAC) has even made it clear that failing SOEs have the state's permission and support to engage in mutually advantageous restructuring through M&A activity with private sector firms¹⁰¹. This is encouraging to private sector growth, even though such changes are far from considered formal policy changes. On the other hand, even though issues

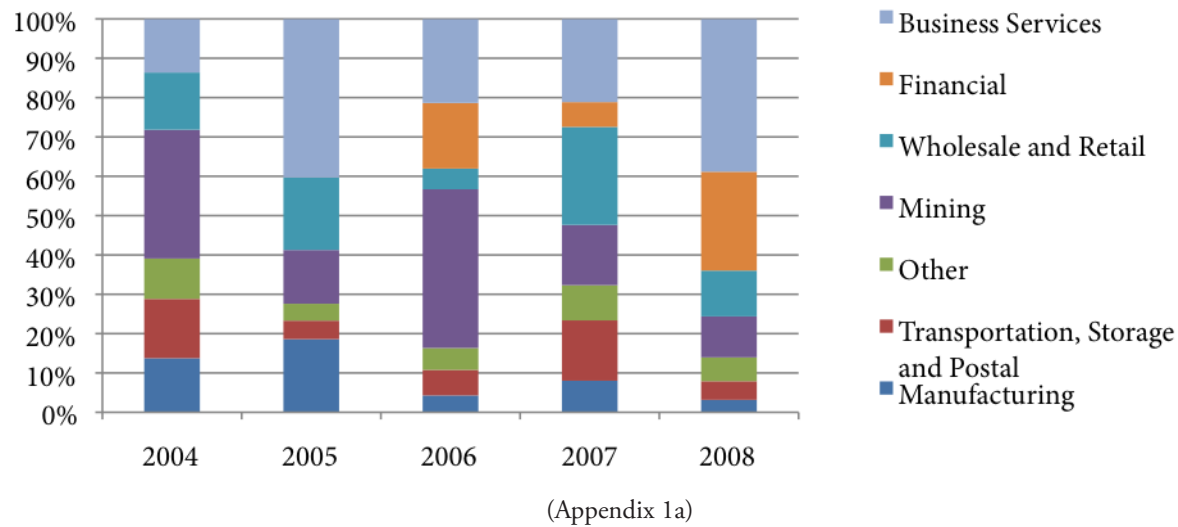
of transparency in reporting and "round-tripping" are still prevalent and distort the true value, sector and destination of Chinese OFDI, it is calculated that a majority of investment by Chinese firms overseas is concentrated in ICT, clean technology, and other business related IT and financial service sectors. The more Chinese firms invest abroad and engage in international business activity, the more globalized and open Chinese firms have to become in order to stay competitive and to avoid anti-Chinese protectionist sentiment in industries sensitive to national security, especially in communications and petroleum or other natural resource sectors. Given that OFDI approval and investment abroad by Chinese firms contracted during and after the recession, there are no obvious signs that China is attempting to exploit circumstances of the financial crisis to guarantee itself a more central role in the global economy, while attempting to leverage its advantage to reshape or influence global financial institutions. China has yet to reveal any hidden global ambitions beyond those that are already mutually beneficial for Chinese firms and China's largest trading partners.

The traditional notion of state directed investment abroad in Chinese SOEs has become diminished, and it is no longer accurate to assume Beijing's influence in a firm's investment decision or corporate governance. This is true as the lines within and between SOEs, and private and cooperatively owned firms have become rather blurred; firms like Lenovo, Haier, and SAIC. The analysis above illustrates that Chinese investment abroad is increasingly motivated not only by government offered incentives and easing capital and foreign exchange control. These firms are also motivated by market and efficiency driven motives that are natural of firms seeking to upgrade their share of value-added and gain more control over the production supply-chain. The negative impact of the financial crisis on firms in industrialized and developing economies has put Chinese firms and banks with ample capital at an advantage to accomplish just this through the acquisition of foreign assets.

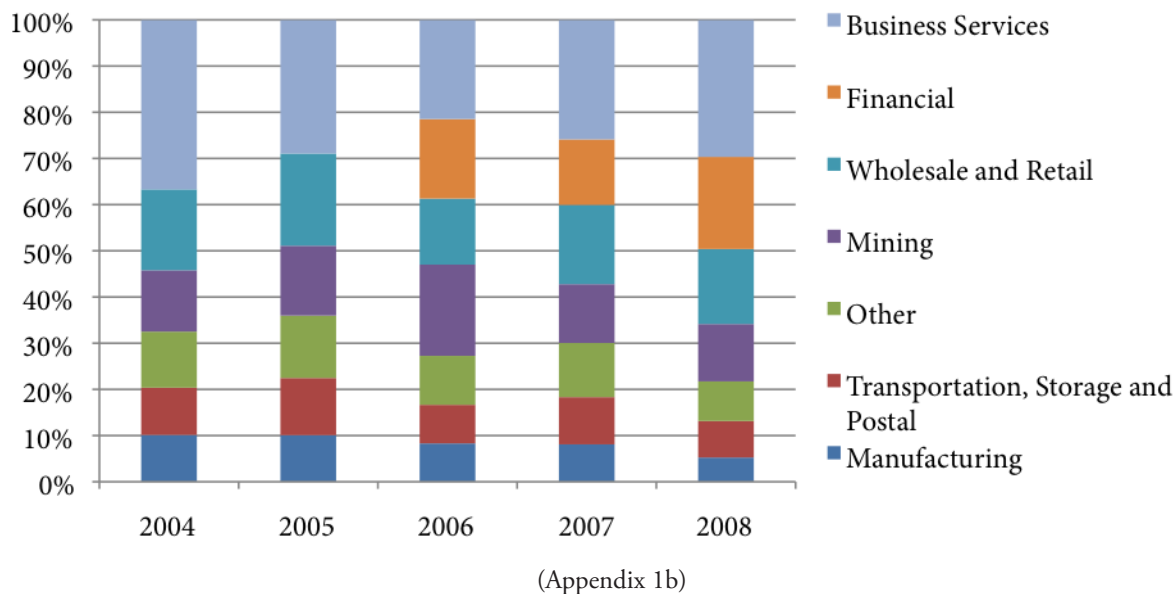
Taking assets abroad can also be seen as one method of reducing overheating in certain sectors while diversifying away from US t-bills. Beijing plans to reduce overcapacity and stave off liquidity by directing the stimulus away from fixed-asset investments, and into healthcare and education.¹⁰² Yet it is unlikely that consumption rebates and heavy bank lending alone will be entirely successful in promoting consumption-

driven growth, given that local and provincial banks are responsible for implementation of 2/3rd of the stimulus funds. Beijing is therefore at a crossroads; to revalue its currency and consider ways to pursue a balanced model for economic growth driven by domestic consumption, or to keep the value of the RMB pegged to the dollar and risk overheating that cannot be controlled by conventional monetary and fiscal policy. Stephen Roach (2009) argues “if China pushes too hard in trying to reshape international policies and institutions without attending to its own imbalances, it could trigger further instability.”¹⁰³ Instability in its own economy will lead to greater trade imbalances between the US and China, and could strain US-Sino political relations in the near future.

Appendix

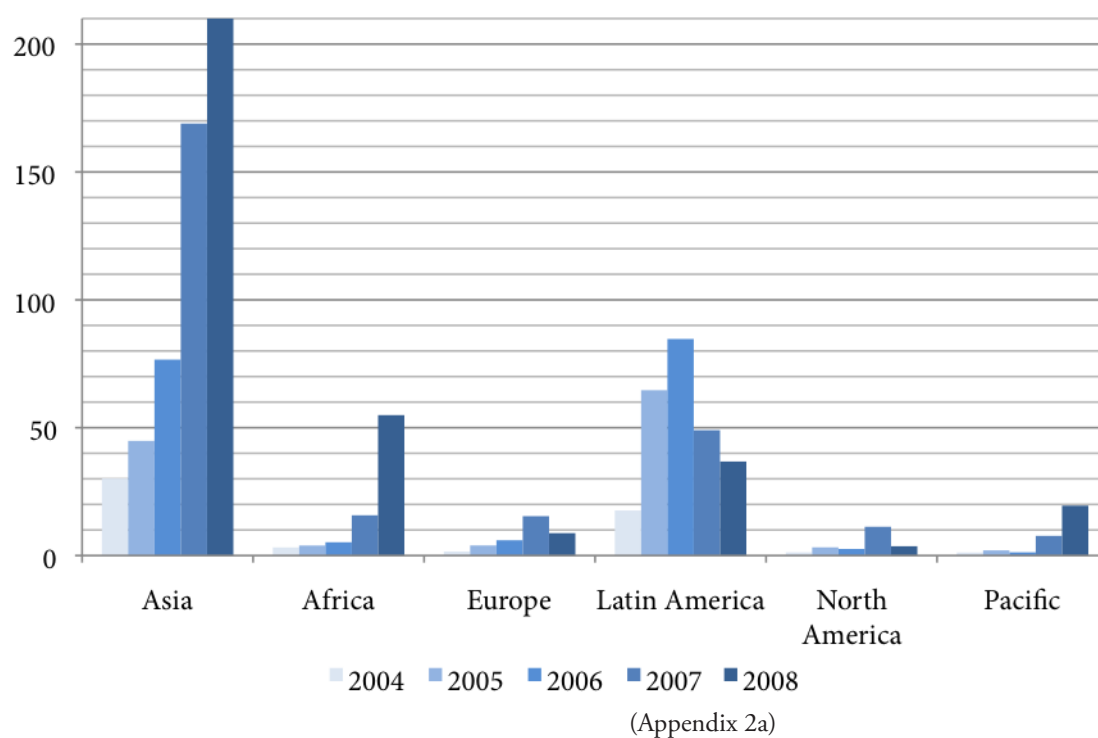
Appendix 1a Chinese OFDI Flows by Sector

Source: MOFCOM et al 2009, 2008 Statistical Bulletin of China's Outbound Foreign Direct Investment, "Table 16 - 2004-2008 Chinese Foreign Direct Investment Flows by Sector"

Appendix 1b Chinese OFDI Stock by Sector

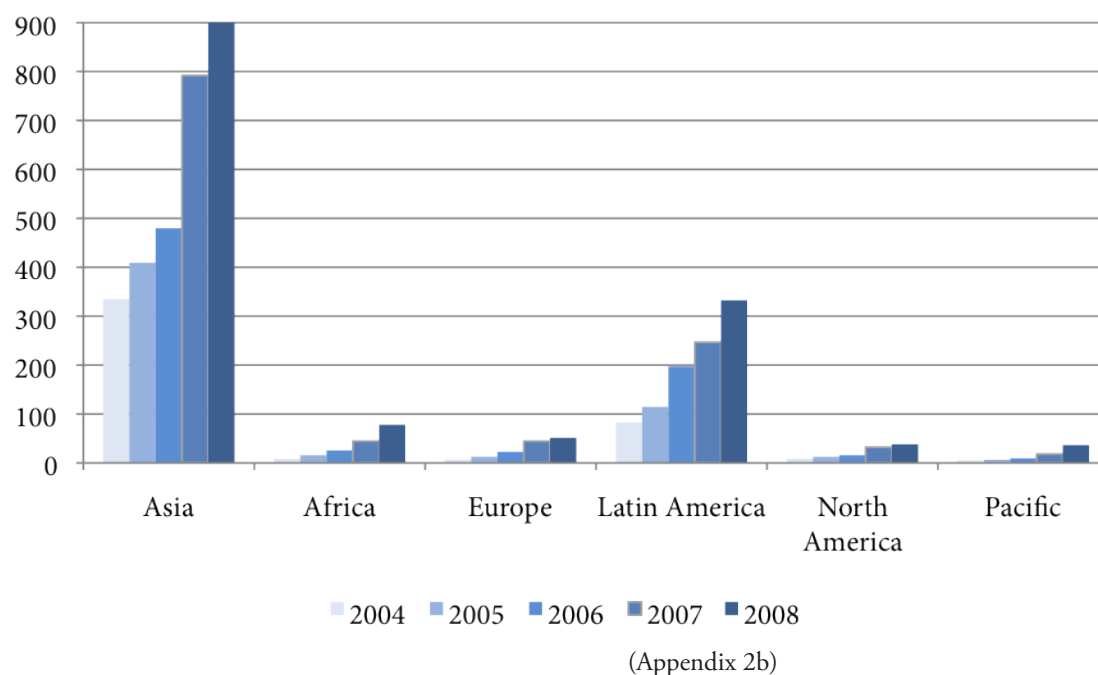
Source: MOFCOM et al 2009, "Table 17 - 2004-2008 Chinese Foreign Direct Investment Stocks by Sector"

Appendix 2a Chinese OFDI flows by destination country
(in USD millions)



Source: MOFCOM et al 2009

Appendix 2b Chinese OFDI stock by destination country
(in USD millions)



Source: MOFCOM et al 2009

Appendix 3 Major “Go Global” Policy Changes since 2004			
Date	Acting Gov. Body	Policy Title	More Info
Oct-04	NDRC	“Provisional Measures on Administration of Foreign Investment Projects”; or 《境外投资项目核准暂行管理办法》	http://www.sdpc.gov.cn/zcfb/zcfbl/zcfbl2004/t20051010_44801.htm
Oct-04	NDRC	“Notice Relative to the State Sponsored Key Overseas Investment Projects (SPV) through the Provision of Support Credits”, or 《关于对国家鼓励的境外投资重点项目给予信贷支持的通知》	http://mofcom.chinawuxi.gov.cn/zfxxgk/ba18/b/01/02/415210.shtml
Jan-05	NDRC, CIECIC	“Notice on Problems Related to Construction of Risk Guarantee Mechanisms for Key Overseas Investment Projects”, or 《关于建立境外投资重点项目风险保障机制有关问题的通知》	http://www.qddpc.gov.cn/ReadNews.asp?NewsID=1575
May-05	SAFE	“Notice on Issues Related to the Expansion of Overseas Investment and Reform of Foreign Exchange Management”, or 《国家外汇管理局关于扩大境外投资外汇管理改革试点有关问题的通知》	http://www.safe.gov.cn/model_safe/laws/law_detail.jsp?id=4&ID=8040400000000000,1
Aug-05	SAFE	“Notice on the Adjustment of Administrative Methods Designating Banks for Domestic Foreign Exchange to Provide Foreign Protection of Financial Capital”, or 《关于调整境内外汇制定银行为境外投资企业提供融资性对外担保管理方式的通知》	http://www.safe.gov.cn/model_safe/laws/law_detail.jsp?ID=8040100000000000,2&id=4
Jun-06	SAFE	“Notice of Administrative Policy Related to Adjustment of Foreign Exchange for Overseas Investment”, or 《关于调整部分境外投资外汇管理政策的通知》	http://www.safe.gov.cn/model_safe/laws/law_detail.jsp?id=4&ID=8040400000000000,23
Feb-07	MOFCOM, NDRC, CBCA	“3rd Edition of Foreign Investment Guidance Catalogue”, or 《对外投资国别产业导向目录》	http://www.sdpc.gov.cn/zcfb/zcfbtz/2007tongzhi/t20070227_118707.htm
May-09	MOFCOM	“Administrative Measures on Regulation of Outbound Investment”, or 《境内机构境外直接投资外汇管理规定的通知》	http://www.mofcom.gov.cn/aarticle/b/c/200903/20090306103210.html
Aug-09	SAFE	“Notice on the Administration of Cross-Border loans by Domestic Enterprises”, or 《境内机构境外直接投资外汇管理规定的通知》	http://www.safe.gov.cn/model_safe/laws/law_detail.jsp?ID=8040400000000000,29&id=4

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<http://www.unctad.org/templates/Page.asp?intItemID=3165&lang=1>

29 FDI stock is defined as the value of capital and reserves in a country plus net indebtedness.

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Chapter Three

Challenges to

Continued

Chinese Economic Growth

Problems to China's Continued Growth

Youn Gee Lee, Tim Quijano and Chris Schulz

Introduction

As discussed in Chapter 2, the Chinese economy has continued to grow in the face of the Global Recession due to a massive stimulus package, and an increase in bank lending. The nation's sustained growth during the global recession demonstrates impressive resiliency and has increased China's role as a Geopolitical player. The outcome of the global recession demonstrates the unique dynamism of the Chinese economy and its formidable strength when contrasted with industrialized nations. Chinese continued growth depends on the nation's ability to successfully plan its economic trajectory while taking into account concerns of possible future obstacles to growth. Past Chinese growth has relied on keen economic innovation and organization, the provision of natural and human resources, as well as relatively stable socio-political governance. The future of the Chinese economy depends on the maintenance of these conditions.

Some analysts suggest that current Chinese growth is unsustainable in a variety of ways. For example, some believe that many loans issued by the state-owned banks will turn out to be non-performing. They argue the CCP has simply delayed the effects of the recession. Some argue that this economic growth has aggravated China's already tenuous relationship with its environment and natural resources. Lastly, some believe that the adverse effects of political repression, corruption, and regional disparity on the Chinese society will eventually threaten the nation's political stability.

This analysis of the prospects of China's future growth will focus on three fields that will present formidable challenges to Chinese future growth: maintaining economic growth, environmental degradation and socio-political conflict. This chapter will move topically from these groups

of challenges (economic, environmental and sociopolitical) to introduce specific problems that may have a negative impact on China's role in the future of the global political economy. After introducing relevant problems, each section will identify the Chinese government's policies to combat these issues. Finally, each section will provide a conclusion stating whether the problems presented in the fields of the economy, the environment, and socio-political relations have the ability to present challenges significant enough to stop China's growth.

Section one will present the economic challenges that will confront Chinese growth in the future, through both a short-term and long-term analysis. The current real estate bubble will be the main emphasis for the short-term challenge. China's long-term economic challenge is the need to rebalance their economic growth model. In order for China to achieve a sustainable long-term growth, it requires a shift from relying on external to domestic demand, and from export-driven growth towards an economy in which consumption and services play a much bigger role.

Section two will focus on the material resource base of the Chinese economy, which has witnessed remarkable degradation since the beginning of the reform era in 1978. This section will emphasize the economic problems of rising energy consumption, water quality and air-borne pollution in China.

Section three will present a picture of the social changes taking place within China and consider whether the current model is sustainable. Party corruption and popular resistance, regional wealth disparity and massive internal migration, and ethnic repression are each important topics of inquiry. Chinese society is held in balance by economic growth and the strong arm of the state working together, and the purpose of this chapter is to determine the threats to this

balance and to what degree they should be taken seriously.

Overall this section will provide a clear picture of the future and risk associated with China's continued economic growth. How well the country handles and manages these problems will impact China's future relationship the world as well as with the US. Will China's recent economic growth be hindered by a housing bubble, or a sharp rise in the number of non-performing loans? Are China's leaders willing and able to successfully rebalance their economy? Is the Chinese economy inevitably going to run up against resources constraints or environmental disasters? Will China's social and political system be able to handle China's continuing economic transformation? This section will critically analyze all these questions, and their implication for the US policy and the world.

Structural Changes in the Chinese Economy

Youn Gee Lee

Introduction

It is very likely that China will replace Japan as the second-largest economy by the end of this year. In fact, many analysts believe that China's GDP has already surpassed Japan.¹ While the majority of economists anticipated China's remarkable economic growth, the speed of China's ascension to the second largest economy is surprising. The 2007 global recession served as the catalyst, distinguishing their economy from the rest of the world. While many analysts speculated the recession would have a great effect on China, as described in chapter two, they were able to turn the crisis into an opportunity. China as the second largest economy is making the world attend to its every move.

While the Chinese economy displayed great resilience during the global recession, achieving a 10.7 percent growth in the fourth quarter of 2009, potential risks remain that might challenge Chinese economic growth.² There are two important reasons to examine such challenges. First, coming out of the recession, the US needs to gain a clear understanding of China's short term economic trajectory in order to make good policy choices regarding the second largest economy in the world. Second, by analyzing long term issues challenging Chinese economic growth, we can gain an insight into the direction the Chinese economy is heading. For the last 30 years, their economy has been swaying between a state controlled capitalism and an export oriented market economy, and there is a strong possibility that the recession could swing the pendulum. Congress will need to understand the challenges China faces and its likely future direction of development to illuminate the actual ramifications of the Chinese economy on the US and construct effective policy.

The potential threats to the Chinese economy can be divided into short-term and long-term challenges. Short-term

challenges refers to problems that China faces immediately in the following the recession and its massive stimulus in order to sustain the current rate of growth. Long-term challenges are problems the Chinese government has recognized as chronic challenges for decades, but so far has been unwilling or unable to solve, however imperative these solutions are for long-term sustainable growth. For short-term challenges, this chapter will examine the real estate bubble. There is a consensus that this is the most significant short-term challenge the Chinese economy face, and experts agree that the bubble is the by-product of government policies imposed during 2007-2009 global recession.³

This chapter will begin by examining the real estate bubble issue. First, it will provide the causes to the current bubble. This examination not only provides context for understanding the origins of China's short-term challenges, but also provides an overall understanding of China's unique economy. Second, it will review the methods and policies the Chinese government is using to confront these challenges. The government's approach to the challenges will be a good indicator demonstrating which way the pendulum of the Chinese economy is swinging, towards global integration or towards more state direction. Lastly, in light of the examined circumstances, we will make our own projection on whether these challenges are likely to limit China's growth in the short term. Many countries confront short-term economic challenges; many times they are not resolved, which in turn becomes a chronic economic obstacle. Therefore, it is important to make predictions whether such challenges could be reversed. Projections, however, cannot be definite, but can be useful in formulating a strategy in the future.

After examining the short-term issues, the chapter will shift to examine long-term challenges. The main long-term challenge and obstacle for the Chinese government is to

shift its growth model from an export oriented to a domestic consumption based economy. First, we will examine why such transition is so vital. This study will involve understanding the deficits of the current growth model, and how shifting to a different model can provide the Chinese economy with new growth potential, by examining two methods the Chinese government is using to reorient their economy: stimulating consumption and research and development efforts. China has deeply rooted problems in these areas, and this section will analyze how China is approaching these problems. After becoming aware of the problems, we will examine whether or not these methods will contribute to the overall objective to transition into a domestic consumption based economy. Finally, the section will conclude by presenting an overall picture of the future trajectory of China's economy.

Housing Bubble

The Chinese luxury housing market is overheating. Government data in January indicate that Chinese real estate price climbed the fastest in 18 months in December 2009.⁴ Residential and commercial real estate prices in 70 cities increased 7.8 percent from a year earlier in December, topping a 5.7 percent gain in November.⁵ China property sales also jumped 75.5 percent to 4.4 trillion RMB last year, led by the eastern cities of Zhejiang and Shanghai.⁶ However, these facts do not necessarily indicate a bubble. In fact, increasing urbanization and rising incomes in China could continue to support real estate prices. It has also been pointed out that current mortgage lending practices in China are relatively conservative compared to the practice in the US before the collapse of the housing market in 2006.

However, the majority of analysts believe the Chinese housing market growth is unsustainable according to the following indications: first, there are significant numbers of vacant or under-performing commercial and residential properties;⁷ second, the price-to-income ratio for real estate is 27 to 1 in Beijing, which is five times the international average;⁸ third, Tianjin projected to have more prime office space than it can absorb in 25 years at the current rate; fourthly, Chinese companies in the chemical, steel, textile and shoe industries are opening real estate divisions, expecting higher returns there than in their core business.⁹

Taking all into consideration, both the Chinese government and foreign speculators are pointing to this housing market boom as a bubble, which is the first challenge for the Chinese economy to overcome in order to sustain their economic growth trajectory.

The current housing bubble has several different causes. Many analysts believe that the housing boom has resulted from an unprecedented 9.59 trillion RMB of new loans that were extended last year, flooding the economy with cash.¹⁰ Moreover, a low real interest rate contributed to the housing boom. Low interest rates make borrowing cheap and, there is a high probability for the liquid funds to flow into the housing markets. Nonetheless, here are other significant causes for the housing bubble:

1. Lack of a Chinese property tax, reducing the holding cost of properties and therefore reducing the incentive to find paying tenants for unoccupied properties¹¹
2. Local government reliance on land sales for income (accounting for up to 50 percent of revenue), incentivizing the continued sale and development of land¹²
3. Limited access to foreign investments for Chinese citizens, artificially increasing the appeal of domestic investments such as property¹³
4. Spending from the China economic stimulus program finding its way into real estate¹⁴
5. Cultural pressures encouraging home ownership, particularly for those seeking a spouse¹⁵

All the above causes indicate that the Chinese real estate market is much driven by government policy. There is a RMB 4 trillion through the stimulus package, another RMB 6 trillion from municipality bonds, and another RMB 10 trillion from bank loans – total of RMB 20 trillion is in the system and much of it finds a way to the real estate market.¹⁶

Aware of this growing property bubble, the Chinese government started to impose significant contractionary policies on the market. Premier Wen Jiabao pledged in December 2009 to stabilize property prices, crack down on speculation and keep housing affordable.¹⁷ One of the first concrete responses from Beijing to growing fears that an unsustainable bubble has formed in the real estate market was to reintroduce a nationwide real estate sales tax in December 2009. The new tax policy requires anyone selling a secondhand apartment or house within five years of its purchase to pay a

sales tax of 5.5 percent.¹⁸

The People's Banks of China (PBoC), the central bank, has increased their deposit required ratio by 0.5 percent points as of January 18th, 2010, following the government's demand. This was the first time that the PBoC adjusted the ratio of deposits that lenders are required to set aside since the end of 2008 and the first increase for the ratio since June 2008.¹⁹ The central bank also sold a RMB 24 billion on January 19 at an increased reference yield rate of 1.9264 percent following sales of RMB 20 billion at 1.8434 percent.²⁰ Furthermore, the government told banks to raise interest rates on third mortgages and demand bigger down payments.²¹ These actions show the government's concerns for the non-performing loans, but the primary objective is to cool the heating market. These preemptive monetary interventions reflect a commitment to prevent a growing property bubble.

Projections and Ramifications

Many Chinese market analysts compare the current growing bubble in China to a similar housing bubble in Japan in the 1980's. A collapse of a real estate bubble in Japan set off a recession in the 1990's and the 'lost decade'. However, observers should be careful in viewing the two cases as parallel, since the Japanese economy had reached maturity at the time, while the Chinese economy is still on a developmental phase.

Current economic trends will make it difficult for China to prevent a property bubble. First, inflation expectations are pushing prices higher. Investors view property as a hedge against rising prices, so the worse inflation expectations are, the more investors will pay for "insurance."²² Demand drives property prices beyond the consumer price inflation trend if supply cannot keep pace with demand. Second, the actual and expected currency (RMB) appreciation has encouraged the overseas Chinese to bet on property in major mainland cities, because not only do these property investments seem to be on an upward trend, but a RMB appreciation will bring higher returns in dollars terms. Real estate-related investment accounted for 10 percent to 15 percent of China's foreign direct investment between 2006 and 2009.²³

Another method to measure the future prospects is to look back on the real estate boom around 2005. The CCP's

response to the boom was to restrict the high-end property supply and demand. On one hand, it restricted the supply by asking all new residential development projects in May 2006 to allocate 70 percent of their floor space to flats smaller than 90 square meters to reduce the number of luxury flats.²⁴ On the other hand, in July 2006, it also restricted the demand on investment in residential property by foreign investors and overseas Chinese, allowing people to buy only one property in which to live. However, the demand remained strong and pushed up the prices.

Reflecting on their past experience, the Chinese government has began to stimulate the supply at the lower end of the property spectrum, hoping to shift construction away from bubble-prone, high-end projects. Because not many developers are interested in building low-price housing without heavy subsidies, the central government and local governments have subsidized lending rates, rolled out administrative controls and tax rules and lowered down-payment requirements for the lower end properties.

However, that alone will not be enough to overcome the current bubble. Speculators are still anticipating an upward trend in the property prices because as an investment it seems to remain strong due to low expected real interest rate. This anticipation is caused by two reasons. First, recent macro statistics indicate a high probability for consumer-price inflation as high as 5 percent in coming years. Second, the Chinese government will be extremely cautious in raising their interest or the value of the RMB, in order to avoid inflows of speculative overseas money. This mean China is likely to experience a low or even negative real interest rate for the coming years, which in turn makes property investments more appealing.

Moreover, the government is reluctant to crack down on this problem because construction, steel, cement, furniture, and other sectors are directly tied to growth in real estate. In November, for example, retail sales of furniture and construction materials jumped more than 40 percent.²⁵ At the December Central Economic Work Conference, an annual policy-setting meeting, officials concluded real estate should continue to be a key driver of growth.²⁶

Nevertheless, if the bubble persists, there will be negative ramifications for China itself. First, it will worsen the existing inequality gap. The current housing market is targeting only the higher-end of the consumers, mainly in

cities such as Shenzhen, Shanghai, and Beijing. While these cities have rapidly modernizing infrastructure and particularly large concentrations of non-local and cash-rich residents and enterprises, a vast amount of the city are the local residents with much lower wages. If the property-prices persist to soar up, the local residents will no longer be able to afford to buy a decent home, which will start to marginalize them out of the city. Moreover, this kind of inflated housing prices will hinder the process of urbanization in China which will act as a barrier that prevents rural migration into cities.

While it is hard to predict when or if this bubble might burst, there is a popular belief that a burst will have substantial amount of negative impact on the US. Many watchers believe if the bubble does burst, the people who borrowed money to purchase real estate will not be able to sell their property at a price exceeding their loan principle amount.²⁷ In turn, the Chinese banks will have to take responsibility for the non-performing loans. This will require China to scramble to raise cash in order to keep its banks from collapsing. In that case, this will involve selling the \$2.2 trillion US debt.²⁸ This could increase the interest rates in the US because the supply of US debt on the market will increase while the demand (Chinese) will decrease – higher interest rates could lead US into another phase of economic contraction as a greater portion of US's GDP goes to paying higher interest payments on its debt.

Contrary to this conventional belief, it is likely that a bubble burst in China will have an imperceptible impact on the US, because China cannot give away the reserves in order to recapitalize its banks. China's reserves are often inaccurately thought of as a savings account available for spending. Rather, they are simply the asset side of the mismatched balance sheet in which China runs a current and capital account surplus. This means that as long as China wants to set their own exchange rate, it must take the opposite position of the market, which is to be a net buyer of dollars.²⁹ This means China cannot sell the reserves without causing an increase in its net indebtedness. Therefore, a substantial amount of nonperforming loans caused by a housing bubble burst will only increase China's debt³⁰ – without the effects impacts on the US mentioned before.

Shifting Growth Model

The scale and pace of economic development in China is without precedent. However, China's economy is not on a sustainable path economically, and the country faces rising tensions over its growth model. At the end of 2009, President Hu Jintao stressed the need to “[wean] the economy away from exports and toward service industries, accelerated development in rural areas, and more energy and resource-efficient production”³¹ He said the quality and effectiveness of China's economic growth should be improved, even as policy planners attempt to rein in overheating while not endangering the momentum resulting from the stimulus measures that helped the country stave off the worst of the global economic crisis.

Contemporary China has been developing along a skewed economic model. Since 2004, China has devoted over 40 percent of its GDP to investment.³² This percentage is far above South Korea, Japan, and Taiwan during their height of investment led economic development strategies.³³ China has been able to produce much more than it consumes by exporting the difference. The Chinese government knows that sustainable growth requires a shift from external to domestic demand, and from an export-driven growth towards an economy in which consumption and services play a bigger role. Nonetheless, it would be worth reviewing why shifting its growth model would be in China's interest. There are three principal reasons:

First, China is caught in a vicious cycle. China's current export-driven growth model requires a revival of world trade growth. However, such a revival will not be possible without a degree of rebalancing in the economies with big current account surpluses, such as China. The Chinese will have to consume more of what they and others produce if global growth is to be put on a sustainable footing. China is simply too big to rely on an export-led strategy for growth. The world economy is not large enough to absorb China's surpluses ad infinitum.³⁴

Second, trade surpluses are as much a source of vulnerability as strength. No country can expect to be able to run huge trade surpluses and be free from any exchange rate risk on the overseas investments made with those surpluses. For example, if China accumulates surpluses and translates these into foreign assets, the Chinese authorities have to expect

that the value of these investments is likely to decline.³⁵

Third, China's current growth structure imposes huge environmental costs on the country. As it will be discussed in later sections, massive investment in energy-intensive industries has contributed to a dramatic rise in China's emissions of greenhouse gases, putting the country under immense environmental strain. Moreover, the impact of China's industrial structure on its increasingly scarce water supplies is also a cause for real concern. On current trends, China could soon experience widespread water shortages.³⁶

In order to achieve this huge transition, approximately in the next 10 to 15 years, there are two tasks in which China must succeed to resolve: stimulate the consumption and become a center of innovation instead of producer of low value-added goods.

Boosting Consumption

For China to achieve the transition from an export-led economy to a domestic-consumption based economy, it requires an increase in China's consumption share of GDP. Private consumption in China today only accounts for 36 percent share of their overall GDP – the lowest percentage of any major economy in the world.³⁷ This low percentage is a vivid reflection of China's excess reliance on their investment and savings that crowds out consumption.

As mentioned from the earlier chapters, it is clear that China has used the stimulus as an opportunity to increase domestic consumption and reduce China's reliance on global markets to soak up excess exports. In tandem with a large short-term stimulus package, China has already embarked on many aspects of this shift, including reforms to health care, education, and the pension system. This section seeks to quantify how this range of policies, if fully enacted, affect today's low consumption share of GDP, and the global ramifications of possible results.

According to McKinsey Global Institute (MGI), if policy makers were to do nothing to stimulate consumption further on a sustainable basis, China's low consumption share would increase only slightly.³⁸ This projection verifies the ineffectiveness of the recent stimulus, as it has neglected to improve access to education and health care, the two main determinants of the saving rates in China.

In fact, last year the government raised the price of grain to increase farmers' income, with the intention of developing the rural consumer market, representing a population of 900 million.³⁹ This involved raising the minimum subsistence allowance for urban residents.⁴⁰ However, since the farmers do not have much security in terms of medical care, education and other basic services, their spending would not significantly increase just because they earn a few hundred extra RMB; they would rather save the money.⁴¹ The absence of any meaningful social security system and the high cost of healthcare and other essential services relative to average incomes ensure that the Chinese have no option but to save a very high proportion of their incomes.⁴²

The CCP, in health-care policy documents released in April 2009, indicated its plans to increase coverage levels to 90 percent of the population and to improve the health-care infrastructure, with an announced 850 billion RMB spending plan to take place over the next three years. This spending is incremental to planned government expenditures, and assuming that private and social spending are not affected, total health-care will reach 5.4 percent of GDP in 2012, and the share of that spending coming from private sources will fall to 37 percent of the total.⁴³ Using macro-econometric analysis, the MGI research suggests that by 2025, growth in demand for health care products and services will push China to levels of similar to those seen in Western Europe today, or roughly 9.2 percent of GDP.⁴⁴ This in turn will reduce the private out-of-pocket health care expenditure as share of total health care expenditure percentage from 45 percent to 35-25 percent.⁴⁵ Lower spending by private citizens would be at least partially spent on other categories of goods and services.

Lastly, analysts believe that increases in health-care insurance coverage will lead to lower precautionary savings, decreasing household saving rates, and boosting consumption. A study of Taiwan's rapid rollout of government-provided health insurance in the 1990s found resulting decreases in savings rates of between 2.2 and 3.7 percentage points.⁴⁶ Since health-care insurance coverage in China has only recently begun to spread (coverage figures seem to have been as low as 5 percent as recently as 2000, rising to 30 percent by 2003 and 73 percent by 2007), analysts assume similar results in China, with a decrease in household saving rate between 2.2 and 3.7.⁴⁷

Usage of consumer credit is another useful variable in

Reducing the burden of private health-care expenditure: Macroeconomic impact				
Indicator	Units	Trendline value	Impact by 2025 from this policy alone	
			Policy Case (minimal case)	Stretch Case (maximal case)
Gross domestic product	Billion RMB, Real 2000(percent)	78,508	80,223 (+2.2)	81,145 (+3.4)
Private consumption	Billion RMB, Real 2000(percent)	30,343	31,325 (+3.2)	31,933 (+5.2)
Private consumption share of GDP	percent	38.7	39.1 (+0.4)	39.3 (+0.6)
Per capita private consumption	Thousand RMB, real 2000(percent)	21.1	21.8 (+3.2)	22.2 (+5.2)

(Table 3.1.1)

Source: McKinsey Global Institute. "If you've got it, spend it: Unleashing the Chinese Consumer." Aug 2009. [McKinsey Global Institute](http://www.mckinsey.com/locations/greaterchina/mckonchina/reports/MGI_Unleashing_Chinese_Consumer_full_report.pdf). 12 Feb 2010 <http://www.mckinsey.com/locations/greaterchina/mckonchina/reports/MGI_Unleashing_Chinese_Consumer_full_report.pdf>. pg 62

projecting the growth of consumption share of GDP. While it became difficult to make any projections based on government policies within the consumer mortgage section due to the rapid changes in the government's restriction, it is still possible to make projections based on non-mortgage consumer credit. At less than 3 percent of GDP, China's economy today has a very low share of outstanding consumer non-mortgage credit relative to other countries, including others in Asia that are at similar development levels.⁴⁸ However, the low infrastructure is not limited to access to credit, but to the use of credit. Many Chinese consumers say they would rather use savings or even borrow from relatives than use a credit card to make big purchases. Consumers do not use much credit because the infrastructure for credit use, while developing rapidly, is still new.⁴⁹ The Bank of China did not establish a credit bureau until 2006, and although more than 600 million consumers have registered only 70 million have a credit record.⁵⁰ These facts suggest that China has already largely put in place the necessary policies to boost the use of non-mortgage consumer credit and that it is at an inflection point where credit use will start to grow rapidly.⁵¹

The MGI research indicate that outstanding consumer non-mortgage credit could grow substantially without additional policy action and by 2025 reach levels seen in other Asian countries. Through econometric methods, the MGI concluded, the expansion in use of credit could give a 1.2 percent boost to consumption share of GDP.⁵²

China's Innovation Challenge

China will face an inflationary pressure due to the rising consumption, which in turn requires an appreciation in its currency. A currency appreciation would reduce China's price competition edge on its low-end products. Thus, a continuous progress in technology-driven productivity and higher value-added production is necessary if China is to sustain rapid growth over the coming decades, especially if China is to make the transition to an economy driven by domestic consumption. China's political leadership also recognizes a shift to domestic consumption would have a multiplier effect on employment, economic growth, and additional consumption. However, such a shift would require a significant investment in technology in order to improve productivity growth.

China's research and development capabilities are sharply rising. In 2007, China spent 48.8 billion dollars on R&D, the highest among countries with similar level of economic development, though the percentage is lower than that of most of the developed economies.⁵³ This huge investment ranks China fourth in the world, after the US, Japan, and Germany.⁵⁴

With notable progress mentioned above, a balanced perspective on the prospects for Chinese science, technology, and innovation requires attention to some of the challenges

that China faces.⁵⁵ First, China has to improve its intellectual property regime (IPR). While China's intellectual property laws and regulations are in line with those imposed by other countries, the problem lies in enforcement. In fact, a decentralized China has made IPR protection at local level difficult, if not impossible.⁵⁶ China's weakness in intellectual property has been a major concern for numerous foreign companies.⁵⁷ Most recently, on January 12, Google announced on its corporate blog that it was considering its options after discovering cyber attacks against it that had resulted in the theft of Google intellectual property. The post said that the company believed the attacks originated from China and had also targeted the e-mail accounts of Chinese human rights activists.⁵⁸ However, contentious relationship between Google and the CCP has existed ever since the government forced Google to follow internet censorship rules.⁵⁹

The Google incident in China reflects the status quo of their innovation culture. While on the surface Chinese researchers and entrepreneurs are encouraged to think outside the box and not to be afraid of failure, autonomy and free access/flow of information are not adequately applauded or tolerated.⁶⁰ In the field of innovation, it is generally believed that tolerance is as critical as talent and technology in driving creativity and growth.⁶¹ However, the current IPR poses challenge to the potential success to China's innovation

strategy. The lack of adequate IPR protection and the leakage of confidential information at various stages of business development are discouraging foreign companies from further technology transfers and setting up R&D centers in China, which is a crucial element to an advanced innovation environment.⁶²

Second, China has yet to establish fully an enterprise-centered national innovation system.⁶³ While overall statistics show that enterprises now account for three-quarters of China's R&D expenditures, in reality, China has allocated few financial resources to carry out innovative R&D activities. Most of the times, in pursuing quick and short-term pay-offs, Chinese enterprises spend more money on technology transfer than on R&D.⁶⁴ According to Suttmeier, once the technologies are imported, only limited financial resources are given to absorption, assimilation, and innovation.⁶⁵

Third, China faces a serious shortage of qualified personnel as it seeks to sustain domestic economic growth and promote technological advance. There is a little doubt that China's current talent pool is impressive: the number of scientists and engineers in China is the world's second largest, after only the US.⁶⁶ However, complaints continue to proliferate from multiple segments of the economy and society about the shortcoming the local talent pool is facing.⁶⁷ Demand seems to be exceeding supply, quality problems are

	1999	2000	2001	2002	2003	2004	2005	2006	2007
R&D Expenditures									
Gross Expenditures on R&D (GERD) (\$1billion)	8.20	10.80	12.60	15.56	18.61	27.75	29.91	36.79	37.10
GERD/GDP (%)	0.83	1.00	1.07	1.22	1.31	1.23	1.34	1.42	1.49
R&D Performance									
Enterprise (%)	49.59	59.96	60.43	61.18	62.37	66.83	68.32	71.08	72.28
Basic Research (%)	4.99	5.22	5.33	5.73	5.69	5.96	5.36	5.19	4.70
Papers Cataloged by Science Citation Index									
Share of the Total (%)	2.51	3.15	3.57	4.18	4.48	5.43	5.30	5.90	7.50
Rank in the World	10	8	8	6	6	5	5	5	3
Human Resources									
Scientist/ Engineers Engages in R&D (1,000 persons-year)	531	695	743	811	862	926	1,119	1,224	1,423
Graduate Student Enrollment (1,000 persons)	234	301	393	501	651	820	979	1,100	1,195

(Table 3.1.2) China's Science, Technology, and Education: Some Indicators

Source: Suttmeier, Richard P. "Commentary: China's innovation challenge." *Innovation: Management, Policy & Practice* August 2009: 254.

rampant, and distribution is uneven.⁶⁸ The talent shortage could have a negative impact in the long run. Suttmeier warns, “While foreign direct investment will continue to demand talents in China, however, if there are not enough skilled workers available for foreign-invested enterprises, desired types of higher value-added FDI might not materialize.”⁶⁹ Consequently, China’s shift in growth model in terms of the development of new technology-intensive sectors might be jeopardized.

Despite the challenges, however, the pace of technological change in China is likely to accelerate. The integrated circuit (IC) industry is a good example to prove this. For years, China’s attempt to nurture its domestic IC industry and narrow the gap behind world technology leaders was unsuccessful. From 2001, though, China’s technology-promotion policies started to be effective in attracting joint-venture IC factories to the mainland.⁷⁰ Many of its firm in the industry rapidly shrank the technological gap in less than two years, an impressive performance in this extremely dynamic industry.⁷¹ Government policies involving substantial technology tax breaks and implicit subsidies played an important role in this process.⁷² Now that China is putting its full force on technological development, the changes will occur more rapidly.

Implications

China’s growth in consumption and technology will successfully assist China in shifting its growth model to a more domestic consumption demand driven economy. This transition is requiring a lot of government interventions, which indicates a swing toward a state directed capitalism. These changes in its growth model and its leaning toward state capitalism have four important implications: (1) a successful transition to a domestic consumption based economy will increase China’s interaction within its region, (2) a shift toward state capitalism is likely to force foreign firms out of the country, (3) a successful shift in China’s growth model could mitigate the current global imbalance, (4) Policy makers have to watch China’s balancing between its export linkages and its domestic market.

First, a successful transition to an economy driven more by domestic consumption demand will increase

China’s interaction with the rest of the East Asian countries. For example, South Korea’s level of trade dependence on China is growing rapidly. On February 1, 2010, the Korean government announced that their trade reliance on China grew to 20.53 percent, which is the highest level South Korea has ever experienced.⁷³ This is mainly due to the growing export to China followed by CCP’s domestic consumption boost. South Korea’s exports to China accounts for 23.85 percent of their total export sector.⁷⁴ Japan is also experiencing a growing reliance on Chinese demand. Japan’s exports to China rose 42.8 percent due to the growing consumption in China.⁷⁵ While the data above are clear indications of China’s increasing economic interaction in its region, it also suggests East Asia’s decreasing reliance on the US.⁷⁶ In fact, South Korea’s level of trade dependency on the US fell to 9.71 percent in 2009, which is only half of its reliance on China.⁷⁷ Japan’s shipments to the US fell 7.6 percent as well.⁷⁸ East Asian countries have been one of the largest trading partners of the US. However, East Asia’s shift away from the US to China should be considered by the US policy makers because of the importance East Asia carries in security, economic, and political fields.

Second, a shift toward state capitalism is likely to force foreign firms out of the country. The current trend toward a state directed economy involves an increase in industrial policy interventions. The foreign firms view this change as a reversal in the economic reformation. Foreign firms have been increasingly complaining that an equal treatment for domestic and foreign companies is “conspicuously” absent in the public procurement process.⁷⁹ China has been active in directing foreign companies to invest in industries involving high-end and new technology, advanced manufacturing, and modern services.⁸⁰ In contrast, these companies were initially attracted to China by the huge potential domestic market. However, as China begins to restrict foreign companies to compete fairly in their domestic market, it will gradually lose its attraction. China might start to lose the foreign retailers and brand-name merchandisers, who will start to place their orders elsewhere. A decrease in foreign companies’ participation in China is noteworthy because it indicates China’s disintegration from global linkages.

Third, a successful shift to a pattern of growth driven more by domestic consumption demand could slightly mitigate the current global economic imbalance. The transition in

China's economic growth model entails a reduction of China's national savings rate relative to its investment rate and an expansion in its consumption demand. This adjustment will be carried out with an appreciation of China's currency in order to ease an inflationary pressure that would otherwise emerge from the increase in consumption demand.⁸¹ The appreciation would tend to reduce the pace of export growth and increase the pace of import growth.⁸² This would decrease China's current account surplus, which will contribute to rebalancing the global economy. However, China's growing ability to produce high-end products makes it very difficult to make any projections on its current account balance.

Lastly, given all the implications above, the greatest concern for US policy makers and China is how China will balance its focus between the export linkages and the domestic market. In current the crisis the confrontation between China's global integration and its state directed economy became more apparent. So far, the previously mentioned challenges and the projections of the Chinese economy clearly indicate China's move toward a state directed capitalism in which the government attempts to control the outcome of the market. However, the extent the government is willing to control its economy remains unanswered. It is difficult to make a definite statement that China is pursuing a complete command economy. For instance, the state sector of the economy has been shrinking from some 300,000 state-owned enterprises (SOEs) a decade ago to around 150,000 today, with a corresponding 40 percent decline in state-sector employees.⁸³ Nonetheless, it is imperative to question to what extent the current state directed capitalism would threaten China's integration with global capitalism in order to understand the role China is creating for itself around the globe. Thus, this is a question that needs to be carried on by US policy makers persistently to build effective policy suggestions.

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Perilous Growth:

Environmental Costs on the Future of the Chinese Economy

Tim Quijano

Introduction

While sustaining China's breakneck growth during and after the financial crisis of 2007-2010 poses important economic challenges for the country's future. Economic growth also reinforces China's pattern of increasing vulnerability to environmental problems. China's incredible economic dynamism presents a new wealth of opportunities to advance into new frontiers of technological development and geopolitical influence through continued economic expansion. Risks are, however, associated with this new path. Chinese growth has imposed serious costs on the nation's environment and natural resources, to which the nation will eventually have to respond. Environmental degradation poses threats to China's continued economic growth, as development runs up against diminishing natural resources and increasing social protests inspired by environmental degradation. Current extraction of resources is unsustainable in many sectors, and environmental degradation is increasingly opposed by those most affected by it.

The Environmental Kuznet's curve describes a common pattern of environmental policy as countries develop. As the level of development increases, the level of environmental degradation associated with early industrialization increases as well (see Figure 3.2.1). This degradation reaches a peak at a certain level of development when environmental degradation decreases and environmental protection increases as a result of increases in the population's interest and education, increased standards of living, and increased funding with which to dispense with the problem.¹ China's two wealthiest cities—Beijing and Shanghai—have passed the peak of environmental degradation in the Kuznet's curve because they are home to some of the most environmentally efficient economies in the nation, partly due to their highly developed service

sector economies and the high level of education of the local population.² The Chinese Communist Party (CCP) continues to delay taking major action on environmental degradation, defending itself as a “developing nation.”¹³ China's incredible population density and unparalleled economic growth has given rise to environmental problems that demand rapid solutions. A 2007 study determined that 70 percent of China's water is unfit for human use whatsoever, and that air quality in 40 percent of the nation's cities did not meet the grade II⁴ national standard.² Literature on Chinese environmental protection emphasizes that while the CCP has established institutional mechanisms to confront these issues, these institutions and their actors have not received requisite power to restrict industrial firms—the organizations that contribute the most to energy use and pollution. In confronting many environmental issues, the CCP has limited transparency, restricted public participation, minimized natural resource rights and markets.⁵ This trifecta of poor environmental management has resulted in lower efficiency and slower economic growth.

A growing consensus both in China and in the West recognizes that ecological realities may place limits on economic growth, and the CCP has recognized this challenge. However, the Chinese economy remains highly dependent on the exploitation of scarce national resources to fuel its rapid growth, and the CCP believes that rapid growth is necessary to maintain social stability. Moreover, Chinese resources are exploited highly inefficiently, externalizing many societal and environmental costs, resulting in a high share of

1 The CIA World Factbook (2010) classifies China as a “lower middle income” country, but this broad classification belies the complexity of China's urban-rural and regional socioeconomic divide.

2 Beijing ranks air quality in the National Ambient (Outdoor) Air Quality Standard (NAAQS) from I, acceptable, to V, unacceptable.

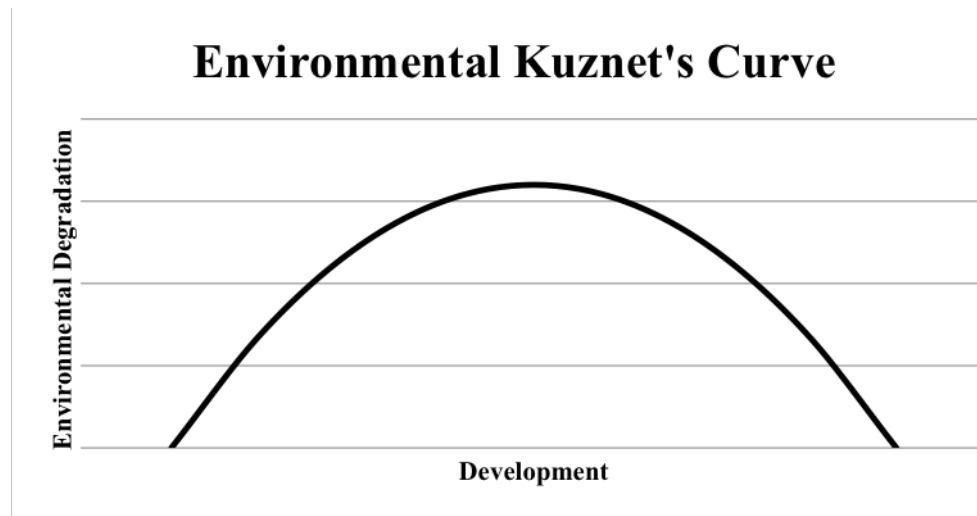


Figure 3.2.1: The Environmental Kuznet's Curve

environmentally hazardous practices.

The future of Chinese success depends partially on the nation's ability to respond to these environmental problems. First, this chapter will summarize the attempts at providing estimations of the costs of environmental degradation through the CCP's Green Gross Domestic Product (GDP) project. Then, this section will introduce three of the primary environmental issues that may present challenges to China's future growth: energy issues, water scarcity, and air-borne emissions. Finally, this section will conclude by stating to what extent these factors may disrupt Chinese economic growth.

Green GDP

Many scholars have found that GDP is an insufficient mechanism in determining a nation's level of development, and that this tool is overemphasized simply because it is very simple to calculate and compare.⁶ Furthermore, although Amartya Sen acknowledges that GDP growth may provide a means by which to achieve the expansion of freedoms. Economists have focused on the means, GDP growth, instead of on the goal, freedom.⁷ In congruence with these critiques, many have advocated for a modified measure of GDP that accounts for environmental degradation. Green GDP seeks to subtract the externalized environmental costs of economic growth, such as diminishing natural resources and pollution, from the standard GDP rate to provide a more accurate understanding of economic development.³ Green GDP aims to correct negative environmental externalities

3 This is a highly difficult and seemingly unscientific task that may require certain amounts of subjectivity.

associated with economic growth by taking into account natural resource depletion, resulting environmental and public health consequences as well as economic costs to clean up environmental disasters.

The central government of the People's Republic of China (PRC) has made several attempts to quantify the nation's Green GDP and promote this as a more accurate representation of development, but each attempt has been abandoned.⁸ Many local officials failed to cooperate with the two central agencies⁴ completing the 2004-2006 report, and later requested that the report's data be classified.⁹ As a result, SEPA and the NBS published a "Public Version" in 2006. These reports suggest that environmental degradation, as seen in the costs of clean up and pollution, comprises 4.85 percent of GDP in 2006.⁵¹⁰ GDP is an extremely important measure in Chinese politics. Whiting (2001) has demonstrated that CCP cadres' promotion and bonuses⁶ are often based on their success in promoting a few policies, the most important of which is increasing local GDP, thus increasing the local government's tax base.¹¹⁷ Increasing GDP is achieved by demonstrating the local municipality's devotion to protecting its local industries, a significant proportion of which are state-owned enterprises (SOEs). Because local cadre's salaries and

4 The two agencies were the State Environmental Protection Agency (SEPA) and the National Bureau of Statistics (NBS).

5 These efforts were very "selective" in their choices of topics to include in their project and excluded many quantities of environmental degradation that are difficult to calculate (Li and Lang, 2010, 48).

6 Bonuses are usually equal to the cadre's annual salary, making them a very important component of the cadre's salary.

7 In practice, local Chinese governmental units are highly independent economically, see Whiting (2001).

promotion prospects are based on GDP growth, which often comes at the expense of environmental protection, enforcing Beijing's environmental regulations can prove to be a difficult task.

Furthermore, the CCP's primary source of political legitimacy is its ability to bring great economic growth to the country. Economic development has resulted in considerable improvements in living standards and increases in consumption rates. The Chinese government believes it must maintain this incredible economic development for political stability, and thus, is limited in pursuing activities, such as environmental protection, which some deem contrary to short-term economic gain.¹² A culture in China and elsewhere maintains that environmental protection is an unnecessary hindrance to economic development and poverty alleviation.¹³ This understanding belies the complex relationship that ties environmental protection and economic development together without a simple causal flow.

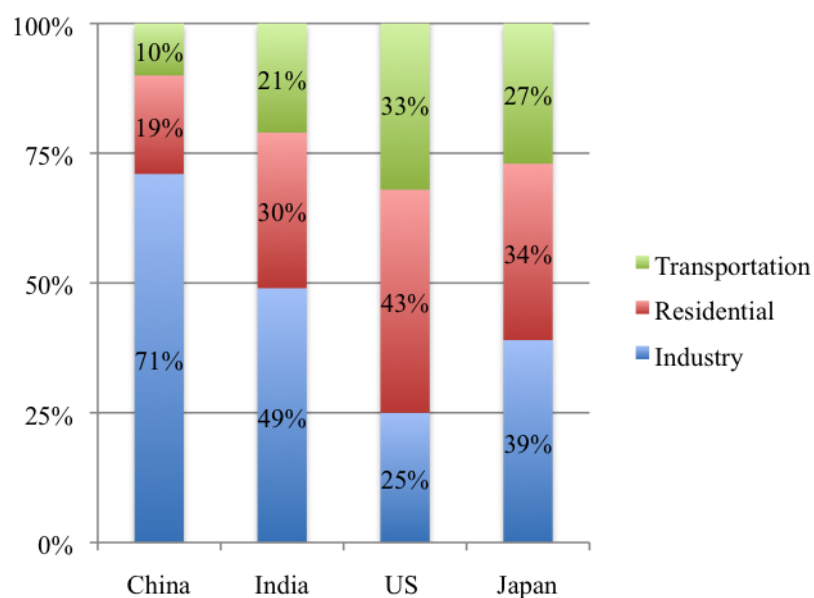
Energy Security

The massive rate of increase in Chinese energy consumption has global ramifications. China will pass the United States (US) as energy producer by 2012.¹⁴ China has been a net

importer of its main source of energy—coal—since 2007¹⁵ and its secondary source—oil—since 1993.¹⁶ Various diplomatic engagements are required of Beijing because China must import its two primary sources of energy, which together supply roughly 90 percent of the nation's energy. The CCP has made extensive commitments to increasing its share of renewable energy production, the majority of which will be provided by massive hydroelectric projects, which also cause detrimental environmental consequences. China's future energy projects will likely bring about environmental confrontations that will necessitate centralized political action to prevent international political dispute, unnecessary economic cost, and social unrest. This section will summarize relevant issues around each of China's dominant sources of energy: coal, oil and renewable sources. It will focus on the status of each source in China today and will present future challenges seen in each particular source of energy. Then, this section will summarize the CCP's efforts in combating the problems arising from these sources.

Almost as exceptional as China's rate of GDP growth is the nation's rise in energy use. Chinese energy use has grown extremely rapidly in the reform era. Comparing China's pattern of growth against the patterns of industrialized nations reveals that China is currently positioned at a tipping point

Energy Demand by Sector



(Figure 3.2.2)²³

of massive growth in energy consumption. In 2003 electricity use was 1,464 kilowatt hours per person in China.¹⁷ This is the rate of electricity consumption of the US in 1941, Japan in 1962 and Taiwan in 1975.¹⁸ Electricity use quadrupled in the following 25 years in each of these three nations.¹⁹ China is on track to do the same.

Currently, China is the second largest consumer and producer of electricity after the United States. By 2012, however, China will lead the way as the largest producer of energy, with a growth rate of 15 percent per annum.²⁰ This energy growth will enact tremendous consequences on global carbon emissions, to which China is already the leading contributor. Also, this high rate of energy consumption growth has resulted in brown outs domestically.²¹ Energy shortages have contributed to a general nervousness about energy security which has encouraged the growth of a massive and largely unregulated energy industry.⁸ This rapid unregulated growth has brought unsafe working conditions and a dependence on resource-intensive but altogether low-capital techniques.²² The most obvious example of this trend is seen in the domestic coal mining industry.

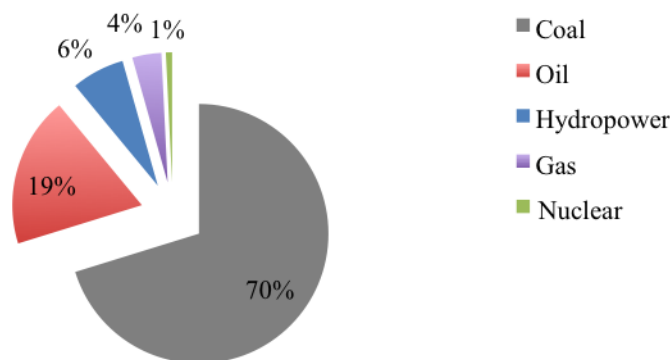
China requires three times the global average amount of energy to produce every dollar of economic output, 4.3 times more than the US and 8.3 times more than Japan.²⁴ This is partly a result of the China's economic dependency on heavy industry. Over 70 percent of China's energy consumption is from industry (see Figure 9.2: Various Nation's Energy

8 This paper will define energy security as the ability to procure a stable supply of energy resources at reasonable rates.

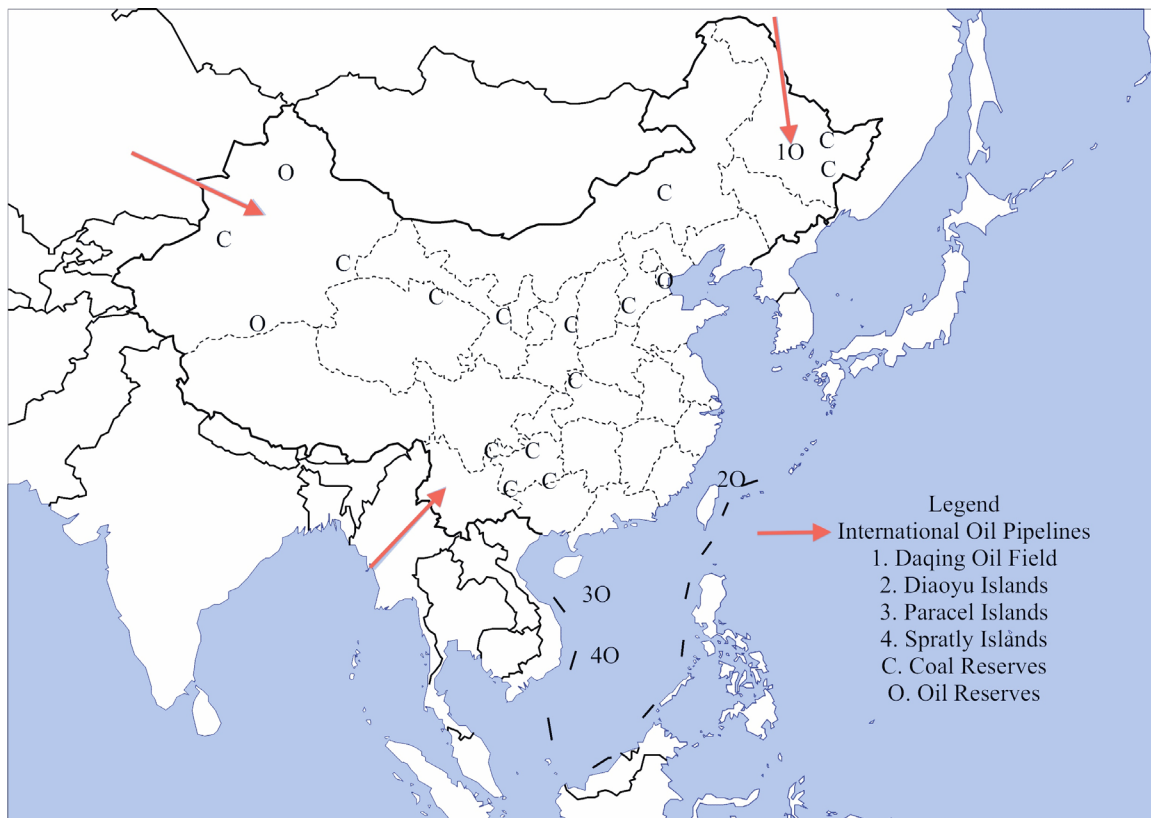
Demand by Sector).²⁵ A rate that has, undoubtedly, risen in China's stimulus plan with its focus on infrastructure. China suffers from both lacking many energy resource deposits and exploiting the resources it acquires inefficiently.²⁶ Beijing will find it difficult to reduce its energy intensity as it has proposed in public announcements with its current policies: low energy prices and high dependency on heavy industry to fuel the national economy. While many experts agree that Beijing would benefit from raising energy prices, this move may prove to be politically difficult in China's socialist market economy.²⁷ Realizing Beijing's energy intensity goals would be much simpler if the CCP decided to adopt the service-industry led growth as seen in India.²⁸

China's reliance on coal for the majority of its energy has been widely reported in Western journalism due to its pejorative effects on global air quality.³⁰ Coal, however, imposes several other significant external economic costs on the Chinese economy: transportation investment, diplomatic engagement, and healthcare costs. Coal provided 70 percent of China's energy in 2008 and the share of coal dependency in national power generation has been rising since the early 1980s (see Figure 9.3).^{31,32} Naughton (2007) states that the nation's dependence on coal is the "root of China's energy problems."³³ Naughton's assessment is an unfortunate oversimplification. While coal brings many problems, China's holds abundant reserves: 114.5 billion tons or 14 percent of global proven reserves.³⁴ Thus coal presents an opportunity for energy independence and security. Also, coal's low

Chinese Energy Production by Source



(Figure 3.2.3)²⁹



(Figure 3.2.4)

International Oil Pipelines, Key Fossil Fuel Extraction Sites and Relevant Territorial Disputes

operating costs encourage exploitation. However, China's low technological extraction and burning of coal exacerbates the inefficiency and environmental problems inherent to coal-burning.³⁵ Coal combustion emits 75 percent more carbon than natural gas-powered plants and one-third more than oil-powered plants.³⁶

Coal combustion requires massive investments in transportation. China's rail network has been experiencing bottlenecks for decades, partly as a result of the massive amounts of coal that has to be shipped from inland mining sites such as Inner Mongolia, Shanxi and Shaanxi to coastal refineries.³⁷ Many Southern coal-fired power plants find the transportation logistics of acquiring coal from northern China too much of a hassle and prefer to import coal from abroad (see Figure 3.2.4).³⁸ This increased unnecessary importation has energy security implications, and as a result, Beijing has aimed to restrict this trade. In addition to the transportation costs of coal-burning power generation, China has to depend on costly diplomatic engagement to acquire coal from abroad. Since early 2007, China has been a net coal importer.³⁹ Therefore, China is reliant on other nations for significant amounts of foreign inputs for domestic energy security.

Chinese coal mines use backward practices contributing to 4,500 to 7,000 unnecessary deaths every year.⁴⁰ The Chinese rate of death per unit of production compares unfavorably to even nations with lower levels of economic development.⁴¹ Furthermore, many coal combustion facilities do not use cleaner burning technologies because they require more energy, and are thus more expensive.⁴² Because carbon emissions from coal-burning power stations are at least twice as much as other fossil fuel oriented power generation facilities, the establishment of a carbon credit market or similar program must parallel continued investment in coal-based energy generation in order to control carbon emissions. The social costs of medical care related to unsafe coal mining operations are tremendous. The number of deaths resulting from China's relatively unregulated exploitation of coal combustion results from not only of unsafe working conditions, but also the thousands who fall ill with bronchial-related diseases from inhaling the by-products of coal combustion.⁴³

While oil combustion provides only 19 percent⁴⁴ of China's energy consumption, China is the second-largest oil consumer in the world behind the US.⁴⁵ While China does hold extensive oil fields such as the Daqing oil field in the

Northeastern Heilongjiang Province, it has been a net importer of oil since 1993.⁴⁶ While China imported 51 percent of the oil it consumed in 2008, this rate will grow in the near future to between 60 and 70 percent.⁴⁷ China's exceptional rise in oil consumption has contributed to "upward price pressure" in global oil markets⁴⁸ and may have been one cause of the shortage that led to the global price spike in the summer of 2008.⁴⁹ This high growth rate has contributed to anxiousness about oil security and the possibility of supply disruptions.⁵⁰ Chinese dependency on foreign oil has defined the nation's foreign relations with a diverse array of nations all over the globe including ASEAN nations, African nations, the former Soviet Republics of Central Asia as well as the Russian Federation. Furthermore, disputes over oil and gas resources has reignited historical territorial disputes.

Beijing believes that relations with Myanmar could improve China's energy security. Because 80 percent of China's imported oil supply must travel through the Straits of Malacca, Beijing is worried that this strait could become blocked with terrorists attacks, oil spills, collisions or piracy.⁵¹ An incident here could debilitate the Chinese economy.

While Africa holds only 9 percent of the world's proven conventional⁹ oil reserves, many believe that Africa is home to many more undiscovered reserves. The vast majority of the other reserves are either state-owned or held by Western oil companies.⁵² Thus, China sees in Africa a long-term supply of oil. African oil exports to China have risen dramatically in the past decade, in parallel with the massive rise in Chinese investment in Africa. Oil and gas grew from 62 percent of African exports to China in 2004, to 86 percent in 2009.⁵³ As a result, Chinese investment into Africa is rising extremely fast. While in 1990 total Chinese investment into Africa was \$49 million, this rate rose to \$600 million in 2003, \$1.6 billion in 2005 and \$7.8 billion in 2008.⁵⁴ Investment for 2008 alone totaled \$5.5 billion.⁵⁵ China is highly invested in Africa, and thus is vulnerable to the demands of African nations, as they provide one-third of China's oil imports.⁵⁶ While this is much less than China receives from the Middle East—50 percent—this dependency has restricted the CCP's

political capability.⁵⁷ Western nations have condemned China's arms deals with Sudan and Zimbabwe. In the Middle East, Iran supplies roughly 15 percent of China's oil imports.⁵⁸ Consistently, Beijing has refused to enact sanctions on Iran for its veiled pursuit of a nuclear weapons program, which has tarnished China's image internationally.⁵⁹ China's lack of significant oil stockpiles defines the nation's lack of energy security, and vulnerability to other nation's domestic whims.

Chinese appetite for oil has also attracted new attention to several of the nation's numerous territorial disputes. The Diaoyu Islands (Senkaku in Japanese), north of Taiwan; the Paracel Islands, southeast of Hainan; and the Spratly Islands, further southeast, are all claimed by a host of East and Southeast Asian nations (see Figure 3.2.4). These islands were not very important until recently when it became known that the continental shelves surrounding these islands hold significant oil and gas reserves.⁶⁰ These conflicts could possibly heat up East Asian relations.

The Chinese government has ramped up its pursuit of renewable energy in the past few years, and derived 7.9 percent of the nation's energy from these sources in 2006,⁶¹ which compares with 9.2 percent of US energy from renewable energy in the same year.⁶² The majority of renewable power today comes from hydroelectric dams, such as the notorious Three Gorges Dam. While the CCP is planning to increase the nation's share of energy from renewable sources to 15 percent by 2020, only about 11 percent of this renewable energy production will be derived from wind and solar.⁶³ The overwhelming majority of this renewable energy share will be derived from hydroelectricity. Hydroelectric dams, however, bring important environmental and safety problems.⁶⁴

With renewable energy production, China has done what the rhetoric of American politicians profess—created massive amounts of jobs. In 2008, China held 1.12 million jobs in the renewable energy sector, which is growing by roughly 100,000 jobs per year.⁶⁵ Chinese green tech manufacturing, undoubtedly, benefits from cheap labor and a low currency value.

China's coal-focused energy production system, along with the economy's reliance on heavy industry, contributes to China's status as the highest carbon emitter in the world. Climate concerns increase every year and President Obama has repeatedly stressed his interest in advancing legislation to reduce carbon emissions in the US. Much criticism of

9 Conventional reserves are of the traditional petroleum composition—liquid drilled from underground, and released under pressure. This type of reserves is often defined in contrast to unconventional reserves such as oil sands or oil shale, which are new ways of processing oil, which have become economical only recently.

China in Western media is, often, insufficient in providing an understanding China's carbon situation. While China produces the most carbon emissions today, the nation has produced much fewer emissions than the US over its lifetime.⁶⁶ While China has produced 13 percent of the carbon emitted into the atmosphere, the US has contributed 24 percent.⁶⁷ By 2020, however, China's share will be 21, while the US's share will have decreased to 20 percent.⁶⁸ This change demonstrates that China must, in the coming decade, demonstrate leadership in developing geopolitical policy that aims to limit damage enacted by climate change. Furthermore, Chinese emissions per capita are much less than of American or European citizens.⁶⁹ These massive emissions do, however, provide many stumbling blocks in the institution of global climate change regulation.

The US has repeatedly defended its inaction to enact climate change legislation by arguing that China and India's exclusion from carbon emission caps under regimes such as the Kyoto Protocol render the agreements largely useless.⁷⁰ Furthermore, China has exercised its new superpower role after the recession, which has proven a significant obstacle in enacting climate change regulation. Pundits have blamed the CCP for the failure of the Copenhagen Accord to enact binding targets that may set a precedent that and Beijing to enact more progressive climate regulation in the future.⁷¹

China is extremely vulnerable to the environmental problems arising from climate change. Climate change may cause extreme weather patterns in China, leading to an increasing frequency of both droughts and flooding. China already struggles with water scarcity, more droughts will exacerbate this issue. China is also very vulnerable flooding, as so many rivers cross its landmass. Floods recently debilitated some areas of the Guangxi Zhuang Autonomous region in southern China.⁷² China's growth would be significantly hindered if these problems grow more frequent.

The CCP has recognized all of the energy issues that this section has addressed, however, the government's responses to environmental concerns often suggest a lack of understanding of the economic consequences of poor environmental policies. Beijing has, however, adopted measures that may prevent energy security from obstructing future Chinese growth. The CCP has also been very successful in developing a clean tech industry.

On February 26, 2009, Beijing made a commitment

to reduce the nation's energy intensity by 40-45 percent of 2005 levels by 2020.⁷³ While this commitment is reassuring, it does not, as some pundits have stated, "present a deviation from existing Chinese policy."⁷⁴ To enact any significant effect on energy intensity, Beijing must increase energy prices. The CCP subsidizes the use of all fossil fuels (coal, oil and gas) as well as the price of electricity,⁷⁵ which results in the continuation of inefficient practices that would otherwise be uneconomical.

China's increasing demand for energy has not come without a cost. While Chinese citizens have experienced brownouts, Beijing has spent billions investing in the infrastructure of other nations in order to satiate Chinese demand for energy resources, with a focus on oil. As a result of China's dependence on African and Middle Eastern oil to be shipped through the Strait of Malacca, Beijing's China National Petroleum Corporation (CNPC) signed a deal with Myanmar's Energy Industry to build a pipeline through Myanmar to China's southwestern Yunnan Province.⁷⁶ China has recognized that energy security is dependent on diversifying the countries origins for energy resources. Thus, the CNPC has joined with the Kazakhstan government to construct a pipeline that provides China with oil from Kazakhstan.⁷⁷ In 2006, construction began on the East Siberia-Pacific Ocean Pipeline that will provide China with Russian oil.⁷⁸ China's growth during the recession only cemented their already extreme growth in the need for more energy. However, Beijing's foresight in providing the nation with a diverse supply of energy resources has proved valuable in gaining energy security amidst China's rapidly expanding appetite for oil.

China holds a comparative advantage in certain energy production resources over others. China's large coal reserves encourage the exploitation of this resource, but coal's high external costs require significant regulatory enforcement by the CCP to ensure that Chinese enterprises exploit coal reserves responsibly. While Beijing has repeatedly tried to close all unregistered coal mines, most still continue to run with the approval of financially-strapped local governments.⁷⁹ Carbon capture storage technology is more than a decade from fruition, and once available, the CCP will find that spreading this technology across the nation will cost decades and billions of dollars.⁸⁰ The CCP cannot afford to continue coal combustion in its current unregulated fashion. The lack

	Length (km)	PERCENT OF TOTAL RIVER DISTANCE IN EACH CLASS					Below V
		I	II	III	IV	V	
National	134,593	5.7	30.7	26.2	10.9	5.8	20.7
Songhua	11,135	0.9	9.2	35.5	32.4	5.2	16.8
Liao	4,529	1.6	8.8	17.6	8.6	13.5	49.9
Hai	10,719	3.1	17.3	18.2	6.1	2.8	52.5
Yellow	13,721	7.6	14.1	11.8	17.7	16.8	32.0
Huai	11,621	2.1	8.8	16.8	15.4	8.0	48.9
Yangtze	38,513	8.9	37.3	31.3	6.4	5.8	10.3
Pearl	16,061	2.0	47.2	25.7	9.2	2.1	13.8

(Table 3.2.1)⁹⁴

Extent of Chinese Water Pollution: the waters of the North China Plain, where water is the scarcest also holds the most pollution

of a regulatory structure results in thousands of unnecessary deaths every year in mining accidents, high inefficiencies due to the use of antiquated combustion technology and poor air pollution regulation.⁸¹ Furthermore, China's status as a net importer today suggests that while coal could provide energy security, the nation has overexploited its massive coal reserves. Nonetheless, Chinese economic growth amid the recession has provided an opportunity to become a leader in constructing efficient coal-combustion plants, lowering the price of the more efficient technology around the globe.⁸²

China also holds a comparative advantage in renewable energy. Chinese factories are benefitting massively from the technology transfer of renewable energy products in its factories. Leveraging its leadership in this sector would provide an opportunity for Chinese energy development to "leap frog" over the problems of earlier industrial societies that placed the majority of investment in dwindling fossil fuel reserves. This comparative advantage has the unique possibility to afford China energy security and independence. China is a net importer of all fossil fuels and is subject to stiff diplomatic and economic costs, such as new tension in territorial disputes and the relatively high cost of oil under the "Asian Premium"¹⁰ as a result of its dependency on foreign oil. Renewable energy offers a route out of this dependency cycle.

The CCP will face many energy problems in the coming years: develop oil stockpiles to prevent a shortage in the case of a supply emergency, continue to avoid military flare-ups over oil and natural gas resources in the South China Sea and the East China Sea, pursue as much energy

10 Some have suggested that China's lack of oil stockpiles may also contribute to China having to pay the "Asian Premium" for Middle East oil. This Premium refers to the rate that Asian nations have to pay for Middle East oil, which is higher than the rate Western nations are required to pay.

resource diversification as possible, minimize the emission of greenhouse gases and particulate matter, and improve safety in coal mines. Failure to successfully act with each of these issues in mind will constrain the future economic growth of the PRC.

Water

China is currently undergoing a terrible water crisis. High rates of industrial and domestic pollution have exacerbated the already critical problem of overexploitation of scarce resources, which will only become more difficult to solve as climate change alters the flow of Chinese rivers. CCP officials have sounded the alarms by radically proposing to transfer water several hundred kilometers from the relatively water-rich south to the water-scarce north with a program called the South-North Water Diversion Project (SNWDP). This section will explain the problem of water scarcity in China and demonstrate how industrial growth and rising domestic consumption has contributed to poor quality. Finally, this section will estimate the costs these water problems have enacted on the Chinese economy in terms of GDP, and steps the CCP have taken to address these problems.

The Chinese water situation is defined by scarcity. Chinese per capita water availability was 2,156 m³ in 2007, one quarter of the world average.⁸³ This rate places China just above the "water-stressed" classification of the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and the World Resources Institute (WRI), at 2,000m³ per person.⁸⁴ Furthermore, this rate is decreasing, and China will soon be classified as "water-stressed."⁸⁵ This rate, however, masks a large discrepancy in water distribution between south and north China.

Northern China is in a very vulnerable position in terms of water scarcity. The UNDP, UNEP, and WRI has classified the region as “water-scarce,” meaning that it has less than 1000m³ per person.⁸⁶ Berkoff states that, nowhere else in the world besides in the North China Plain are “so many people faced by so little renewable water.”⁸⁷ The region has one quarter the water availability of southern China, 1/11th the world average and ¾ the rate defined as water scarcity.⁸⁸ Additionally, these average values hide the annual variation in rainfall. The Hai and Huai River systems fall to 70 percent of their averages every four years and to 50 percent of their averages every twenty years.⁸⁹ The uneven temporal distribution of rain—most of the country’s rain arrives in the summer monsoons—in northern China intensifies the scarcity problem. The spatial and temporal unevenness inherent in water distribution in China makes water management much more difficult.

As a result of the scarce supply of water and increasing demand for water due to rising population pressure, Chinese citizens have begun to depend on unsustainable practices to maintain their current supplies of water. Specifically, Chinese have begun to overexploit the underground water supply, the aquifer. From 1950 to 1994, the water table fell from 5 to 50 meters below ground.⁹⁰ In recent years, overexploitation of the Yellow River, the backbone of Chinese civilization, has caused the river to frequently run dry before reaching the Yellow Sea.⁹¹

Chinese water pollution originates in both industrial and residential sources. Paper, metallurgical and chemical factories deplete water of oxygen, and thus the ability to support plant life.⁹² Only 56 percent of the 53.7 billion tons of domestic sewage wastewater is treated all.⁹³ This industrial and residential dumping into Chinese water sources has made much of Chinese water resources wholly unsuitable for human use.

The Chinese government established a five-level system (I-V), rising with the level of toxicity, which classifies water on the basis of its suitability for human use. Half of the Liao, Hai and Huai river systems (emboldened in Table 3.2.1) and one-third of the Yellow River system fall into class V or worse.⁹⁵ Class IV is acceptable only for industrial use. Class III is acceptable for human contact or intake into drinking purification systems. Analyzing the entire system, however, minimizes the extent of the dirty water problem.

The overwhelming majority of Chinese population lives in the areas furthest downstream of these river systems where all pollution materials congregate, and thus water quality is the worst.

This situation highlights the inadequacy of decentralized Chinese environmental monitoring. Upstream inland areas do not have the resources of downstream coastal areas with which to achieve effective resource management and pollution control.⁹⁶ A 2005 study found that 25 percent of 1000 sources of drinking water do not meet national quality standards and that 300 million rural Chinese citizens depend on unhealthy water.⁹⁷ This study drew a correlation between the incidence of diarrhea and typhoid fever and the level of bacteria in drinking water.⁹⁸

In a 2009 World Bank publication on China’s water crisis, Xie states that, “water scarcity is constraining the long-term sustainability of development.”⁹⁹ Water problems, specifically widespread lack of access to clean water, is enacting a significant drain on the Chinese economy. While the extent of damage to the water system is difficult to measure due to the large geographic area this report estimates that the external costs of water quality degradation and scarcity amount to 2.3 percent of GDP.¹⁰⁰ The cost of diarrhea and damage to crops as a result of being fed polluted water each amount to about .5 percent of GDP. The Chinese government estimated that costs of water pollution damage amounted to about 1.4 percent of GDP in 2004,¹⁰¹ However, a governmental report issued in February of 2010 stated that early water quality reports had not considered the damage enacted on water from agricultural fertilizers, a large source of water pollution.¹⁰²

The CCP has aimed to address water scarcity in China by equalizing the north-south water distribution discrepancy with an array of water diversion projects. The most remarkable is the SNWDP, a three-pronged effort with an Eastern Route bringing water from the Yangzi River to the Yellow and Hai Rivers.¹⁰³ This type of massive project is typical of CCP action, but its scale may have provoked attention, which has delayed the project.

The effect of Chinese water management on the water systems of neighboring countries may provide an opportunity for conflict to develop between downstream populations that depend on water originating in China’s mountains. A particularly controversial phase of the SNWDP suggest that Beijing divert water resources from the Mekong

and other international rivers.¹⁰⁴ Chinese dams have already severely restricted the amount of water flowing through the Mekong, provoking frustration from downstream residents in Laos, Thailand, Cambodia and Vietnam.¹⁰⁵ As climate change exacerbates China's water scarcity, Beijing may divert Himalayan water, spreading its risk to the downstream nations of South and Southeast Asia, providing for regional conflict.¹⁰⁶

As a result of a large surge of polluted water in 1994, which contribute to an abundance of dead fish and human illness, Beijing launched a campaign to clean up the river by 2000, investing 60 million renminbi or \$7.2 million.¹⁰⁷ This effort failed because local politicians were interested in protecting local industries and shielding these industries from "costly upgrades or shutdowns."¹⁰⁸ This episode demonstrates the primary challenge that Beijing has faced and will continue to face in enacting environmental regulation: local governments that are unmotivated in enforcing environmental campaigns both in terms of career advancement and economic benefit.

Water certainly is the most dire environmental issue in China today. Chinese civilization has developed on the precarious provision of water, but extreme population growth, poor agricultural planning and insufficient political will may dry northern China's aquifer soon. The Chinese water resource system faces the problems of: insufficient supply, largely unregulated dumping of industrial and domestic waste and the diminishment of Northern China's lifeline, the aquifer. Investment in the provision of water will be required of the PRC budget in future years, providing for the most significant of environmental constraints on Chinese growth

Air Quality

China's massive coal endowments have encouraged the exploitation of this resource, which has largely fueled the reform era economic growth. Allowing coal combustion to fuel this period of tremendous economic growth has led to significant air quality problems. As a result, China is not only the largest emitter of carbon dioxide, but also the largest emitter of pollutant such as sulfur dioxide and particulate matter.¹⁰⁹ Asian pollution is already widely reported as damaging air quality in western states of the US.¹¹⁰ American cities are recording Chinese pollution in their air. This section

will focus on the cost of air pollution in China.

While it is generally agreed upon that emissions resulting from China's rapid industrial growth have made a tremendous impact on the health of Chinese citizens, calculating the extent of the impact is very difficult. Studies have estimated that poor air quality in China causes anywhere from 300,000 up to 1 million premature deaths from respiratory diseases every year.¹¹¹ A World Bank study in 1997 estimated that air and water pollution costs were \$54 billion a year or 8 percent of GDP. Naughton states that, "4.5 million person-years are lost because of illnesses associated with urban air pollution levels that exceed standards."¹¹² The industrial and infrastructural buildup resulting from the CCP stimulus plan, assuredly, resulted in a tremendous increase in pollution and carbon emission.

Beijing was successful in reducing the number of cars on the road during the Olympics with a program that restricts driving to either odd or even license plates in Beijing.¹¹³ This policy has been retained after its popularity during the Olympics. Beijing city officials are campaigning to boost the number of cyclists in the capital by 25 percent from 19 percent to 23 percent of all trips in the next five years. They will attempt to accomplish this through infrastructure improvements that make cycling safer, and by furthering integration with other modes of transportation such as the bus and metro systems.¹¹⁴ More important than the transportation sector, however, are the manufacturing and industrial sectors. The CCP has enacted emissions control standards for heavy polluting industries and for urban areas.¹¹⁵ It appears that Beijing will continue to pursue the traditional "develop first" philosophy, delaying much significant environmental regulation until the economy is more advanced in high tech and efficient industries.

Conclusion

The cost of China's environmental degradation is already very high, and as the nation continues to largely ignore cleaning up its pollution problems, the costs of clean up continue to rise. Perpetually disregarding the environmental costs of the nation's economic growth is not an option. However, the Chinese government has failed to successfully act on cleaning up its continuing environmental catastrophes.

The author believes that an understanding of the economic costs of environmentally negligent behavior will provide significant impetus for stronger environmental policy in the future. Chinese environmental policy will continue to be unsuccessful without fiscal power to restrict powerful tax-generating engines for local municipalities.

Rawski (2009) states that castigating China for its environmental degradation is no more than acknowledging that it is the “workshop of the world,” because this is the natural result of this industrial growth.¹¹⁶ Proponents of this perspective are, however, ignoring recent data that takes into account the economic and public health costs of ignoring environmental degradation. While China will have significant difficulties in confronting all of these issues, Beijing has demonstrated adequate investment in procuring energy supplies internationally. China’s air quality problems are contributing to significant death and disease and will continue to do so without strong CCP policy. China’s water crisis is disastrous and will present Beijing with the most important environmental problem in the foreseeable future because the extent of damage is largely unknown. The systematic scarcity, inefficient exploitation and widespread pollution will require a creative solution that influences the practices of every major industry. This imminent challenge requires a thoroughly planned solution, which may turn out to be a logistical nightmare for the CCP.

The central government’s institution of market mechanisms that prioritize environmental protection could provide minimal constraint to the contemporary philosophy of “growth at all costs.” While the recession has provided many instances in which the government has provided liquidity to provide funding for more efficient projects, this efficiency is undermined by China’s incessant and rapid economic growth and the heavy industry focus of the Chinese economy and its SOEs.

The CCP has fumbled with such competent ideas as the Green GDP project that could provide a general understanding of the economic costs of environmental degradation and thus engender popular support for these environmental clean up programs. A market-oriented water and energy pricing system would encourage the abandonment of inefficient water and energy exploitation and also demonstrate the extremity of the contemporary water crisis/situation. The Green GDP program would also demonstrate the medical costs of those

requiring medical attention because of exposure to air and water pollution.

These issues bring up a fundamental question: if Beijing’s political legitimacy rests on economic growth, then can the CCP afford to balance this growth with sound environmental policy?

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Political and Social Challenges in Modern China

Chris Schulz

Introduction

While the primary purpose of this policy recommendation is to provide context and direction for addressing recent developments in Chinese political economy, it should be made clear that this is only one frame of analysis. Economic growth presumes political and social stability, which can allow for a somewhat fixed model for production to exist. Trends that threaten Party rule are intrinsically threatening to the current allocation of resources. The coordination of the economy has been under the influence of a highly repressive state that presides over a number of explosive internal contradictions.

Corruption

One major factor which will determine the direction of China's future is corruption. As Minxin Pei observes, two metrics of international confidence in a regime—inflows of foreign capital and high growth rates—are taken by the state government to be sufficient assurances of the regime's stability, and political reform is therefore seen as a secondary concern.¹ Some statistical slight of hand is at work here: "high rates of growth can mask the weak political foundations of authoritarian regimes," and because there is minimal incentive for liberalization under the current conditions, the Chinese developmental autocracy has devolved into a corrupt and predatory state.² Minxin phrases the problem in terms of the "accumulation of systemic risks."³ It is difficult to determine how well or how long the society will be able to endure these tensions, and there is speculation that a deceleration of growth could end popular tolerance of the regime. Local-level allegations of corruption already incite "tens of thousands of riots and violent collective protests each year, undermining social stability and necessitating extra spending on internal security."⁴ Minxin elsewhere claims that

the inability of the CCP "to implement meaningful political reform is responsible, in retrospect, for a rapid and substantial accumulation of governance deficits," respectively defined as "erosion of state capacity" and the "ability to mobilize political support."⁵ Rather than summarize Minxin's thesis, I will use it as a point of departure to ground further arguments in this section.

The Horizon Research Consultancy conducted a survey of 1350 people in major Chinese urban centers at the beginning of 2010, which concluded that, "corruption ranked as the single worst blot on China's international image, for the third year running."⁶ At the most recent meeting of the Communist Party's Central Commission for Discipline Inspection, President Hu Jintao concluded his speech with the words, "The life or death of the party depends on whether or not we have a strong will to punish and prevent corruption."⁷ It is crucial that the problem of corruption not be overlooked—in the aftermath of an anti-corruption sweep conducted in late 2009, a series of high-profile corruption cases are currently being processed in China's court system and the country is watching closely.

The urgency of the rhetoric surrounding corruption reflects a current preoccupation with its detrimental effects on the Party's legitimacy, but the Party has long feared the consequences of internal corrosion and a fall from grace in the eyes of society. In other words, this urgency is nothing new. The initiation of reform with Deng Xiaoping brought an increasing trend of corruption to the forefront of the Party's concerns. In 1982, the CCP Central Committee and the State Council published a "Resolution on Cracking Down on Serious Criminal Activities in the Economic Arena," admitting that what was "especially unsettling is the fact that in the last two or three years, activities such as smuggling, embezzlement, bribery, profiteering, and theft of state properties have

increased dramatically.”⁸ In Jiang Zemin’s final report to the National Congress in 2002, the former Party leader admitted that “‘If we do not crack down on corruption, the flesh-and-blood ties between the party and the people will suffer a lot and the party will be in danger of losing its ruling position, or possibly heading for self-destruction.’”⁹

Yet what is the link between CCP corruption and the goal of continued economic growth? In the first place, there is a direct relationship between the disappearance of funds and GDP. In work published in 2007, Minxin ran an exercise based off of the “conservative assumption that 10 percent of the land lease revenues, fixed investments, and government spending is stolen or misused” and came to the conclusion that the diverted funds could amount to “3 percent of GDP, roughly \$86 billion, an amount exceeding the government’s entire spending on education in 2006.”¹⁰ In the second place, there is a strong argument to be made that China’s aggregate economic growth has been enabled by the power of the CCP. Party officials’ economic decisions can impose conditions on citizens that will come back to haunt the Party in the form of political challenges.

In an interview with the *New York Times* published in September 2009, Gao Qianxin, of Beijing’s Chinese Academy of Social Sciences, gave his perspective on the relationship between corruption and economic growth: “Corruption has not derailed China’s economic rise. But it’s rotting the establishment of a rule of law. The Chinese government has more than 1,200 laws, rules and directives against corruption, but implementation is ineffective.”¹¹ Because China lacks an independent judicial system or police, party officials themselves call for anti-corruption investigations. In a summation of several expert positions, the article asserts that “prominent corruption cases in China are often the outgrowth of power struggles within the Communist Party, with competing factions using the ‘war on corruption’ as a tool to eliminate or weaken rivals and their corporate supporters.”¹²

With this frame of analysis, it is no longer a complete paradox that corruption has remained such a contentious issue as the same time as it continues to persist as a widespread phenomenon. Minxin Pei, who elsewhere characterizes China’s growth period as the “Trapped Transition,”¹³ in fact places emphasis on the value of corruption for the Party in terms of gaining membership with the promise of personal benefit from graft: “It’s now a recruiting tool. Corruption is the glue that

keeps the party stuck together. Getting rid of it is not possible as long as they keep this system.”¹⁴ According to Yasheng Huang, an economist at MIT, government shareholders can readily intervene in business, especially when businesses are successful. This practice has meant that the government has “exercised its ownership privileges to meet party objectives” and has thus constricted or shut down successful firms.¹⁵

The character of both public and private enterprise in China has been distinctively marked by the ubiquity of corruption. Will Hutton argues that there is a general rule that “the more politicized and controlled a Chinese enterprise, the lower its productivity and performance.”¹⁶ At the time of Hutton’s publication, the State Owned Enterprises (SOEs) had not registered a significant improvement in performance since the onset of reform, and despite controlling a clear majority of industrial assets, organization is highly inefficient: “one in three of their workforces is estimated to be structurally idle.”¹⁷ Close to three-quarters of these firms employ fewer than 500 people. Finally, Hutton cites an influential report which estimates that either a incremental increase in interest rates or decrease in sales “would mean that 40%-60% of their enormous bank debts would not be serviced, rendering the entire Chinese banking system bankrupt.”¹⁸

As far as private enterprise, most firms do not last long—on average, firms last three years. Finance is opaque and private companies consciously try to avoid being handled by the state, though as I noted above, collusion is commonplace. The problems with the current configuration of business in China can be traced, at least in some respects, to the nature of the overbearing party-state. Margaret Pearson points out that the state does not attempt to manhandle every part of the socialist market economy: “a degree of autonomy for economic interest outside the party state structure is deemed by to the state to be necessary for industrialization (and therefore legitimate), at the same time that the state finds it desirable to prevent the independent organization of the societal groups that might undermine the state.”¹⁹ However, citing David L. Wank, Pearson goes on to contend that “capitalist entrepreneurs see capitalist growth as possible, because of, not in spite of the involvement of officials.”²⁰

Hutton goes on to contend that the development of business practices is highly reliant on an attentive public which can militate against poor decisions and defend more cost-effective types of action. Such a public sphere, a

“whole network of ‘soft independent processes of scrutiny, justification, transparency and accountability that range from a free media to independent justice,” is in fact necessary for the healthy operation of business: these processes “do not stop just with the state—the same processes are extended to capitalism and the market economy, and through having to justify themselves, makes them more honest and better performing.”²¹ But Hutton’s formulation is, in fact, an inversion of the relationship described by Wank in the previous paragraph. The current situation in China places capitalist entrepreneurs in a dependent role vis-à-vis state officials, often attempting to operate outside of the purview of the state.

A corollary of Hutton’s argument is that in order to function most effectively, the public sphere must be constituted by a minimal level of inequality between groups deeply involved in the economy. Otherwise, it is unsurprising that elite self-servicing groups, existing in a dual-role “gray area” between public service and private gain, will work in ways that protect a narrow vanguard of interests while masking a volatile social order. Consistent with the course of my argument under the next section, the “unexpected” conclusion reached is that “capitalism works best the more inequality is capped—and the more and better developed its democratic institutions.”²²

Democratic institutions in China are extremely weak, and there are few signs that have led analysts to believe that increased democratization will be inevitable in this case. If corruption has an inextricable role in China’s national order, it is undoubtedly a double-edged sword. The challenge for the state is to contain the serious potential for corruption to provoke unrest. I will use one case study to foreground my analysis.

On June 17, 2009, the body of Tu Yuangao was discovered on the street below Yonglong Grand Hotel in the city of Shishou. According to blogs written at the time, although Tu had been seen falling from the hotel above, there were no signs of blood on the ground and the body was already cold upon first inspection. The same sources reported that Tu’s lower body “showed signs of severe torture” and there were “blood clots around the deceased’s mouth, nose, and ears.”²³ When Tu’s family was reportedly offered RMB 35,000 (\$5,200) to confirm that the cause of death had been suicide—there existed a suicide note, despite claims that Tu

was illiterate—the family rejected the offer and took up arms to prevent the body’s removal.

Police were sent to retrieve the body for cremation at 1:00 am on June 19, but found 2,000 people had galvanized to protect the body, which still was marked by the signs of death which contradicted the official cause. Those 2,000 people remained at the scene through the night, creating banners and petitions. By 3:00 pm that day, blogs estimated a presence of 40,000 people outside the hotel. Riot police were dispatched on the evening of June 20 after prolonged and heated confrontation between demonstrators and state guards as the presence grew to 70,000. The hotel was set on fire two separate times.

Even more telling is the discordance between the cutting-edge independent bloggers and the state media, Xinhua. The latter remained silent until the afternoon of June 20, when a report was released which claimed that traffic police, the medical department, and the fire department had organized a fire drill the day before, and a fire had unintentionally broken out, attracting the attention of a large crowd. At the same time, blog posts began to disappear.

It is precisely at such flashpoints of societal disorder that the CCP’s legitimacy is at stake. Critical and independent media are constantly exposed to the watchful eye of the central government, and there is a constant ideological war of representation which this section will not address. It should be enough to relate that the Chinese government has a wide range of repressive tools at its disposal.

The Legacy of Uneven Development

The spatial distribution of foreign capital in China has historically been highly uneven. There are two primary determinants for this historical fact. In the first place, the market size of various provinces was a factor in whether or not a province was attractive to foreign investors; the greater the market, the greater the attention given to the region by actors abroad. In the second place, the Chinese government itself actively pursued a policy based on regional favoritism. Starting from the advent of Deng Xiaoping’s rule, the Chinese state undertook a policy of preferential development, reasoning that the government should make the best use of the limited capital it had to work with, and hence capital

should be directed toward those regions that had conditions already favorable to growth. This policy of regional growth was a marked departure from the philosophy of development under Mao, which had stressed shared growth.

The coastal regions, notable for their relatively skilled workforce, managerial and technological sophistication, good foundational infrastructure, and easier access to networks of overseas Chinese, were chosen as recipients of government investment and would be the beneficiaries of active government intervention. Wang Shaoguang argues that the most significant change in “inter-provincial capital movement” after the mid-1980s is the increasing financial independence of separate provinces—rich provinces were less often seen transferring their own saving to other regions.²⁴ This independence facilitated a self-perpetuating cycle of development: because these rich provinces were able to retain their own capital, they could invest in themselves and attract local investment, which meant a greater rate of capital accumulation. Wang explains that for a long time, “only coastal provinces were allowed to provide fiscal incentives for foreign investors. Even among coastal provinces, some (e.g. Guangdong) enjoyed a more generous package of incentives than others. Thus, it is not surprising that the provinces that can offer generous incentive programs tend to attract more foreign capital.”²⁵

The objective of coastal development was predicated upon a “Gradient Theory,” which held that China was divided into three overall regions—coastal, central, and western—and like a tidal wave of progress, development would wash inland over time. This theory was first institutionalized in the Sixth Five-Year Plan (1981-1985), but became the backbone of the Seventh Five-Year Plan (1986-1990). In 1988, the Chinese state jumped to an explicit “Coastal development strategy,” opening the entire coastal strip to foreign investors: “Coastal provinces were even encouraged to seek their raw materials from foreign sources and sell their products to the world market, though doing so might run a risk of severing their links with interior provinces.”²⁶

But come the Eighth Five-Year Plan (1991-1995), the government realized the gravity of the threat that regional disparity could pose, and determined that “sufficient” development had taken place to allow the creation of interior development zones and interior “open cities.” At both of the 1993 and 1994 National People’s Congresses, representatives from interior provinces spoke about their serious discontent,

and the State Planning Commission published a document in 1994 warning that “if problems caused by growing regional gaps were not settled properly, they might one day become a threat to China’s social stability and national unity.”²⁷ The Ninth Five Year Plan was characterized by an increase in support for the central and western regions.

However, it is not possible to assume that official support is always sufficient to enact the policies envisioned. In the 15 years from the beginning of the Sixth Five-Year Plan (1981) until the beginning of the Ninth (1996), the “share of China’s total fixed investment financed by state budget declined sharply, from nearly 30 per cent to almost a negligible 2.7 per cent.”²⁸ The political consequences of decentralization have meant that the central extractive capacity of the state has been stripped down, and because the central government cannot as easily exercise its power to transfer investment resources toward the less-developed provinces. The state can no longer extract surpluses from the burgeoning areas to provide subsidies for new development.

In order to counteract the effects of regional divergence, China will first need to recover its control over resources. Contrary to the naturalized assumptions of both the “Gradient Theory,” which relies on the inevitable spread of economic prosperity, and neoliberal governance, which expects that uneven development is an aberration and convergence between poor areas and wealthy areas is automatic, the empirical observations in China suggest that wealth disparity will be aggravated as long as investment continues to cluster in the coastal areas.

Wang accurately notes that State intervention has always been an integral part of free market economies, and as I will illustrate below, high-ranking officials in China are increasingly apprehensive about the differences between regions. International scholars such as Eswar Prasad place just as much weight on this problem and its possible repercussions for the country: “While some of these disparities are the natural byproduct of a fast-growing economy, they pose a serious threat to social stability.”²⁹ The next section examines the threat of ethnic-based conflict in the far western regions. It is worth noting that the only provinces that maintained their holdings of state capital investment in the period from 1979-1991 were the “minority-concentrated autonomous regions,” indicating that the state had been concerned it might face confrontation from ethnic minority groups.

Ethnic Conflict: Development, Repression, and the Threat of Secession

The People's Republic of China has dealt with the specter of Tibet's secession since its inception. Chinese troops invaded Tibet in 1950, claiming that it was part of China, and on May 23, 1951, an agreement "for the Peaceful Liberation of Tibet" was reached: Tibet would formally be part of China, but under conditions of autonomy. The notion of autonomy was further institutionalized in 1955, when the Chinese government organized a provisional committee, led by the 14th Dalai Lama, to govern Tibet as an autonomous region.

Yet these strained relations were aggravated in 1959 when there was a large popular uprising against Chinese rule, centered in Lhasa, the regional capital, and supported by the CIA. The Chinese government suppressed the movement, whereupon the Dalai Lama fled to India and set up a government in exile. He prominently rejected the 1951 agreement, as did the Chinese government. Chinese officials eliminated the old autonomous administration and replaced it in 1965 with the Tibetan Autonomous Region.

The policies towards ethnic minority regions underwent a shift as Deng Xiaoping took over from Mao. In 1980, the General Secretary of the CCP, Hu Yaobang, visited Tibet in 1980 and, dismayed at the underdevelopment he had seen, called for huge reforms upon his return to the capitol. There was a renewed interest in reaching out to the provinces with a dominant presence of national minorities: the 1982 Constitution held a provision requiring the highest government position in each province to be held by a person of the minority group having the condition of autonomy in the region. However, this did little to affect the balance of power regionally—the position with the most power regionally continued to be the CCP, no matter who held power in the governmental position. The 1984 Law on Regional Autonomy further addressed the issue of minority recognition. Deng Xiaoping subsequently implemented a series of policies intended to privilege minorities, which was meant to "bring them into the fold" in terms of profession and education and have these groups share in China's overall national success.

However, the rise in socioeconomic conditions in Tibet during the 1980s did nothing to make the population

forget its claim to independence. The shift in Chinese policy toward Tibet had run parallel to an increase in Tibetan nationalist aspirations, and the years 1987-1989 yielded a major opposition movement that condemned Chinese rule in Tibet and demanded complete independence. At this point, Chinese officials wrote off the adult population as reactionary and instead took on a "soft power" campaign of patriotic education and further economic reform in a bid to win over the younger generation.

The issue of ethnic representation was reconsidered in February 2001 with the passage of an amended Law on Regional Autonomy, which guaranteed affirmative action for government positions in addition to the 1984 version's guarantees of preferential treatment for ethnic personnel in the autonomous areas. In 2001, the Direction of the State Council's Poverty alleviation office testified that "among China's total population suffering from absolute poverty, 36.5 per cent belonged to minority nationalities."³⁰ Minority groups suffer from poverty at a significantly higher rate than the majority ethnic Han people. Investment in Tibet, however, has consistently been relatively high over the reform period, and it is the ethnic area to receive the most investment and subsidy from the central government.³¹ Even in January 2010, the "Tibet Work Conference" (the first since 2001) advocated "leapfrog development" and the need to increase rural incomes in the region, in addition to fighting what was referred to as "penetration and sabotage."³²

But once again, the analytic investigation of even minority provinces should not be monolithic: within these rural provinces, inequality persists between the urban centers and the countryside. As Colin MacKerras observes, "In the first years of the twenty-first century, investment and wealth in selected parts of the minority areas have greatly increased, with inequality actually increasing between areas with significant investment and those without, between urban and rural areas and between regions."³³ This phenomenon can be understood through an understanding that most development funds go to the cities, and the disproportionate development of the cities creates another sticking point: within minority-dominant provinces, most ethnic Han people live in the cities and benefit from these projects more than members of the local ethnicity themselves.

Another case study will help express the tensions that currently exist in China's minority regions. In a situation reminiscent of Tibet, an uprising in the ethnic-minority (Uighur) dominant province Xinjiang in April 1990 was also met with the same twin reaction: fierce suppression of separatism paired with the promise of economic development to discourage future nationalist antagonism. A March 19, 1996 memo from the CCP general Committee was sent to the regional Xinjiang government demanding greater repression of nascent nationalist movements, and a follow-up conference in May was held by the Xinjiang CCP to discuss the stability of the province.

But just recently there was another demonstration of the "propensity" for violence between people of these different backgrounds (as illustrated above, both ethnicity and poverty are intertwined). According to the New York Times, in response to rumors that several Uighur men had raped two ethnic Han women on June 26, 2009, a group of Han men at Early Light Toy Factory in Shaoguan City (Guangdong province) started a major fight that left 2 Uighur men dead and approximately 60 wounded (although some accounts claim up to 120 wounded), most of whom were also Uighurs.³⁴

This news spread to Xinjiang province, and on July 5 hundreds of Uighurs, including many students, organized protests to address local racial discrimination and simultaneously call for the government to take action against the instigators of the Shaoguan City riot. Late in the evening the protests crossed the threshold into violence as demonstrators broke into shops, attacked buses, and burned vehicles. More than 20,000 security personnel had been dispatched by the state by July 7, after the chaos had left 192 people dead and over a thousand wounded.³⁵ Although the government stated that two-thirds of the deaths were ethnic Han, the Uighur minority has maintained that far more of their co-ethnics were killed that day. Even after repression, the Chinese government finds itself in a double bind. As the Wall Street Journal put it: "If its response is considered too heavy-handed by foreign governments, it could provoke international condemnation. But if Beijing doesn't go far enough, it risks a domestic backlash from Han citizens."³⁶

China's solution to all this, as suggested at the end of the previous subsection, has been to invest highly in the more politically unstable areas. The cases of the ethnic minority

regions (particularly Tibet) perhaps show the limits of this solution. I would like to highlight one aspect that has not been sufficiently covered despite the high level of attention paid to the ethnic provinces. Political dissent has cropped up in Tibet in spite of developmental (economic) attention, which suggests that a political problem might require a political solution (or at the least, a more nuanced approach to development). Chinese officials have not been sensitive to either possibility, describing their policies on Tibet as "totally correct" as late as February 2010. According to CCP sources, the blame instead lay with "the 'Dalai clique' that used a 'very small group of people' to mislead the public into rioting."³⁷ It is doubtful that ethnic separatism will be resolved if the government continues to utilize top-down economic means to prevent violence, but if the government is confident in its repression, it might see this kind of political confrontation as necessary friction, and the golden egg of growth will remain intact.

Rural-Urban Migration and Labor Unrest

Worker riots are not unheard of in China, even in the most recent period of the country's growth. In July 2009, upon hearing news that a private Beijing firm, Jianlong Steel Holding Company, was planning a takeover and deep job cuts to the state-owned Tonghua Iron and Steel Group, 30,000 of the plant's employee-shareholders held a massive protest. Some of the steel workers had a confrontation with the riot police and then the general manager, Chen Guojun, whom they beat severely; after the workers prevented medical access, the manager died. Although this violence should be denounced, the government subsequently chose to abandon the takeover of the plant, setting a precedent that confrontational actions can reverse the "irreversible."³⁸

The sheer scale of internal migration in China is historically unprecedented. Made up of 80-120 million humans, the largest peacetime migration at any point ever on earth, the floating population (*liudong renkou*) constitutes between one-fifth and one-third of the size of the larger urban centers.³⁹ The designation "unofficial migrant," which refers to anyone who has moved, "either temporarily or long-term, away from home without a corresponding transfer of their official household registration or *hukou*."⁴⁰ This mass of

people is both a tremendous source of economic strength, but it also is a source of social instability that has so far been kept in balance.

Prior to the 1980s, the household registration system was more or less congruent with the principles of political and economic management under Mao. A set of geographical priorities emerged from state policy concomitant with the drive to develop (seen, in context, as synonymous with “modernize”) the Chinese economy. Development favored heavy industry—as had been the model in Soviet Russia, the Chinese government cut back resources from agriculture, and at the same time “guaranteed subsidized food and housing, lifetime employment and welfare benefits to urban residents, but not to those with rural registration.”⁴¹

With the implementation of the economic reforms detailed in previous chapters, the system of household registration gradually lost its ability to restrict population movement. Because people were less dependent on the state to provide basic food necessities, it became more feasible for people to live in the cities even while registered as rural under hukou. According to Dorothy Solinger, author of *Contesting Citizenship in Urban China*, the primary argument of her book is that “citizenship does not come easily to those outside the political community whose arrival coincides with deepening and unaccustomed marketization.”⁴²

An array of government restrictions on urban residency, coupled with corruption in government and managerial positions, have precipitated a significant shift in the daily experience of migrant workers. Especially in the larger urban centers, this entails what should be understood as “limited citizenship” for migrant workers, and there are many mechanisms for creating this status. Because the household registration system provides incentives for urban registration, rural-registered migrants are accorded none of the welfare benefits or job security that the local workers receive. Whether or not they have appropriate documentation, rural migrants face widespread social exclusion in cities; they encounter the same animosity as “foreign” workers do in most countries. Moreover, because household registration status is conferred by the mother and not the father, rural women who give birth in the cities must deal with exceptionally high fees for their children to enroll in urban schools, among other problems.

As part of the effort to minimize the visibility of the migrant population (which is seen as threatening a

city’s image and state of order), the government also often carries out “clean-up” campaigns that destroy migrant living quarters, detain the migrants, and forcefully deport them to rural areas again.⁴³ Every local police station in Beijing has a target number of migrant workers to detain each month, and Guangdong province relies heavily on the fines from migrants (mainly in Shenzhen and Guangzhou) to cover the expense of controlling them.

All of these factors contribute to the creation of a substantial sector of the population rife with discontent—to put it bluntly, China’s economic growth is built on the subjection of these workers, and its prospects require the containment of this discontent. From a “Western” point of view, there may be a tendency to either on the one hand naively trust that city life is always better than country life, or on the other assume that factory workers are always routinely abused. Rural migrants do voluntarily come to the cities in search of prosperity, but most of the qualitative research for this section suggests that migrants leave subsistence agriculture only to enter into what could be called “subsistence wage-labor,” as they are often locked in a cycle of debt and obligated to continue work in one location until the termination of their contract. While it is important to avoid the impulse to pathologize the migrant workers, it is worth noting that at least one important study has monitored the negative effect that these conditions have had on mental health of the migrants.⁴⁴ The suicide rates in China are approximately three times greater than the global average, and China is unique among most countries in that most of these suicides are young rural women.⁴⁵ Although this statistic must find its origin at least partly in cultural values, it is worth keeping in mind the gendered nature of social hardship in modern China.

At the same time, the high regulatory demands placed on the migrant workers has been accompanied by a low level of compliance. Many workers cannot afford the time and cost of appropriate documentation and ultimately do not believe it is worth it. One testimony cited by Jacka illustrates the problem: “it just makes it easier for them to track you down.”⁴⁶ Another testimony elaborates on the problem of documentation specifically in regards to corruption: “The police station requires documentation from your landlord, but most landlords don’t go through the legal formalities because it costs them, which means there’s no way for you to get a temporary residence permit. But that’s okay. If you’re

detained you have to pay; to get a permit you have to pay.”⁴⁷

An interesting consequence of this arrangement might be that the Chinese state’s dual characteristics of “providing” and “watching” is contested: in short, “there was a bonding of the state’s refusal to grant sustenance and security with its inability to dominate.”⁴⁸ With Minxin’s concept of governance deficits as a guide, it is possible to draw broader implications from this evidence. Poor governance encourages shirking, and harsh state repression can legitimize resistance at the same time as it delegitimizes the state.

Conclusion

While corruption has been a constantly serious problem for ordinary citizens in China, there is little evidence to suggest that this will derail China’s continued economic expansion. It is most useful to conceptualize corruption as a hallmark of an imperfect state, rather than a massive sink for national funds. It matters as much as elements of civil society make it matter. As was mentioned in the introductory chapter, widespread awareness of official corruption was one of the prime motivating factors for the 1989 student protests in Tiananmen Square. Chinese officials know that the social effects of corruption cannot easily be dismissed, but it seems the only way to counteract the incentives for corruption is to carry out large-scale anti-corruption campaigns, and as is evident from the interviews cited above, this is effectively limited in practice. Alternatively, at the most recent meeting of the Central Commission for Discipline Inspection, Beijing University professor Huang Zongliang proposed the creation of a system for officials to declare their assets.⁴⁹

The societal tension brought about by vast and disruptive patterns of rural migration may pose more of a latent threat to China’s stability. Three full decades of imbalanced development has left a variety of strained relationships in its wake. Chinese society has so far been able to tolerate this discontent, but if the country’s aggregate growth were to fall, there is some speculation that some of the contradictions in society might be laid bare, and the CCP may lose favor with urban elite Han Chinese. China’s leaders are seriously concerned about the potential for unrest. One of the bases of the configuration of power in China is that economic growth and reform is a prerequisite for political

reform. The turn toward a market economy and the prospect of economic growth came at the expense of political rights. In a kind of “social contract,” the CCP offered the country an increasingly capitalist future in return for an uncontested hold on power. The key at this point for the Chinese government is to maintain support from the urban elite, without which the CCP would have no legitimacy and little capacity to enforce policy. To take the next step and consider a lack of legitimacy alongside the already weakened capacity of the state to extract resources is to consider a very real potential for the Party to be vulnerable.

There have been many beneficiaries of China’s economic transformation, but there has also been a high cost. When Argentina underwent drastic economic reform in the late 1980s, then-President Carlos Menem described the process as “major surgery without anesthetic.”⁵⁰ It is not my intent to compare Argentina’s transformation with that of China, but I find the metaphor instructive. What has been surprising in China is the persistence of a breakneck pace of growth under high-pressure conditions of disparity, and here (without political reform), it is instructive to think of the role that state repression has had in the maintenance of stability. Thus Elizabeth Perry is right in distinguishing between economically driven protests, toward which the CCP is tolerant and even sympathetic “provided that they remain clearly bounded in both scale and aspirations,” and far more threatening protests such as “nationalistically inspired student unrest.”⁵¹ To continue the metaphor above, while the state may be carrying out long-term major surgery without anesthetic, the patient is heavily strapped down.

There may come a day when the social contract frays and is broken, but it is difficult to predict what kind of event might instigate a crisis in the Chinese state. If anything, the experience of the ethnic minority provinces might be approached as a microcosm for political change—capital investment is not always sufficient to buy off stability. The waning of growth might be one factor, but as I have tried to show, there are multiple fault lines for conflict that are integral to present-day Chinese society. Economic growth is one aspect of the current moment in China, and a complete apprehension of the dynamics at work in the country should require a holistic view of the society.

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Chapter Four

Lessons and
Policy Considerations:

The US Response

US Foreign, Economic, and Domestic Policy Responses to China's Rise

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Introduction

In the Lessons and Policy Recommendations chapter of this report, we address how the US should construct its political, economic, and domestic policy given China's newly elevated role in global affairs. The following three sections examine the points where Chinese and US diplomatic and economic policy intersect and offer realistic policy recommendations based on China's new perceived position of power. China's economic stature has given it more weight to throw around in diplomatic and economic forums, contesting arenas usually dominated by the US and the western world, while undermining the competitiveness of certain sectors of the US economy. Historical interactions illustrate the difficulty of working with China in multilateral forums and through bilateral dialogue. It remains to be seen whether or not China will prove a constructive participant within multilateral institutions or continue to act as a roadblock on key agreements, as it did during 2008 in the Doha Development talks. This section reassesses traditional policy towards the new power and examines the ways in which new policy can incorporate China into international institutions with the ultimate goal of giving Beijing a larger stake in the rule making process of the international trade regime. A renewed approach toward Beijing should focus on providing incentives towards becoming a responsible participant and stakeholder in international institutions like the IMF, WTO, and World Bank. Domestically, policy makers must acknowledge that the US and Beijing may have diverging national interests which hamper progress on key issues, and should adopt a domestic competitive policy to effectively compete with China. At the same time, the recent crisis presents an opportunity to move forward on fundamentally rebuilding the American economy to prepare it for 21st century realities.

The first chapter examines China's global diplomatic engagements and discusses the ways in which the US must adjust its diplomatic policy to accommodate China's new influence. The second chapter examines how China's relative success in avoiding a severe economic downturn has created a new set of macroeconomic policy challenges for the US, particularly how the US can create a competitive trade regime in response to indirect and direct subsidization of industry in China. The final chapter offers recommendations for the domestic economy, with the intention of propelling the US back into a competitive position in the world economy.

US-China Diplomatic Engagements with Africa and ASEAN

China's diplomatic and economic engagements with ASEAN, Africa, and Latin America have implications for US policy, due to the relative lack of US influence in such regions. As China has grown into a powerful economic force, it has taken the opportunity to extend its diplomatic reach into strategic areas that conflict with US interests. Especially after the Asian Financial Crisis, ASEAN and China have developed stronger economic ties and shared geo-political interest. By building regional security and economic linkages through multilateral forums, ASEAN and China have contested the predominance of western economic and political institutions. This section questions contemporary policy approaches and asks how the US can secure its own national interests, and increase its influence with ASEAN, as a counterweight to China in the region. US national interests stand to gain if it can build upon existing relationships with ASEAN nations and begin treating ASEAN as a distinct multinational forum.

China has also taken measures to expand its influence in Africa, both economically and politically. As Beijing

extends its hands into countries like the Sudan, it contests America's prevailing vision of a democratic and US-friendly region. China's broad energy, trade, political, and even military interests in Africa threaten to undermine American and European efforts to promote peaceful, pluralistic, and prosperous societies in the region. In recent years, China's economic dealings with oppressive governments in Sudan have developed into contentious political flashpoints with the West. Similar linkages have developed between Beijing and Latin America that undermine US interests. Such interactions underline the type of resource grabs that the Chinese have undertaken in recent years and pose a threat to traditional US policy approaches.

China's rise has also coincided with the rise of India in the 21st century and has complicated US interests in the region. India, along with Vietnam and Indonesia act as competing powers with China in the region. The intense rivalry in Central Asia between the India and China, for instance, has created a difficult situation for the US to address. While the US does not want to alienate China in its support of India, or vice versa, it would like to maintain reasonably beneficial ties with both countries to secure its own national interests. As China and India reach into one another's spheres of influence in the coming years, the US must adopt a policy of neutrality on specific issues between the two countries to avoid further raising tensions. These rising security issues present a dilemma for the US on how to help ease security disputes in the region through multilateral forums.

US Economic Policy Towards China

The second chapter examines the critical intersections of US macroeconomic policy and the expanding Chinese economy. US concerns over the direct government subsidization of industry and indirect subsidization through the undervalued RMB have sparked numerous China-related proposals in the US congress. These proposals often tend to scapegoat China as the cause of the current trade deficit and industry woes. It is imperative that US policy makers consider the realities of economic integration with China and approach trade issues with clarity and responsibility, to avoid enacting antagonistic policies. This chapter evaluates macroeconomic policy options to respond to subsidization in China and

to address specific trade disputes and broader policy goals. Exploring the viability of such institutions as the WTO, the US-China Strategic Economic Dialogue, the IMF, and other multilateral forums is central to determining the most effective course of action for US economic policy. The WTO is a pillar of the international trade regime and a pillar of US trade policy. China's willingness to coordinate its own legal regime and enforcement mechanisms with the WTO largely determines the actions that US policy makers should take on issues of Intellectual Property Rights, 'dumping' accusations, industrial policies, and support for domestic industries.

China's success in the Great Recession has coincided with increased pressure from the American public and the US congress to respond to trade and currency imbalances. This section takes on these issues, and assesses their importance and the extent to which the US stands to gain from confronting them. Such an assessment will help determine reasonable policy objectives and the viability of current proposals in Congress, which aim to address such issues as currency undervaluation and industry subsidization in China. Congress's role must be limited in directly addressing disputes with China, in order to avoid severe conflict. This report does not determine that Congress should be absent from the overall economic strategy towards congress; however, it makes recommendations on the correct venue to effectively address each particular issue.

China's historical approach to multilateral economic policy making will be assessed as a way to frame realistic policy objectives and the most effective approaches to address China's economic advancement. This section advocates policies that would incorporate China into international institutions and give China a larger stake in the rule making processes that accompany them. If China is to become a responsible stakeholder in the international trade regime, and indeed it would benefit from such a position, then the US needs to provide incentives for China to participate as a responsible actor rather than as a roadblock to progress.

US Domestic Policy Recommendations to Increase Competitiveness with China

Section three offers domestic policy suggestions for the US to increase competitiveness around the globe and with China, given the likelihood that China will continue to operate

within its own set of economic norms and rules. While the US works to create a level playing field with China and the rest of the world, the US must concentrate on a plan to rebuild the competitiveness of the domestic economy, some of which has deteriorated as globalization has intensified. As America reflects upon the recession and the faults which it revealed, the coming years can be seen as a time to bounce back and strengthen our economy, or to retrench and continue on the same faulty foundations that led to the Great Recession. We can view the recession as a routine bump of the capitalist system, or as an impetus to rebuild and realize the great power of the US economy.

This section makes suggestions in the following areas to revitalize the American economy: education, infrastructure, long-term deficit reduction, and the competitiveness of US exports. Innovation is a core part of the American economy, however, recently the number of foreign scientists and engineers staying in the US after schooling has dropped considerably. The loss of highly educated people will hamper innovation of new technologies in the US, which is one of the main revenue sources of the U.S. export market. The congress must make key investments to reform the educational system, so that it is effective and competitive with other nations.

While increasing the competitiveness of the US labor market through education reform, It is necessary to redevelop the aging infrastructure, including roads, power grid, and public transportation. Over many decades the US has become highly dependent on non-renewable energy sources. The inevitable move away from traditional fossil fuels presents the opportunity to become a leader in the development and innovation of green technology through the adoption of a new national energy plan. Upgrading our aging power grid can increase electricity efficiency, while preparing for our soon to be popularized electric vehicles.

Additionally, the congress should focus on policies that recreate local jobs and increase education funding, while focusing on increasing investment in critical R&D fields. Such investment fosters innovation and the development of so-called industry clusters, which attract continued investment and innovation. The competitive advantages in sectors like biotechnology and other high-tech industries can be fostered and maintained through continued investment in R&D. Policies which tackle the aforementioned areas will begin to address the overall objective of increasing US competitiveness

and long term stability.

A Comprehensive Strategy to Confront the China Challenge

The following three sections provide a strategy to address the challenges that have arisen as China's economic and political influence has increased. By establishing the proper framework and channels to address each issue, we provide policy guidelines on how the US can most effectively respond to regional challenges, economic imbalances and industry-specific disputes. US economic macroeconomic policy to level the playing field and domestic economic reforms can work together to create and maintain competitive advantages in key domestic industries. These policies must be adopted simultaneously with a multilateral approach that works to incorporate China into international governing bodies. In reality, such an approach requires encouraging China to take a greater stake in the global economic system and ensuring its prosperity. This approach requires reforming international institutions like the IMF, World Bank, and the WTO, and strengthening their enforcement capacity. China should be encouraged to take part in the rule making and rule shaping of the regulatory regime, as it becomes a dominant economic and political power. Such an approach will build bilateral trust and cooperation while providing incentives for China to bring its economic and foreign relations policies within international norms, rather than adhering to its own version of state-directed capitalism. Our suggestions are certainly not guaranteed to succeed in bringing China within these norms. Given such uncertainties, domestic policy objectives are designed to increase the competitiveness of American exports while avoiding protectionist trends in a world where China may continue to operate its own style of state directed capitalism.

US Economic Policy Towards China:

A Comprehensive Bilateral and Multilateral Strategy

Andrew Calkins

Introduction

China's performance during the Great Recession has forced the US to reconsider its understandings of the Chinese economy and standard approaches of dealing with the emerging economic powerhouse. The US and the global community now confront a China whose fixed currency peg and system of guided capitalism threatens international monetary stability and muddles the rules of the international trade regime. The recent financial crisis presents the US with the opportunity to both reassess bilateral policy towards Beijing and to examine at length the reform of the multilateral policy-making and policy implementing institutions that govern the world economy.

By looking at the intersections of US and Chinese economic policy, this chapter formulates a series of recommendations to the US congress, which, from a broad perspective, seek to avoid antagonizing or alienating China while securing America's vital interests. The chief US policy should be twofold: to engage China with the most effective forms of economic diplomacy, creating a level playing field in which US industries can compete competitively with China, and work to curb the redeveloping trend of state-guided capitalism in China. This chapter argues that US policy makers should address major economic issues through a series of multilateral and bilateral institutions, based on China's historical response to such forums and new perceived position of power. The US should pursue broader macroeconomic goals in areas of common ground through bilateral institutions or dialogue, to maximize the potential of the US-China Strategic Economic Dialogue. Particular trade disputes, such as accusations of dumping, unfair industrial policies, and intellectual property rights concerns, should be addressed and enforced to the fullest extent possible through

the multilateral Dispute Settlement Body (DSB) at the World Trade Organization. This institution is a pillar of US international trade policy and one that China has become quite invested in; the DSB is discussed at length later in this section. The complex and contentious issue of the undervalued RMB should be approached multilaterally through a careful strategy, which strengthens international institutions to address and enforce regulations concerning currency imbalances while simultaneously incorporating China into that very process.

The US Economic Policy Recommendations section of the report first addresses current Chinese economic policy and examines the points where it intersects with US economic policies and goals, followed by a section that addresses the implications of current Chinese economic policy on US industries and the implications of a revalued RMB on the US economy as a whole. Here, I present the possible channels for addressing, and effecting, Chinese economic policy before evaluating the historical precedent and effectiveness of each channel. The chapter then provides context for the accusations of currency manipulation in China and addresses what the role of congress should be in addressing the issue. Recent bills proposed in the US congress often scapegoat China as a direct cause of the US trade deficit and industry woes. Here, we evaluate whether such policies of raising tariffs across the board outside of the WTO legal system is an effective or appropriate response. The next section dives into the specifics of the WTO DSB, which is used for settling disputes between WTO members. In recent years, a number of cases by the US have been brought against China, bringing forth allegations on issues of dumping, industry subsidization, and intellectual property rights. Because of China's relatively recent entry to the WTO, it has had little experience responding to rulings, although has vested the time and commitment in becoming a member of the WTO. The report then examines lessons

learned from China's behavior in dealing with International Economic forums and makes an assessment of China's future role in such organizations. Finally, we suggest a comprehensive approach to increase Beijing's influence within international institutions like the IMF and World Bank, beginning with the Strengthening of the bilateral US-China Strategic Economic Dialogue. This strategy is devised in order for China to become a greater stakeholder in the international economic system.

US-China Economic Policy Intersections

As discussed in depth in previous portions of this report (Section 1), the Chinese government has weaned itself away from the heavy state-guided capitalism while opening its borders to trade and in joining international trade institutions, like the WTO. The recent decisions to slow the appreciation of the Chinese yen in 2008 marked a regression of the liberalization of economic policy in China. The protection of domestic industries and barriers to successful foreign business operations within China present a set of problems for US industries, who are trying to compete with Chinese industries in foreign and domestic markets. This section discusses the ongoing system of state-directed capitalism, and the explicit and implicit subsidization of industry in China and its impact on US economic policy.

Chinese Monetary Policy

China's accumulation of currency reserves in recent decades has precipitated a fragile relationship with the US economy. China has, in a large way, helped to finance the US deficit, which totaled 1.4 trillion dollars in 2009.¹ The result of such a strategy means that a revaluation of the RMB or a weakened dollar would significantly diminish the value of over 1 trillion dollars in US assets holdings. In a similar vein, China is unlikely to stop buying US debt in order to maintain monetary stability in the US.² The Chinese currency value is therefore a central piece in the relationship between the Chinese financing of US debt; a RMB appreciation would lead to a relatively lower priced dollar and holdings of US assets would diminish in value. Chinese policy makers have argued that a revaluation of the RMB, which appreciated from 2005 to 2008 and is now again pegged to the dollar, would cause instability in the markets and in the "undeveloped"

domestic banking sector,³ as Section 2, Chapter 3 of this report elaborates on. Allowing the RMB to appreciate would also hurt Chinese export industries, which are the centerpiece of China's economic policy.

China's accumulation of foreign exchange reserves is grounded in an effort to maintain domestic currency stability by controlling the effect of capital inflows.⁴ Chinese reserves currently total over \$2 trillion dollars, accounting for almost 30 percent of the world's total reserves.⁵ At the same time, China is well aware of the consequences of maintaining such a peg. The undervalued currency distorts the domestic economy by continuing to favor an export-led growth model and has contributed to lower living standards among the poor and middle class.⁶ Appreciation would give the Chinese much more buying power and would increase living standards – though putting exporters at a competitive disadvantage. Still, some experts believe that the RMB will appreciate in the coming years without intense pressure from western trading partners. A revaluation, however, would likely not be independent of new reforms or subsidies to domestic industries; an absence of such policies would certainly not be in line with historical trends, which suggest that China's government will always seek to subsidize industry in some form.

The Chinese currency has been a useful tool for the government to develop industry and an export-growth led economy. In the pre-WTO accession era, heavy government subsidies were essential to the creation of a growing economy. As China acceded to the WTO in 2001, it liberalized its industrial policies and lessened the influence of direct government subsidies. Remarkably, maintaining the undervalued RMB has acted as an implicit subsidy in place of direct government subsidies.⁷ This indirect subsidy has maintained the competitive advantage of domestic industries at the cost of foreign firms. US policy now confronts the indirect and direct industry subsidies with the intention of strengthening the competitive advantage of US industries in global trade. As this chapter will discuss in detail, the explicit subsidies are a much easier target for US policy to address – and the channels for addressing them are more clear-cut – the WTO DSB.

Chinese Industrial Policy

The direct subsidization of the pillar industries of the Chinese

export economy is of great concern to US policy makers. China takes great steps to ensure that exports from domestic industries are low priced, and since many firms qualify as state-owned enterprises (SOEs) or have significant government influence, it is relatively easy for the government to implement subsidies and control firm decisions or strategies. A 2009 study by the US Department of Commerce identified the most frequent type of subsidies received by Chinese firms and the extent to which such subsidies are applied. 80 percent of the subsidies identified were either tax-oriented financial contributions, direct grants, or identified by the low price of sale.⁸ Other forms of subsidies include loans, tax exemption upon export, and debt forgiveness subsidies.⁹ The majority of subsidies were targeted at SOEs, who provide 34.1 percent of the total industrial value, as the government often works to select specific target industries whose exporting power is great.¹⁰ As part of China's WTO Accession Protocol a huge majority of such subsidies should have been phased out. The existence of such extreme subsidies provides an opportunity for the US to pursue policy reforms in that area.

Possible Channels to Address Chinese Policy

Due to China's new role in global economic affairs, previous approaches to affect Chinese policy must be readjusted and rethought. The US has only a limited amount of historical encounters to base its approach on, given China's relatively new open market economy. As policy makers look for channels to address trade disputes, subsidies, and monetary imbalances with China, reasonable approaches must be considered. Policies enacted in various forums have the potential to antagonize and scapegoat the Chinese government. The US has only a variety of policy channels to use when engaging China. These include enacting legislation in congress, pushing for reform in bilateral and multilateral dialogue, addressing disputes via the WTO DSB, and executive action taken outside international rules and institutions. Each channel, however, serves a distinct purpose and has its own set of consequences and effects. The latter option, when taken outside of WTO rules, has the potential to escalate economic disputes into a trade war. This report addresses each of these channels as possible approaches to dealing with China and recommends the use of each channel to address specific macroeconomic and trade policy objectives.

Addressing Imbalances with China: Congressional Approaches to address the RMB

A growing trade deficit in the United States and the global relocation of jobs overseas to lower factor sites has left policy makers and concerned citizens of the United States with a tendency to scapegoat China as the chief culprit of America's woes. From 2005 to 2007, anti-China legislation reached a peak, with forty-five separate bills being introduced.¹¹ 2008 and 2009 again saw numerous pieces of trade-related legislation introduced that sought to raise tariffs and trended towards protectionism. Much of recent legislation is premised on China's undervalued currency and its trade distorting effect on the global economy. Legislation, has in many cases, sought to denote China as a non-market economy and violator of international trade rules. Legislation has at times been overwhelmingly protectionist and dramatic, to a point where many analysts argue it would be detrimental to the US economy. However, many congressmen are justified in their claims that imbalances within China and with China are distorting trade. A consensus of economists estimate the RMB is undervalued from 25% to 40%.¹² This section evaluates both the need to address currency imbalance concerns in the US, and the role of the US Congress in doing so.

In 2009 a number of bills and resolutions specifically targeted at China were introduced to the US Congress. In January, House Resolution 44 used powerful language to convey disregard for characteristics of the Chinese economy:

H. Res. 44: Condemns the People's Republic of China (PRC) for producing unsafe products, disregarding the environment, and exploiting workers. Encourages: (1) U.S. merchants to suspend the importation and sales of goods from the PRC until reforms are made; and (2) U.S. parents to consider the "Made in China" label when purchasing toys due to potential levels of toxic materials that may cause serious injury or death.¹³

The resolution, introduced by Rep. Ted Poe of Texas, was less an attempt to address imbalances with China, but expressed a sliver of resentment for the business practices taken place therein. The resolution never made it out of committee. H.R. 499, a bill introduced by Rep. Artur Davis, currently seeks to universally apply "countervailing duties to nonmarket

economies” to offset subsidies, particularly in the PRC.¹⁴ The bill is very direct in placing all industries and firms under the umbrella of China’s nonmarket economy; the bill “prohibits the administering authority from considering requests for market economy treatments at the individual business enterprise level”¹⁵ in any dispute involving a nonmarket economy. The Trade Enforcement Act of 2009, H.R. 496, introduced by Rep. Charles Rangel, also seeks to amend the Tariff Act of 1930 to “apply countervailing duty provisions to nonmarket countries.”¹⁶ In this bill, the offsetting of subsidies in China is addressed more subtly and indirectly through the adjustment and reinforcement of existing trade guidelines for the US and the WTO. Specifically, H.R. 496 seeks to empower the objectivity of the WTO DSB and ensure its decision-making is made independent of the WTO Appellate Body.¹⁷ These three bills have sought to address macroeconomic disputes with China in various ways, both indirectly and directly. To examine bills positioned to exclusively address currency imbalances, however, this section looks to bills introduced in 2008 in the midst of the global economic crisis.

In 2007 and 2008 the 110th Congress took dead aim at Chinese currency manipulation policies. S. 796, introduced by Sen. Jim Bunning sought to amend the Exchange Rates and International Economic Policy Coordination Act of 1998 to classify “exchange-rate misalignment by any foreign nation [as] a countervailable export subsidy”¹⁸ in order to broaden the use of US countervailing duty on Chinese exports. The bill, similar to the main provision in Senate Bill 1607 proposed by Sen. Max Baucus and numerous other bills proposed from 2007 to 2008, would have required the Treasury Secretary to determine whether or not a country’s manipulation of currency has a detrimental effect on the U.S. economy. Some bills, however, skipped this step, and assumed the adverse affect on the U.S. economy and moved forward with even harsher retaliation measures towards China. H.R. 5777, presented by Rep. Thomas Tancredo in April of 2008 sought to influence Chinese economic and social policy by essentially cutting off trade completely with China, prohibiting importing of goods from China and the exporting of goods or technology from the US, until the president certifies that China has met democratic principles and converted to a market-oriented economic system.

On the other hand, S. Res. 76 recently sought to engage China to work with the US to “reduce or eliminate

tariff and nontariff barriers to trade in clean energy and environmental goods and services.”¹⁹ The bill, introduced by Congress, encouraged the US and China to work through the Asia Pacific Economic Cooperation forum and the WTO to reach a multilateral agreement on the matter. Representative Rick Larsen of Washington State also introduced a bill in 2009 that sought to provide “assistance to small and medium sized businesses to promote exports to [China].”²⁰

The summary of proposed bills to address economic policy with China illustrate the broad range of approaches being considered to affect, influence, and co-opt Chinese policy. The sheer number of bills addressing Chinese economic policies suggests that there is both momentum and potential that one of these bills will pass.

Is Congressional Action addressing the RMB Necessary?

In light of all the congressional bills aimed at the undervalued RMB, it is necessary to evaluate the validity of the argument that a revaluation or appreciation is vital to US economic security interests. Economists suggest that the Chinese government will be forced to evaluate their currency within the year anyways, due to inflows of “hot money.” The inflow of hot money illustrates that investors believe that China’s currency will appreciate in the coming years, as explained in Section 2, Part 3.

In addition, one lesson to be learned from China’s performance during the recession and in recent years, is that China acts independently. With regard to currency reform, for instance, China has historically signaled disregard for outside calls to let its currency float. Government leadership has expressed this sentiment in 2005,²¹ and currently in 2009 and 2010. Though there is a great amount of momentum against China in the US congress, taking action outside WTO rules could lead to legitimate retaliation from China through the WTO DSB, which will be discussed later in this essay. Congressional action is always an option, however, action should be reasonable and within the rules which the US has elected to abide by. Furthermore, the effect of the RMB has a significant effect on many emerging economies, and should be approached through such a multilateral lens.

Policy Recommendations

Based on the discussion of possible policy option to address macroeconomic imbalances with China, this report makes the following preliminary recommendations on the specific role of congress on confronting the aforementioned issues:

1. Congress should seek to enact legislation to strengthen existing trade enforcement institutions, including the role of the US Trade Representative and US Dept. of Commerce International Trade Administration, so that they are well equipped and with an expanded role to adequately apply countervailing duty, anti-dumping, and responsible tariffs in response to subsidization in China.
2. Congress should seek to encourage the use of the WTO DSB as the objective forum to address industry related disputes and should seek to strengthen the World Trade Organization's role as the pillar of the international trade regime.
3. Congress should avoid unilaterally enacting legislation that uses severe pressure to force China to let its currency appreciate and should instead delegate the issue to multilateral bodies that can legitimately adopt an approach to RMB undervaluation.

Addressing Chinese Economic Policy in Specific Areas

China's policies of promoting 'pillar' domestic industries and 'famous brands', providing tax breaks to state-owned enterprises (SOEs), enacting barriers to limit foreign access to the domestic market, and indifference to intellectual property rights enforcement present US policy makers with opportunities to confront the trend toward state guided capitalism in China. The way in which the US chooses to address these disputes has the potential to ignite tensions between the two nations or successfully guide Chinese policy within WTO norms and the larger global trade regime. This section argues that to achieve the objective of bringing Chinese policy within international norms, the US must pursue a multilateral process and dialogue through the WTO DSB. Although US policy makers have a limited amount historical precedent in dealing with China and the WTO, a strong case can be made for the ability of the WTO to affect domestic policy through the DSB. In order for the US to

avoid antagonistic policies in congress aimed at countering foreign economic policies, action must be pursued through the WTO on issues of industrial subsidization, tax breaks for domestic exporters, intellectual property rights enforcement, and on policies which hamper foreign investment in China.

The Chinese Experience with the WTO

China's historical use of the WTO DSB provides a rough guide for pursuing successful outcomes through the DSB. In addition to providing a forum for addressing trade and industry disputes legitimately, the WTO provides a way for China to progress with internal reforms in terms of "scaling back domestic subsidies, improving intellectual property enforcement, or increasing the benefits of competition obtained via additional import market access provided to auto parts firms, Hollywood film studios, or some other foreign industries."²² To date, China has been the complainant in 6 cases, the respondent in 17 cases, and participated as a third party in 62 cases.²³ China's participation in 62 cases as a third party illustrates an attempt to learn the process of dispute settlement within the WTO.²⁴ To this point, China's experience in presenting complaints against its own members has been quite limited. Of the 6 cases where China has been the complainant, the US has been the respondent in 5 of them. This trend evidences both the strong linkage between the two trading partners and the escalated level of tensions between them. Similarly, of the 17 cases where China has been the respondent, 8 of those cases have been brought to the DSB by the US.²⁵

Most recently, on January 19th 2010, a DSB panel was established in response to China's claim concerning US restrictions on the importing of certain Chinese produced tires. A WTO News Item reported the following:

"China deeply regretted the US decision to impose restrictions on Chinese [tires] and believed it was a departure of international consensus of G20 leaders to fight against protectionism. [...] The US regretted that China would dispute this safeguard. The US added that in just four years, US tire imports from China more than tripled by volume and the value of those imports rose to \$1.8 billion dollars. The US said that in those

same four years its production had fallen by more than 25 percent, while 14 percent of US workers in the industry had lost their jobs.”²⁶

China’s decision to respond through the WTO DSB process to US tariffs, a decision made outside of the WTO, represents a growing commitment by China to use the WTO system. The country has vested a considerable amount of energy and resources in gaining accession to the WTO and to keep certain policies within WTO regulation. Still, a statement by China directed at US ‘protectionism’ sheds light on the contradictory aspects of Chinese economic policy; China implements policies which hamper foreign investment through non-tariff barriers within its own borders while accusing WTO members of protectionism in their own attempts to offset industrial policy in China. The dispute concerning US tires is not the first for China; it also brought cases in 2009 accusing the U.S of enacting unfair antidumping and countervailing duty import restrictions on certain steel products.²⁷ These cases, however, are still pending.

DSB cases aimed directly at China are not in short supply and have been more frequent in the last decade, often pursued by multiple WTO members. In December 2009, the DSB established a panel to investigate “measures relating to the exportation of various raw materials” and China’s restrictions on their exportation.²⁸ China’s reaction to these measures has expectedly been denouncement of the disputes,²⁹ but cooperation from both the US and Chinese sides suggest that the WTO is a formidable venue to address contentious bilateral trade issues at relatively subdued level.

A recent annual report from the US Trade Representative on China’s compliance with the WTO cited a continued trend in china to “pursue industrial policies [that] seek to limit market access for non-Chinese origin goods and foreign service suppliers while offering substantial government resources to support Chinese industries and increase exports.”³⁰ The Chinese government has used controls on export quotas and pricing to provide advantages to domestic enterprises. While these policies are clearly a contentious and ongoing issue for the US, the USTR report cited some key successes in the WTO DSB process:

“Through the pursuit of a WTO case initiated last December, the United States was able to bring about the elimination of a

Chinese industrial policy designed to expand the market share of famous Chinese brands of merchandise around the world through the use of what appear to be prohibited forms of financial support, provided through a multitude of measures issued by the central government and provincial and local governments throughout China. As a result of months of intense negotiations, as noted above, China took steps to remove all of the export-contingent benefits from the numerous Chinese measures at issue, as confirmed in a settlement agreement executed in December 2009.”³¹

Although the Chinese government policies of subsidization operate outside the WTO Rules, its compliance within the larger WTO system, when addressed multilaterally, presents opportunities for mutual cooperation and policy reforms beneficial to US economic interests.

Tax Breaks for Domestic Exporters

China’s variations and exemptions on their value-added tax present a great disadvantage to American corporations, which seek to export competitive products to China. In a hearing before the US-China Economic and Security Review Commission it was reported that in 2007 the value-added tax had a detrimental impact on US exporters of \$52 billion.³² In other words, “China’s VAT gap may be viewed as a \$52 billion incentive for US producers to move to China.”³³ Although China charges a 17 percent value-added tax on domestically produced or imported items, its discriminatory practices gives preferential rebates to domestic firms, particularly, to SOEs.³⁴ Hence, the value-added tax serves a dual purpose as a revenue source and as a way to increase the competitiveness of domestic producers. When the USTR finds that such policies diverge from international rules - the rules which China has agreed to - the US should seek the adjustment of such policies directly through the WTO DSB.

Intellectual Property Rights

The issue of Intellectual Property Rights (IPR) in China has grown more contentious as the impact of China’s weak

IPR regime on foreign corporations has become more and more clear. Indeed, China has had to modify its IPR regime in compliance with WTO regulation in the last decade, but has failed to implement an adequate enforcement regime. Recent testimony by John Frisbie, president of the US-China Business Council stated “a strong intellectual property rights protection regime is critical for any country seeking to foster a vibrant, competitive economy that provides quality innovative goods to its consumers...But even the strongest IPR legal framework is meaningless if not adequately enforced.”³⁵ The US actually has already used the WTO as a venue to address IPR disputes with China. In 2007 the US initiated a dispute aimed at the “protection and enforcement of intellectual property right” in China.³⁶ The US alleged that China’s protection and enforcement of IPR was inconsistent with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), signed in 1994, which has become the pillar of the international IPR regime. In addition to failing to properly enforce and pursue judicial penalties for violators, the US accused China of “[denying] copyright and related rights protection and enforcement to creative works of authorship, sound recordings and performances that have not been authorized for publication or distribution within China.” In other words, foreign products that are not authorized to be distributed in China were not properly protected. Similarly, in 2007 the US also initiated a dispute concerning China’s restrictions on the importation and distribution of “certain publications and Audiovisual Entertainment Products.”³⁷ In this dispute, the US was arguing for access to the domestic market for IPR-intensive goods.

Through the DSB, China has been forced to modify its IPR regime as rulings and recommendations have been made by the panel and adopted by the DSB urging China implement the recommendations. For DS362, China received the recommendations from the DSB and informed the DSB that it “intended to implement the DSB recommendations and rulings and that it would need a reasonable period of time to do so.”³⁸ China accordingly submitted a report of suggested policy changes to the central government on how to bring China’s IPR regime within China’s Accession Protocol Agreement and the greater TRIPS agreement.

China appealed the decision by the DSB on DS363, concerning its restrictions on market access for foreign firms, but the DSB dismisses China’s appeal. While disputing

the recommendations, China simultaneously maintained rules for online media that treat domestic and foreign firms differently.³⁹ Import restrictions on “copyright-intensive” goods creates a system where these “restrictions inadvertently help to ensure that infringing products continue to dominate those sectors within China.”⁴⁰ This system puts US exporters at a dual disadvantage, on market access levels and on the IPR protection of their goods. The lack of enforcement means that there is not a severe enough deterrent for IPR and copyright infringers in China. In recent years, the US has pursued both a bilateral and multilateral dialogue with China on IPR issues. Strictly bilateral discussions have been quite frustrating, historically, on IPR issues.⁴¹

Opening China’s borders to the inflow of copyright-intensive goods holds will benefit both the economies of China and the US. IPR protection domestically will help China develop industries in copyright-intensive sectors. On the issue of IPR regulation and enforcement the US should use the multilateral WTO DSB to pursue the continued implementation of an effective IPR regime in China. Industry leaders suggest a similar approach, but note that IPR regimes differ from country to country, and the US may have to accept policies that deviate from the norm in the US.⁴²

Based on the determinations of the above discussion, this report makes the following recommendations for US policy, as it relates to the WTO:

1. The US should maximize the use of the WTO DSB for issues of disagreement with China, such as direct subsidization of industries, ‘dumping’, and other aspects of industrial policy.
2. The US should pursue a multilateral push in the WTO aimed at encouraging China to fully implement an IPR legal regime and enforcement mechanisms in line with international norms.
3. The US should encourage China to adopt the FDI-related recommendations mentioned in Chapter 2, Section 4 through the WTO.

Approaching China through Bilateral Dialogue and International Economic Forums

China’s involvement with the recent Doha Development Agenda talks and cooperativeness within the new US-China

Strategic Economic Dialogue, or the SED, provide policy makers with a guide to the extent to which progress can be made within such forums. China was generally uncooperative in the recent Doha talks and blocked progress on key issues. On the other hand, the SED has been successful, at points, in renewing China's commitment to pursuing discussions and reforms on IPR and industrial subsidization policies. Bilateral Dialogue through the SED has often been suggested as a way for the US to pressure China on currency reform, but such pressure within these institutions could have the effect of antagonizing China and creating a resentful relationship. An issue such as currency reform certainly should be a subject of discussion at such forums. Policymakers, however, should be keen to note that pressure on such an issue is likely to be detrimental to progress on other specific issues.

The remainder of this chapter confronts China's participation in international institutions, such as the WTO and the IMF, and experiences with bilateral dialogue, to develop a strategy to incorporate China into international institutions in order to make it a responsible stakeholder in such institutions and the success of the global economy system. Rather than leaving China to operate within its own set of norms, policy should be oriented to pull China within the existing rules of the international system while simultaneously encouraging Beijing to take part in the rule making of such a system.

Historical Experiences: The Recent WTO Doha Development Agenda Talks

Historically, China has been somewhat reluctant to take on a leadership position on global economic issues. This trend was continued during Beijing's surprising disruption of the Doha Development Agenda talks in 2008. The talks in 2008 stalled because China pushed for the exclusion of certain manufacturing sectors in the global free trade agreement being discussed.⁴³ Indeed, only in recent years has the international community urged China to become a leader and responsible stakeholder in the rule making process of the international trade regime in order to reflect its great impact on global trade.⁴⁴ During the 2008 talks, a culmination of negotiations over the past decade, China has sat on the sidelines and taken little consideration on points pertaining to domestic trade liberalization. Beijing has pushed for lower liberalization

requirements for recently acceded members of the WTO, like itself, and has emphasized the extent of its own liberalization policies enacted upon accession to the WTO.⁴⁵ Despite being included in the G-7 and G-4 "mini-ministerial" committees, China has straddled the line of qualifying as a developed or developing country.⁴⁶ China has failed even to take on a de facto leadership role among developing countries, often emphasizing the development aspect of the talks, while road blocking certain issues pertinent to developing countries.⁴⁷

Beijing has a great deal to gain from a global free trade deal and the ultimate success of the Doha Development Agenda, but the role it will play in the success of such an agreement is ambiguous and holds lessons for future multilateral discussions. Lim and Wang point out, it seems China will not accept a front-line role in advocating either developing or developed country positions, in order to maintain flexibility.⁴⁸ Ultimately, the advancement of the Doha Round does rely on China to take a larger leadership role. This is also a requirement of any other agreement, which requires unanimous consent from over 150 countries. The US and the global community need to adopt an approach, which encourages China to take a larger stake in the rule-making processes of the international trade regime. China's continued reluctance can no longer be tolerated, given its dominant role as an importer and exporter. This section forms suggestions on how the US can encourage China to accept a larger role in shaping the trade regime of the 21st century.

Apart from failing to accept a leadership role during the Doha round of development talks, China exhibited the failure of negotiations through multilateral forums.⁴⁹ During the talks, which were intended to provide the foundations of a global free trade act, China stated that it "should have no liberalization obligations whatsoever in the round" of talks.⁵⁰ Beijing's reluctance also illustrated what some describe as China's preference for "low quality," "politically motivated," bilateral talks, as opposed to more high-level agreements through multilateral institutions.⁵¹ China's reluctance and seemingly indifference to the Doha round of development talks, and the larger goal that they sought to achieve, emphasizes the need for a renewed US approach to negotiation with China on economic agreements and accords.

A Renewed Partnership With China

The US must adopt a dual approach that both creates incentives and illustrates the advantages to China's responsible integration with the global economy, while engaging China bilaterally on issues of mutual agreement in order to cooperatively shape the rules, norms, and institutions of the global economy. This report recommends a timely and multi-step strategy that would effectively advance these objectives. The first step would require a renewed commitment to the US-China Strategic Economic Dialogue. The SED would be elevated in US-China bilateral dialogue and serve as a forum for the discussion of issues of common agreement and interest, both strengthening and deepening the institution a creating an effective working relationship. The second step would require a larger, multilateral effort, which would incorporate China into the rule-making IGOs, such as the World Bank and the IMF, and encourage Beijing to become a leader in future development and trade talks within the WTO. These two steps taken together would strengthen bilateral ties and encourage China to realize the benefits of global integration and cooperation within the current institutions. China should be able to contribute to the rule making of the institutions and regulatory framework of the world economy given its sizeable role in global economic development.

Strengthening the US-China Strategic Economic Dialogue

A deepening of the SED would undoubtedly provide a cooperative forum for dialogue between the US and China, but at the expense of possibly alienating the other major trading partners like the European Community. The authors of *China's Rise: Challenges and Opportunities*, who argue for a reinforced and strengthened SED, state that calling such an arrangement the G2 publicly would be "impolitic" and would alienate the EC.⁵² But the SED can in fact act similarly to how a G-2 would. The SED is specifically a forum for addressing economic concerns, however, the military link established as part of the original US-China Strategic and Economic Dialogue provides the framework of what a G2 would really look like.⁵³ Therefore, if used correctly, the SED provides the ideal bilateral institution to engage China on economic issues of mutual concern and agreement.

The success of such an institution is ultimately dependent upon the strategy the US uses within that institution. During the Bush Administration, during a July 2008 meeting, the SED was used as a forum to press China on the RMB undervaluation and little else was seriously discussed as a result.⁵⁴ A meeting later that year in December was more productive, and saw the creation and ratification of an eco-partnership between the two nations.⁵⁵ A strengthened SED is not likely to be a constructive place for arm-twisting or placing pressure on Beijing on areas of disagreement. Rather, US policymakers should consult China through the SED only on areas of mutual commitment and cooperation. The issue of global warming is one such subject where national interests align, though China may need to realize the incentives to addressing the issue before gaining momentum. As Chapter 3 previously explained, China has much to gain from slowing global warming, which is destroying its environment. On this issue, the US and China both stand to gain from climate change legislation that would control the emissions of greenhouse gasses worldwide. By using the SED as a forum to come to a consensus in issues where the two powers agree, the US and China increase the chances of such reforms being agreed upon during future global climate negotiations. Such a strategy provides China with the opportunity to shape policy, rather than roadblock it.

Though there will undoubtedly be disagreement throughout the SED negotiation process, the ultimate result would likely be an institution capable of "[producing] active cooperation on at least those occasions when the national interests of the two countries come close to intersection" by fostering a relationship of "trust and understanding."⁵⁶ To achieve this goal, we recommend Congress and the current administration adopt the following policies:

1. Congress should adopt a policy, which encourages the use of the SED and ensures its power to construct and implement meaningful economic reforms and policy.
2. Congress should encourage the administration and participants at the SED to discuss issues pertaining to trade liberalization, industry-specific disputes, and IPR cases and avoid serious discussion and pressure on issues of contention, such as currency manipulation.
3. The US should address key points of the global

warming debate within the SED to come to a solid consensus on points of agreement with China, so that the two countries can together pursue the success of future multilateral climate change negotiations.

Increasing China's Stake at the IMF

In addition to strengthening the bilateral US-China SED, the US must work to create a larger place for China in the larger international regulatory regime. One component of this approach is increasing China's power and role at the International Monetary Fund (IMF). Originally established as part of the Bretton Woods Accords in the post-WWII era, the IMF has become a symbol of western capitalism and the so-called Washington Consensus. Indeed, the role of the US is overbearing, currently holding nearly 17% of all voting power in the fund.⁵⁷ The next largest voter is Japan, with 6.02%. China, now on its way to becoming the second largest economy in the world, has no appointed seats, and only 3.66% of total voting power.⁵⁸ The leverage the US has in the IMF certainly ensures that the institution follows policy guidelines in line with US interests. However, such a global institution requires a reasonable voting system that correlates well with the global economy and the various economic systems that comprise it. In recent years, an effort in East Asia has developed seeking to establish the Asian-equivalent of the IMF to respond to severe crises. Such a development represents the failure of the IMF to address crises globally, effectively, and responsibly. Thus, the process of strengthening of the IMF would not only be an effective tool to influence global regulatory regimes to preserve national interests, but also serve as a mechanism to encourage China's active participation in global regulatory institutions.

In 2006, the Bush Administration actually advocated for a very similar approach to what is being proposed in this report. Administration officials sought to increase China's voting shares relative to European and western countries.⁵⁹ Such a reorganization of voting power would also affect minority members, like developing countries in Africa, who already have limited power. Not surprisingly, European allies did not openly welcome such a proposal. Timothy Adams at the treasury department stated "the fund needs to get back to basics to deal with the problems of the 21st century."⁶⁰ Administration officials similarly discussed the overall objective of giving China a "bigger voice" and awarding it a

"greater sense of responsibility for the institution's mission."⁶¹ In fact, the IMF is better suited to address currency imbalances with China than any of the other channels discussed in this section. A key purpose of the fund is to "promote exchange rate stability"⁶² but concrete enforcement mechanisms have limited the IMF's ability to respond to severe global imbalances caused by currency manipulation.

Given the failure of the American delegation to secure major leadership reform at the IMF in 2006, this report recommends a renewed and reinvigorated approach from the current administration to increase China's stake in the IMF institution, and its ability to shape policies. By increasing China's voting share in the IMF, the US is providing a key incentive for Beijing to partake in the rule making process. Its elevated power, which would be more in line with the size and resilience of its economy, would allow it to shape the norms and policies of the international economic system in its own favor. Such a strategy certainly would require the US giving up some of its own 17% voting share and influence within the institution, which in the present era has come to be described as a key component of the Washington Consensus. This strategy would illustrate the US commitment to fully incorporating China in international institutions and help to create the type of respectful and responsible bilateral relationship that this overall strategy seeks to achieve. We offer the following concrete guidelines to guide the US Congress in adopting, or encouraging, such a strategy:

1. The US Congress should encourage the current US administration to bring a proposal to the decision making body of the IMF, calling for a restructuring of voting shares, specifically to increase the voting shares of China and other developing countries in East Asia to a more reasonable level that would accurately reflect the size of their growing economies.
2. The US should bring proposals to the IMF seeking to create enforcement mechanisms to address currency manipulation and trade imbalances that operate outside of, and independent from, conditionality agreement enforcement.
3. The US should view the current economic crisis as a chance to reform and strengthen international regulatory bodies and in doing so, the US should consider relinquishing some of its own voting shares in the IMF and other organizations as a way

to increase cooperation and bilateral partnerships between Washington and Beijing.

Strengthening IMF Enforcement Mechanisms

In recent years, the power of the IMF to enforce its mission and maintain monetary stability and fair exchange-rate policies has dwindled. As Morrison Goldstein put it, “The Fund rejected the role of being a global umpire for the exchange rate system just when the international community needed that role the most.”⁶³ Not only has the fund been slow to evaluate the undervalued nature of the RMB, but it has also shied away from calling the exchange-rate policy in China “currency manipulation.”⁶⁴ If the fund is to continue as the key surveillance mechanism of global exchange rates and imbalances, it must adopt a more concrete enforcement mechanism. Today, the fund has little power of enforcement beyond bilateral and multilateral consultations. Goldstein suggests both a clear and objective policy to identify misaligned currencies as well as an enforcement mechanism working with the WTO to provide approval for retaliatory measures in response to such misalignment.⁶⁵ In theory, Goldstein’s recommendation would involve the IMF determining the level to which a country’s currency is misaligned, based on the size of the imbalance relative to GDP, and the WTO would provide approval to member countries to enact retaliatory measures.

Given the IMF’s central mission and function, it seems the only realistic venue for the IMF to address the issue of China’s RMB misalignment. By strengthening the IMF’s legitimacy, US policy can work to empower the institutions objectivity and willingness to confront members over monetary failings. Because of the lack of an enforcement mechanism built in to the IMF’s framework, the US must work to create a multilateral system, or linkage, between the institution and other institutions with of enforcement capacity. The WTO, as Goldstein suggests, is one such institution. Proposals could also be brought forth to create an enforcement mechanism within the IMF itself. In a different vein, the strengthened legitimacy of the IMF, established through a reformed power structure and reinvigorated surveillance program, could act as an implicit enforcement mechanism, or rather, an agreement between nations to keep currency misalignments to a minimum.⁶⁶ Some approaches to understanding enforcement

in the IMF argue that the function of the institution in providing reports and analysis of monetary issues to member states acts as an enforcement mechanisms in and of itself, while others argue that member states work within the IMF to influence one another so as to avoid serious deviations from the norm.⁶⁷ Although the specific policies to strengthening enforcement within the IMF may be difficult to pinpoint at present, the report offers the following suggestions for US policy makers to create momentum for such a change:

1. US policy makers should push for a more objective and defined route to determining exchange rate misalignment at the IMF, one where it is made clear to member states, without hesitation, when a country is determined to be manipulating their currency.
2. The US, backed by a multilateral coalition of other member states, should pursue the restructuring and linking of international regulatory institutions, in order to create an effective mechanism for the enforcement of exchange rate misalignment.
3. The US should court China to take part in the aforementioned strategy, in order to create a system of enforcement that China is a creator of, and a stakeholder in.

Increasing China’s Role at the World Bank

Another Bretton Woods’ institution that seeks to regulate the international economic system is the World Bank. Again, the US and the European economic powers control an overwhelming majority of the institution’s policies. The US alone has 16.48% of the total voting power in the International Bank for Reconstruction, 23.62% in the International Finance Corporation, 11.91% in the International Development Association, and 15.18% in the Multilateral Investment Guarantee Agency.⁶⁸ China on the other hand holds voting shares of 2.79%, 1.03%, 2.05% and 2.67%, respectively.⁶⁹ The weight of the US on such institutions as the World Bank and the IMF deters the legitimacy of the institutions around the globe and in some cases limits their effectiveness. The voting structure is also a way to incorporate China into such institutions and give them a larger place at the bargaining table. Thirty years ago such a limited role was more justified. Given China’s new position of power, however, a call for the

reworking of such institutions is imperative. In the same way that IMF voting power reform would give hand China a larger role in shaping policy, increased ownership of the World Bank would make it more likely that China won't deviate to far from international norms.

A Comprehensive Strategy for US Economic Policy Towards China

China's emergence in the 21st century as an economic force to be reckoned with has brought on a rethinking of US economic policy – domestically and globally. China's rise has been accompanied by an alteration in the discourse concerning our neighbor to the west. At issue is no longer the "China Threat," but instead at issues are concerns of how to deal with China's rise and creating a place for Beijing's ambitions in the international economic system.⁷⁰ The previous discussion establishes a framework to confront those concerns. By pinpointing key issues of concern and disagreement and matching them with the correct channel, the US can avoid major conflict while securing vital national interests. The ultimate goal of the preceding recommendations is to bring China's economic policies within the norms of the international community, and to discourage China from operating its own distinct set of policies. These recommendations will provide the framework for a strengthened and renewed international regulatory regime, one in which China is a larger stakeholder in.

This report has concluded that in general, the actual role of the US Congress should be limited in address specific trade disputes. Instead, the US should pursue specific economic disputes and concerns through the WTO DSB. Such issues include concerns over IPR, industrial subsidization policies, and accusations concerning tariffs and 'dumping.' Broader macroeconomic imbalances and disagreements, such as the value of the RMB – an issue effects more countries than the US alone, should be delegated to multilateral institutions like the IMF. However, the functionality and effectiveness of these institutions is presently limited and US policy should take the aforementioned suggests to strengthen the surveillance and enforcement mechanism of these institutions. The leadership and voting powers of the IMF, World Bank, and the WTO can be reformed to increase their legitimacy so that they are better suited to address the new problems of

the 21st century economy. When such reforms are made and China's role in shaping those reforms is elevated, less of the burden of maintaining stability falls on the US and more on Beijing. With China's commitment to the stability of the international economic system secured, the US can responsibly move forward to address the challenges associated with the emergence of China after the Great Recession.

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US Policy towards the Chinese Diplomatic and Economic Engagement with the World

Aaron Larsen

Introduction

Since the current global recession China's diplomatic engagement in the world especially with Asia has grown. China has been increasingly engaging with regions such as the Association of Southeast Asian Nations (ASEAN), Africa, and Latin America in order to secure the resources needed to fuel its economic growth. In the economic sphere China has also been developing close ties with the ASEAN region, Japan, and Taiwan. China is also faced with increased economic competition from countries like India, Vietnam, and Indonesia. The US should respond to China's increasing influence in these regions by using diplomatic policy as well as increasing economic ties as a means of increase its influence and bringing more countries into the international economic system, thereby presenting China with greater incentives to abide by international norms. Through building diplomatic and economic ties with areas in which China has a growing influence, as well as in countries that are competing economically with China, we can create a broad multilateral coalition that will encourage China to continue on its peaceful ascension of power and abide by global rules and norms. We should avoid a zero sum paradigm, and instead develop a strategy whereby both the US and China can stand to gain economically from each others' growth and stability.

China's Resource Grab

The discovery of fossil fuel resources on the continental shelf in the South China Sea has given rise to issues of sovereignty and exploration rights, specifically surrounding the Spratly Islands. Within ASEAN disputes over the Spratly Islands began to emerge in the 1980s, especially after the signing of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982. "The reported rich deposits of maritime resources, including

oil and natural gas, led to scrambling for atolls and islands in the South China Sea".¹ The UNCLOS convention allowed all countries bordering the South China Sea to use the resources from the sea to their own benefit. Possible tensions could rise in the future regarding exploration rights in the South China Sea. The US has a stake in maintaining stability in the region, and thus should make attempts to mediate these conflicts.

1. Recognize ASEAN as an important multilateral organization²: By getting rid of the bilateral approach that America has with certain Southeast Asian countries it would help develop and expand US-ASEAN economic ties and resource gain. This requires soft power relations toward a multilateral forum where there can be non-confrontational negotiations and where all parties can reach a consensus in settling problems that may arise in the region.
2. Engage ASEAN and provide support to member nations by trying to resolve the South China Sea conflicts in a way that would benefit each country in the region.

Another region where there are growing concerns about the People's Republic of China's influence around the globe is Africa. Africa has become an area of strategic importance for China as a source of natural resources, and this had led to an expansion in FDI. China's economic and political support for regimes that violate human rights, like the Sudanese government in Khartoum, has exacerbated ethnic conflict in the region. China's continued support hinders the peaceful resolution of these conflicts through UN intervention. Ethnic conflict and oppressive regimes cause regional instability.

Recently the Chinese economy has been expanding at a nearly double-digit annual growth rate, giving rise to a

subsequent increase in energy demand. China's sharply accelerating domestic energy demand, combined with declining domestic petroleum production and insufficient coal output, has spurred Beijing to pursue stable overseas sources of hydrocarbon fuels. According to US Department of Energy in 2004, China became the world's second largest oil consumer, behind only the United States.³ "Chinese oil consumption is expected to increase by 10 percent per year, while China's oil and gas imports are forecast to increase from the present 33 percent of China's total oil and gas demand to 60 percent by 2020".⁴ China needs to find a way to meet this energy demand, because a large portion of Middle Eastern oil and gas production is mostly allocated to American and European markets. China has focused on African nations to fulfill its energy demand. "An estimated 25 percent of China's total oil imports currently come from Africa."⁵ China has placed a great importance on maintaining strong ties with its African energy suppliers through investment, high-level visits, and a strict policy of noninterference in internal affairs. Chinese government firms have invested billions of dollars and have used Chinese engineering and construction resources for developing oil, gas, minerals, and other natural resource infrastructure in dozens of African countries, including Algeria, Angola, Gabon, Nigeria, Sudan, and Zimbabwe.

The Chinese government has combined its efforts to secure exclusive access to African natural resources with a commitment to noninterference in internal affairs accommodating repressive regimes. Sudan's Khartoum government has long supported genocide against large non-Muslim populations in its Darfur region. "Nearly 200,000 people have died since February 2003 as a result of the conflict there and nearly two million have been burned out of their villages and moved to displacement camps."⁶ While the United States, the European Union, Japan, and other Western democracies have sought to impose United Nations (UN) sanctions against the Sudanese regime over the issue, China has continually opposed these actions.

Over the past several years, Sudan's Khartoum government has forced hundreds of thousands of people to flee their homes in southern oil fields largely owned by the China National Petroleum Company (CNPC). These actions have motivated "rebels who attacked oil installations, seeking to deprive the Sudan government of the wherewithal

to pursue a civil war that has killed more than 2 million people and displaced 4 million from their homes over the past two decades".⁷ Chinese Deputy Foreign Minister, Zhou Wenzhong, made a comment in a recent interview that demonstrated China's utter lack of concern for political volatility in Africa: "Business is business. We try to separate politics from business. Secondly, I think the internal situation in the Sudan is an internal affair, and we are not in a position to impose upon them".⁸ US's national interests lie in effectively countering these developments in Africa by encouraging democratic processes, economic freedom, and respect for human rights across the African continent.

The United States needs to be aware of the potential long-term disruption of American access to important raw materials and energy sources as these resources are locked up by Chinese firms for the People's Republic of China's (PRC) domestic market to maintain China's economic growth. China's broad energy, trade, political, diplomatic, and even military interests in Africa threaten to undermine American and European efforts to promote peaceful, pluralistic, and prosperous societies in the region. In order to protect and advance American interests and influence in Africa, the task force suggests the following policy actions:

1. Continue to encourage human rights, democratic principles, and good governance⁹: The United States should help young African democracies lay the institutional foundations for a free, open, stable, and prosperous societies in their individual countries and throughout the region.
2. Increase trade and economic relations with Africa¹⁰: Even though US-Africa trade accounts for only about 1 percent of total U.S. trade¹¹, it has grown rapidly since the passage of the African Growth and Opportunity Act (AGOA) in 2000. The US government should continue to encourage the development of economic linkages with African trading partners, as opposed to the simple provision of monetary aid. By encouraging the development of robust markets in Africa, the US can hope to mitigate China's destabilizing influence in the region.
3. The US should continue to work within the framework

of the UN to support concerted multilateral action against overtly repressive political regimes in Africa. Bringing the repressive nature of these regimes to the attention of the international community should, over time, motivate the Chinese government to re-think its own engagement with these regimes.

Much of China's interest in Latin America especially in South America is resource motivated. China is eager for access to commodities such as iron and other ores, soybeans and soybean oil, copper and steel, integrated circuits and other electrical machinery, and oil in order to meet the demands of China's booming economy. China's imports from Latin America "grew from almost \$3 billion in 1999 to \$21.7 billion in 2004, a more than 600% increase in five years".¹² China's exports to Latin America have also grown considerably in the last five years, "from \$5.3 billion in 1999 to \$18.3 billion in 2004, with major exports including electrical appliances; woven and knit apparel; office machinery, and mineral fuels and oil. During this period, the overall share of China's exports to the region as percentage of its worldwide exports, although small, increased slightly from 2.71% in 1999 to 3.09% in 2004".¹³

The increased Chinese interest and economic linkages with Latin America may constitute a significant future threat to US influence and interests in the region. A possibility that could arise is China using Latin America to challenge United States hegemony in the western hemisphere. In addition, China can also build a political alliance of developing nations with interests that can challenge American interests and values. The US should respond to China's growing influence in the region in the following ways:

1. Continue to promote the development of economic linkages between the US and Latin America¹⁴: The US should continue to establish bilateral investment treaties, as well as to look towards the future development of a broad, multilateral trade agreement encompassing Latin America.
2. Involve those countries negatively affected by RMB manipulation, in order to pressure China to change some of its market distorting policies.

China's increasing influence in these regions poses challenges to continued regional stability, and the global economic system. The US should make a concerted effort to counter this influence on a multilateral basis, through the promotion of multilateral trade agreements and increased economic ties, which promote the development of robust markets and encourage China to abide by international norms.

China's economic relations with ASEAN, Japan, and Taiwan

In October 2003, China signed the ASEAN Treaty of Amity and Cooperation and issued the China ASEAN Joint Declaration on Strategic Partnership for Peace and Prosperity. In December 2004, a 5-year (2005-10) Plan of Action was adopted. This plan focuses heavily on defense and security cooperation between China and ASEAN, especially in the following areas: "confidence and trust in defense and military fields; dialogue, consultation, and seminars on defense and security issues; cooperation on military personnel training; joint military exercises; peacekeeping operations".¹⁵ China also proposed, and received endorsement from ASEAN, for the creation of an Asian defense cooperation forum. The first Security Policy Conference was held in Beijing on November 4th to 6th, 2004. The meeting covered an array of issues including the "Korean nuclear crisis and the Six-Party Talks, maritime security, and terrorist threats to the region".¹⁶ China has offered extensive military assistance to Manila, "including donations of \$1 million in equipment and \$3 million for setting up a Chinese-language training program for the Philippine armed forces".¹⁷ The PLA also invited the Philippine military personnel to receive educational training in China.

A major development in China-ASEAN relations since the end of the Cold War is the growing economic interdependence between the two regions. Two-way trade has been "growing at a rate of 20 percent for the last decade and reached over U.S. \$100 billion in 2004, a year ahead of a previously set target. It further registered a 23 percent increase in 2005, reaching \$130.4 billion".¹⁸ ASEAN member states have benefited from China's spectacular economic growth. In 2004, "ASEAN had a roughly \$20 billion trade surplus with China, while China's other major trading partners all

sustained sizable deficits”.¹⁹

Chinese analysts have divided the evolution of China-ASEAN economic relations into two phases. The first phase started in 1991 when Chinese Foreign Minister, Qian Qichen, was invited to attend the 24th ASEAN Foreign Ministers meeting. This phase continued into 2001 when Chinese Premier Zhu Rongji proposed a China-ASEAN free trade area, allowing the two sides to expand and deepen bilateral trade ties. The second phase began in November 2002 with the signing of the China-ASEAN Framework Agreement on Comprehensive Economic Cooperation moving toward regional economic integration. The two sides have identified five key areas of potential cooperation: “agriculture, information communication technologies, human resource development, the Mekong River Development, and mutual investment”.²⁰ The two sides sought to establish a free trade area (FTA) within 10 years, first with the original ASEAN-6 by 2010 and then followed by the entire ASEAN-10 by 2015. China and ASEAN have also expanded areas of cooperation, particularly in the nontraditional security areas. This includes securing antiterrorism, anti-piracy as well as ecological issues related to the Greater Mekong River project and other environmental issues. The Chinese Premier Wen Jiabao has demonstrated his commitment to ASEAN by stating, “friendly neighbors leads to peaceful coexistence, regional stability, and harmony; secure neighbors leads to regional peace and stability through dialogue, negotiation to resolve disputes, and rich neighbors develop, deepen regional and sub-regional economic cooperation, and promote regional integration”.²¹ The China-ASEAN market constitutes a common market of 1.7 billion people, with a combined gross domestic product (GDP) of US \$1.5-2 trillion.²²

While China and Southeast Asia living in harmony can contribute to regional peace, stability and prosperity and minimizes the potential for conflicts, the future direction of this relationship nevertheless can have major implications for the US. If the region evolves into a competitive and exclusive regional trading bloc it could lead to a geo-strategic arrangement under the shadow of a growing and more assertive China. The US needs to become more proactive and to go beyond rhetoric so as to truly recognize ASEAN’s critical place in American foreign policy. To address the challenges posed by these developments in the China-ASEAN relationship the US should:

1. Encourage the development of ASEAN as an important multilateral forum, through which economic issues should be addressed: The US should embrace this multilateral approach, as a mean of further encouraging China’s adherence to a distinct set of regional norms.
2. Washington should avoid taking a confrontational approach to China’s ASEAN policy²³: Avoid the zero sum paradigm. The US should be interested in finding ways of cooperation, whereby both parties can benefit from increased economic integration in the region.
3. The US should work within the ASEAN structure to encourage those countries with competitive economies with China to work in concert in order to curb China’s unfair trade practices.

Since the 1970s and into the 1980s, economic ties have grown between China and Japan. Their complementary economic interests led to a strengthening of Sino-Japanese relations. Japan has been a major source of capital, technology, and equipment for China’s modernization drive (see Chapter 1, Section2). In fact, “Japan has been China’s largest trading partner since the mid-1960s, accounting for more than 20 percent of China’s total trade”.²⁴ When US President Richard Nixon visited China in 1972, the Tanaka cabinet had just replaced the Sato cabinet in Japan; Prime Minister Tanaka Kakuei grappled with the normalization of Japan-China relations. In 1978, the Fukuda cabinet concluded the Treaty of Peace and Friendship, “establishing the basic framework for Japanese policy toward China, extended significant economic assistance to the Chinese in various modernization projects and supported Chinese membership in the World Trade Organization (WTO).”²⁵ Chinese President Hu Jintao visited Tokyo in May 2008. This was the first such visit in 10 years, and a symbolic step toward renewed positive Sino-Japanese relations.

The US-Japan alliance is the cornerstone of US security interests in Asia and it is fundamental to regional stability and prosperity. Despite the changes in the post-Cold War strategic landscape, the US-Japan alliance continues to be based on shared vital interests and values. These include stability in

the Asia-Pacific region, “the preservation and promotion of political and economic freedoms, support for human rights and democratic institutions, and securing of prosperity for the people of both countries and the international community as a whole”.²⁶ While maintaining its relationship with the United States, Japan has diversified and expanded its ties with other nations. Good relations between Japan and its neighbors continue to be of vital interest for the United States, in that it contributes to regional stability. As we enter the twenty-first century, both Japan and China continue to characterize their relationship as an important bilateral relationship.

1. The US should work to maintain the positive relationship between China and Japan.
2. The US should continue to renew its historically important political and economic relationship with Japan

Despite the tense diplomatic friction between Taiwan and China, their economic relationship has blossomed. China entered the World Trade Organization (WTO) in 2001 and, within a month, Taiwan entered as Chinese Taipei “Bilateral trade between China and Taiwan in 2007 reached \$102 billion, up from \$ 8 billion in 1991.”²⁷ China is Taiwan’s largest trading partner; “in 2007, 30 percent of Taiwan’s exports were sold to China”.²⁸ Likewise, Taiwan ranks in the top ten of China’s trading partners. Taiwanese businesses have invested an estimated \$150 billion in the mainland since 1988. In 2009, Taiwan opened up one hundred of its industries to mainland investments. China and Taiwan have also agreed to allow banks, insurers, and other financial service providers to invest and work in both markets. Negotiations between the two for an Economic Cooperation Framework Agreement that will ease trade restrictions even further are scheduled to take place soon.

Taiwan undoubtedly remains the most sensitive and complex issue in the US-China relations. Beijing has not foresworn the use of force should Taiwan declare its independence from China and Chinese officials repeatedly block Taiwan’s efforts to gain greater international recognition. At the same time, officials in Taiwan are increasingly maneuvering for more international stature and for independent access to multilateral institutions. In 1978, the United States had

to break official relations with Taiwan in order to normalize relations with China. Since then, US policy towards Taiwan has been shaped by the Taiwan Relations Act. Taiwan continues to pose delicate political problems for American policymakers. Any US action appearing to be either directly or indirectly supportive of Taiwan’s interests is met with vehement objections by the PRC. Such was the case on May 22nd, 1995, when the Clinton Administration, under heavy congressional pressure, decided to allow Taiwan’s President, Lee Teng-hui, to make a private visit to the United States to attend his college reunion at Cornell. The resulting controversy ultimately led to a near-confrontation in the Taiwan Strait in March 1996, after China had conducted a series of live-fire missile exercises off the Taiwanese coast. The United States responded by sending two carrier battle groups to that area and although that confrontation passed without incident, potential controversies over Taiwan still have the potential to disrupt US-China relations. Recent US arms sales to Taiwan, announced on January 29, 2009 garnered a similar negative reaction from Beijing. In reaction, China cancelled some military exchanges and announced punitive sanctions against american companies operating in China²⁹. In order to avoid any potential disruptions, we suggest the US undertake the following steps:

1. The US should encourage the growing economic ties and improving political relations between the PRC and Taiwan. Increased economic integration provides a disincentive for military confrontation between the two parties.
2. Continue to provide Taiwan with arms of a defensive character.³⁰: Providing Taiwan with the necessary defensive capability is necessary to discourage Chinese military action and is in the interest in regional and national security.

China has developed positive economic relationships with its Asian trading partners - ASEAN, Japan and Taiwan. The US should support the peaceful maintenance and development of these relationships with the goal of creating an environment conducive to continued economic growth and prosperity in the region. Continued economic growth and integration throughout Asia will reduce the likelihood of destabilizing

military conflict and further integrate China into the global economy.

China's competing economies: India, Vietnam, and Indonesia

China-India relations have been tense ever since a dispute regarding the border between Tibet and India led to a full-scale war in 1962. Several rounds of talks since 1981 have failed to resolve the disputed claims. There is a continuous dispute regarding the "2,520 mile frontier between India and China, one of the longest interstate borders in the world. [It] remains the only one of China's land borders not defined, let alone demarcated, on maps or delineated on the ground".³¹ This long running dispute has set the tone for India-China relations in the second half of the 20th century.

As China and India rise politically and economically on the world stage, they are eventually going to compete with one another for influence in the Asian region. Although China's economic rise will continue to be faster than India's, in the short-term China may seek to counter India's political and geo-strategic influence. The rivalry between the two nations will only increase especially as each country begins to reach into the other's traditional spheres of influence. The US has an interest in continued stability in the India-China relationship; however India has the potential to serve as a hedge against negative Chinese influence in Asia. In this regard we suggest the following adjustments in US foreign policy:

1. Continue building ties with India and encouraging a more active stance politically and economically in the region³²: To help India fulfill this role, US should continue to seek improvement in its military-to-military relationship with India for defense purposes.
2. Collaborate more closely with India on initiatives that strengthen economic development and democratic trends in the region³³: Encourage the present trajectory of India's current economic development and democratic governance.
3. Avoid any potential India-China military conflict over unresolved border issues given the U.S. interest

in ensuring stability in the region³⁴: The US has an interest in the continued growth of Indian political and economic influence in the region, and any military conflict with China could present a considerable hindrance to this growth, and could threaten stability in the world at large.

4. Encourage India to take a larger role in multilateral institutions, commensurate with its growing economic strength. Encouraging increased participation on the part of developing countries such as India in multilateral institutions, specifically in the WTO, could help to curb some of China's unfair trade practices.

China and Vietnam's relationship has been a competitive one. China's stance on handling the territorial disputes in the South China Sea has been to use military force. China's navy has been patrolling the South China Sea to "strengthen its claims over the disputed territories, such as the Spratly Islands in the South China Sea".³⁵ Beginning in 1992, the two countries engaged in extensive discussions and negotiation over land and maritime boundaries. On December 30, 1999, a land border treaty was signed. However, there still remain tensions between the two countries today over disputed fishery zones. "A shooting incident took place in January 2005, leading to the death of eight Vietnamese fishermen".³⁶ The US should take measures such as:

1. Recognizing ASEAN as an important multilateral forum: In doing this Vietnam can put pressure on China to relinquish some of its power over the South China Sea. This would help provide safety and strength in a number of countries to avoid dependence on China. Ties between the region of ASEAN and the US would improve, while not putting relations with China at risk, because the US would be taking a mediatory role in the South China Sea conflict.
2. Diversification of economic relationships³⁷: Improving relations with Vietnam by increasing economic ties would create more cooperation between the two countries and allow the US to have more influence in the Asian region. Building infrastructure would strengthen US and Vietnam communication lines providing for closer economic linkages between the two countries.

Indonesia has significant concerns about the PRC and its own citizens of Chinese ethnicity. “Since the Dutch East India Company’s founding in 1602, the Dutch had local aristocrats and the Chinese residents gain revenue from Indonesia, and the Chinese played a significant role as well in taxation, agriculture, and money lending in Java and Sumatra”.³⁸ When the Japanese occupied Indonesia, some of these ethnic Chinese locals worked with the Japanese but the Chinese eventually lost their privileged influence after the nationalistic revolution of Indonesia took place. After that many local Indonesian peasants identified the ethnic Chinese people in the region as being associated with the old colonial order and this led to a number of brutal attacks on ethnic Chinese in Indonesia. “As recently as 1998, substantial popular violence was directed at ethnic Chinese living in Indonesia, with a thousand or more persons killed as the Suharto regime fell and Indonesians felt the economic distress of the Asian Financial Crisis”.³⁹ Indonesia is worried that these riots would eventually lead to China using their military as a threat to protect the affluent parts of the Chinese population in Indonesia. Indonesia is worried because its military is in no condition to fight against a rising military power in China. The US should approach this issue between Indonesia and China in the following way:

- Increase security and regional multilateralism in ASEAN⁴⁰: If this is done it would provide security for Indonesia in case of future conflicts with China. It would also help prevent violence against ethnic Chinese living in Indonesia, with the US treating the region of ASEAN with great importance in Asia.

Conclusion

China is increasing its political and economic influence in a number of regions including resource rich countries in Africa, Latin America, and Asia by promoting low quality bi-lateral trade deals outside international norms. These bi-lateral deals damage regional stability and undermine the global economic order. The US should respond to China’s increased influence in these regions by increasing its economic ties and building strong free trade agreements, which promote robust markets, bringing these countries into the international economic system. The US should continue to build its economic ties

and maintain positive relationships with its allies in Japan and Taiwan. The US should support Japan and Taiwan’s greater economic integration with China in order to facilitate its greater integration into the global economy. The US should also support India’s growing economic influence in Asia, in order to curb the undue influence of China. Through a renewal of our diplomatic and soft power, the US can create a broad multilateral coalition that can help curb China’s unfair trade practices and encourage China to abide by global rules and norms.

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Renewing America's Economy

Zhi Wei Wan

Introduction

The US financial crisis has demonstrated the failure of our economic trajectory based on increasing availability of debt and a poorly regulated financial system. Though the US remains the world's largest economy, China's rapid growth in the face of the global recession could pose a challenge to American future economic predominance. Our ability to influence world events will be limited if the US cannot regain its economic footing.¹ As concluded by Chapter 2, Sec 2 China is already working to upgrade its economy and insure the competitiveness of its export industries. China is investing in the economy of the future by moving into areas like clean energy.² Staying competitive with China in the 21st century is going to require more than just a few slight changes in policy. We must address the structural weak points in our economy; education, infrastructure, the competitiveness of our export industries, and respond to China's economic challenge through a renewal of our own economy.

After two years of economic turmoil, the US still has an unemployment rate exceeding 10 percent, and our country still does not have a clear picture of how to reorient our economy onto a more productive and sustainable path. In the 2010 State of the Union Speech President Obama acknowledged that there are serious issues hampering our economic growth. Key challenges Obama listed are: job creation, innovation, export competitiveness, education, and expanding the middle class.³ The overarching theme is that new investments must be geared towards clean, efficient, and renewable energies and enhancing our competitiveness. Through reforming our broken primary and secondary education system, capitalizing on our world leading higher education by making it more affordable for everyone, rebuilding our aging infrastructure and updating it for the economy of the future, and finally

upgrading the technological and innovative capacity of our industries, we can successfully respond to China's economic challenge

Flawed Economic Trajectory

This renewal must begin first with a critical analysis of our recent economic trajectory that culminated, disastrously, with the financial crisis. Since the 1980's, as discussed in Chapter 1, lower valued added manufacturing has been transferring from the US to Asia. A global retail revolution increased the size of the largest retail firms that then rationalized their supplier and wholesale markets gaining great leverage over suppliers and manufacturers. Large retailers used this leverage to force incremental price decrease from their suppliers and manufacturers. This pressure accelerated a process, made possible by global advances in transportation and logistics, of outsourcing the production of lower value added goods, primarily to Asia. As described in Chapter 1, manufacturing consolidated in China in the 1990's and the Chinese economy has since then experienced an export driven economic boom.

Export surpluses generated from these export industries, driven by demand from US retailers and manufacturers, is retained by the Chinese government in order to hold down the value of the RMB and keep its exporters competitive. These large currency reserves have in large part been lent back to the United States in the form of Government Bonds. This purchasing of government bonds from China as well as other export surplus countries including oil-producing nations, allowed the US Federal Reserve to keep interest rates low as our national debt expanded. This was matched in a decline in the US savings rate. "Government, business, and households spent their earnings and then borrowed more, ultimately from Chinese producer, in order to buy more."⁴

Although, there was significant economic growth during this period, particular during the tech boom of the 1990's the American middle class got almost none of the gain. Middle class incomes only increased by 14 percent over thirty years.⁵ It was during this period that American savings decreased dramatically. Our economy grew on the back of rising asset prices primarily stocks and home values. The American economy became dependent on this increasing level of debt in order to maintain consumption levels and fuel our economy. Government and corporate debt expanded as well. In total government, corporate and household debt increased by an entire years GDP from 1997 – 2007.⁶ The financial services industry expanded by a huge margin and became the leading growth sector in the US economy, generating rising incomes and profits. The profits from the financial sector generally went to the top income brackets, and further increased American income inequality.⁷

The financial crisis has demonstrated the failure of the US' poorly regulated and globally connected financial system to effectively manage and allocated capital to productive uses. This transformed America's foreign trade and debt position, and led to the financial crisis.⁸ In the meantime China and other export producing countries were building up their industrial and manufacturing capacity, investing in infrastructure, and upgrading the competitiveness of their exports industries. They are continuing to do that today. The recession is our chance to realize the weakness in our growth model, and respond. The US should reduce our dependence on finance and rising levels of debts in the long-term, make smart and considered investment in our human capital, build the infrastructure of the future economy, and continually upgrade and maintain our technological and competitive edge. This US has risen to great economic challenges before and can do so again.

Education

One of the most valuable resources the US has is its world-class educational institutions. The US has 55 of the top universities in the world, and over 4,000 other quality universities and colleges.⁹ However the US faces two major challenges in this regard - fewer US citizens are attending college, and an increasing number of international students are choosing to

return home after completing their education in the US.

College education is proving to be more important to the productivity and competitiveness of individuals. In the current US economic context those with a college education have a definite comparative advantage in the labor market. As manufacturing employment has increasingly moved abroad in the last decades (partly as a result of the increasing mechanization of production), the relative demand for unskilled labor has decreased. This trend has put those without a college education at a distinct disadvantage in the American economy.

Given the importance of a college education in the US economy, the exceeding cost of such education should be of major concern, as it impedes access to higher education for many. The average cost of a two-year public college education is \$2,544 annually, \$7,020 at four year universities, and the average cost increases to \$26,273 for private four-year universities.¹⁰ These costs do not include living expenses, such as housing, food, and textbooks etc, which potentially double the overall cost depending on the location of the universities.¹¹ The concern here is that many students will not go to college due to the high cost, and those who are able to attend college are ending up with a large sum of debt by the time they graduate. According to one study, for every \$1,000 reduction in net college costs, it increases the probability of attending college by five percentage points.¹² Thus, despite the competitiveness and high quality of universities in the US, most students still wrestle with the problem of cost.

The Obama administration has taken steps towards addressing these issues through a renewed Elementary and Secondary Education Act, a program to revitalize community colleges, a plan to end taxpayer subsidies to banks for student loans, a \$10,000 tax credit for families to pay for four years of college, an increasing in government education grants, student loan debt forgiveness program after 20 years or after 10 years if they choose a career in public service, and finally cost cutting measures at colleges and universities.¹³ These moves show that policy makers are aware of our weakening educational system, however it does not offer a comprehensive plan on how these goals will be met in practice. We argue that these preliminary goals set out by the Obama administration are a step in the right direction. If the US is to maintain its current advantage in the quality of its human capital, then higher education must be made accessible to all its citizens.

Data provided by the Department of Education shows that US high school students fall well below the international mean in math and science according to the international STEM (science, technology, engineering and mathematics) test.¹⁴ This is another deficiency that the US must correct if we wish to remain competitive in the future. The US should work to improve the quality of math and science education within the primary education system, and promote the study of these fields at the university level.

In recent years, as economic conditions in places like China and India have improved, many talented young people who come to the US to study are choosing to return to their home countries after completing their education.¹⁵ This is due in part to the stringencies of US immigration laws - our visa controls make it both more difficult and less attractive for talented foreigners to remain in the US and contribute to its economy. The congress should consider revising these laws with the goal of attracting more talented foreigners to the US, and retaining those who have chosen to receive their education at US universities. To improve the quality and access to our higher education institutions Congressional policy makers should:

1. Consider policies that increase access to higher education to a larger portion of the population.
2. Consider programs that improve the quality of math and science education within the primary education system, and promote the study of these fields at the university level.
3. Consider relaxing immigration laws in order to attract talented foreigners to work in the US economy, and retain those which have chosen to receive their education at American universities.

Infrastructure

One of challenges facing continued economic growth in the US is our aging infrastructure. In the past, government investments in transportation infrastructure, first in rail roads that opened up the west, and then in a national highway system, have linked together America's diverse markets and facilitated a huge amount of economic growth.

These investments in transportation infrastructure not only improved the mobility of labor and resources, but also kick-started growth in industries like steel production and later automobile manufacturing.¹⁶ Today with the increasing price of oil, and increasing competition for fossil fuel resources from developing countries like China and India, we should build a more energy efficient infrastructure. Our rail system is outdated and, our capabilities in high speed rail technology lag considerable behind Japan and Europe, and China is quickly catching up.¹⁷

In the short-term, investment in repairing our aging transportation infrastructure can help spur economic growth and create jobs. A 2005 infrastructure report card found that most of our states have deteriorating highway systems, and that \$1.6 trillion is needed over a five-year period to bring the nation's infrastructure to a good condition. "Traffic congestion in the nation's 50 most populous urban areas is estimated to cost over \$39 billion a year in time and wasted fuel."¹⁸ Improving our existing highway system will increase productivity by reducing congestion. US infrastructure investment should not, however, be simply focused on improving our existing infrastructure. Instead the US should also be creating the public and private infrastructure of the future that is more energy efficient, and less reliant on fossil fuels.

The design and planning of US cities is based around private vehicular transportation made possible by the low prices of fossil fuels. Fossil fuel prices are likely to increase as demand for these resources in developing countries increase. Therefore, we should place a renewed emphasis on Public Transportation and more energy efficient urban planning. The US government should take an active role and funding, promoting the creation of a strong public transportation system. This will reduce America's dependence on foreign oil and increase the productivity of our workers by reducing congestion.

High Speed Rail is another area where the US should make investment. The US is already far behind in developing a high speed rail networks and technology. China now has a train with the worlds fastest average speed, and this is just one of 42 recently completed or slated be completed by 2014. In sharp contrast, the US is only planning to complete one high-speed rail network by 2013, connecting Tampa and Orlando Florida.¹⁹ China's network of High Speed rail will not only

facilitate the linking of a vast continental country - their significant investment will create the huge economies of scale that are necessary to produce these technologies for export. President Obama argued in his 2010 State of The Union that the US should make investment in high-speed rail, because “China wants those jobs. Germany wants those jobs. They are going after them hard, making the investments required.”²⁰ The US is far behind on high-speed rail technology, and the US government needs to make much more serious commitment to these investments if we are to become competitive in these industries.

In 2003 President Bush announced an plan to “...modernize our electric delivery system...for economic security...and for national security.”²¹ This initiative has subsequently been followed up by an \$11 billion investment through the economic stimulus plan.²² A smart energy grid will integrate the functions of the national energy grid with the goal of enhancing efficiency, resiliency, and reducing energy needs as well as reducing carbon emissions. A smart energy grid would achieve these goals by utilizing computing information and communications technology. “If the grid were just 5% more efficient, the energy savings would equate to permanently eliminating the fuel and greenhouse gas emissions from 53 million cars”.²³

The US energy grid should also be expanding this grid to integrated renewable energy projects like wind and solar that that are generally located in unpopulated areas. US energy growth is expected to increase by 30 percent in 2030, so these investment in the energy grid will not only create jobs in the short-term but will also provided the needed efficiency and capacity to accommodate our growing demand and continue to fuel economic growth in the future. Investment in the energy grid will help secure the position of US firms as leaders in the smart energy grid industry. With this in mind, we make the following suggestions to the congress:

1. Increase investment to rebuild our aging transportation infrastructure. This will create jobs and increase productivity by reducing congestion.
2. Work to build the transportation infrastructure of the future. This includes investments in public transportation and high-speed rail.
3. Increase funding and increase the pace of development and implementation of a smart energy

grid. This will create jobs, increase efficiency, and help develop a promising domestic industry in the future.

Energy

The US is the world’s largest economy, and consequently the world’s largest energy consumer. The large majority of the energy consumed in the US comes from non-renewable resources - continued dependence on such resources for our energy needs will continue to impose external costs on the US economy, through the negative environmental effects of the burning of fossil fuels. Moving into the future the US must implement policy to reduce its dependence on non-renewable energy resources, and facilitate the transition to an economy powered by renewable energy sources. In addition, the US imports the majority of the fossil fuels it consumes, and this contributes heavily to the US trade deficit.²⁴ Making the transition to renewable energy would also help to re-balance global trade. In order to make this transition the US must support and create incentives for research and development in green technology, and also help facilitate the development of markets for these technologies. If the US can develop strong domestic markets for clean energy technologies, the US could put itself on the path to becoming a global leader in this field, and a major exporter of green technology to the world at large.

Efforts towards successfully making this transition have been made, but the fruits of these endeavors have yet to be realized, and more effort is necessary. A bill that would create a system for the regulation and trading of carbon emissions passed through the House in June of 2009. This “Cap and Trade” system would place an upward limit on greenhouse gas emissions, and would allocate “pollution permits” which utilities providers and other high emission industries could trade among themselves in order to meet pollution limit requirements.²⁵ This system could allow the US to make considerable progress in reducing its greenhouse gas emissions. The bill has, however, stalled in the Senate. The American Reinvestment and Recovery Act of 2009 allocates \$60 billion in direct spending and \$30 billion in tax credits towards the development of clean energy technology in the US. The bill seeks to broadly incentivize investments in research

and development through a combination of tax incentives to private firms to invest in research and development in green technology, and direct government investment in this sector.²⁶

The US should continue along this path. Government subsidization of private research and development will help to counter traditional disincentives associated with such activities within private firms,²⁷ and direct government support of institutions involved in renewable energy research can only compliment these activities. The US is not alone in these efforts - China recently surpassed Denmark, Spain and Germany to become the leading producer of wind turbines.²⁸ If the US is to be a competitor in this field in the future, then concerted action must be taken now. The US should also continue to make efforts to successfully implement the “Cap and Trade” system as the first step towards successfully limiting our greenhouse gas emissions. These policies will help the US move forward towards making the successful transition to an economy based on renewable energy. The US government should make efforts not only to provide incentives for the development of green tech, but also facilitate the organization and development of a market for these new products, while looking towards becoming a leader in the development, implementation, and exportation of these technologies. To accomplish the goals we make the following suggestions to the Congress:

1. Work towards the successful implementation of a system to reduce and regulate the emission of greenhouse gasses
2. Increase and maintain funding for R&D in renewable energy technology, through both market based incentives and direct government funding

Addressing the US Budget Deficit

The Congressional Budget Office estimates that the federal government will end the fiscal year of 2010 with a budget deficit totaling \$1.35 trillion.²⁹ In order to locate the cause of this huge deficit one must look at certain policies implemented during the eight years of the Bush administration. On the spending side there are two main causes - first, there was

the introduction of a prescription drug benefit to Medicare, estimated to increase annual deficits over the next decade by an average of one third of a percent, and more in the years following. The other spending decision contributing to the budget deficit was the decision to fight two wars without implementing any fiscal policy to offset the cost, which is now approaching \$1 trillion. Important revenue decisions were also made during the previous administration, particularly the 2001 and 2003 tax cuts, which have helped to push revenues to their lowest levels as a fraction of GDP since 1950.³⁰

Many economists believe that budget deficits are beneficial in an economic downturn because they provide needed government investment and tax relief.³¹ However large budget deficits negatively impact economic performance in the long-term in a number of ways. In order for the government to finance a budget deficit it must borrow money, which puts the government in competition with private firms and individuals who wish to make productive investments. This results in what would otherwise be productively invested capital being used to government purchases and consumption. The US has been able to maintain its budget deficit through borrowing abroad, at the expense of increased foreign indebtedness.³² The large US budget deficit and requisite foreign borrowing contributed greatly to the global imbalances which precipitated the financial crisis. The US must take action to address the budget deficit. Large budget deficits and debt have disastrous potential if not corrected. At a certain point government debt would exceed the point at which investors are willing to hold the debt at a given interest rate. At this point, rising interest rates would further worsen the fiscal situation, further reducing investors' interest in holding the debt, leading to even higher interest rates, and so on and so forth.³³ If the US is to correct the systemic issues in its economy, and work to rebalance global trade, then the budget deficit must be addressed.

The largest contributor to America's fiscal deficit in the future is the growing cost of entitlement programs. According to the Congressional Budget Office (CBO), Social Security and Medicare spending will grow from 10 percent of GDP in 2011 to 18 percent by 2050.³⁴ Bringing costs down in the long run will be critical for maintaining America's fiscal health.

Bringing down deficits is not only a matter of reducing expenditures, but must also include proposal to increase

revenues. In this regard, a Value Added Tax (VAT), or a tax on consumption rather than income, which is levied at each stage of the production, should be carefully considered. The US is the only OECD country that does not implement this type of tax. Many analysts believe the VAT has the potential to help close the US budget gap. “An analysis for The Economist by the Tax Policy Centre estimates that a 5 percent VAT that exempted education, housing, and religious and charitable services would raise a net \$324 billion in 2014 and \$411 billion in 2019.”³⁵ The need for these revenues is quite pertinent - the CBO estimates budget deficits to reach \$726 Billion by 2014. As stated earlier in the report, America’s economy has a paucity of savings, and has been too dependent on consumption, made possible by expansion in consumer credit. A shift from taxes on income (US existing system) to taxes on consumption (VAT) can encourage savings and increasing capital available for growth.³⁶ Critics of the VAT argue that as a tax on consumption it disproportionately harms low-income brackets, because they have a higher percentage of their income going towards consumption.³⁷ These concerns can be addressed “by exempting broad categories of goods, like groceries and children’s clothing”, or reducing taxes for lower income brackets”.³⁸

On Feb 18th 2010, president Obama signed an executive order to establish a Bipartisan National Commission on Fiscal Responsibility and Reform.³⁹ This commission will be tasked with making recommendations that put the budget in primary balance so that all federal operations and programs are paid for and deficits are reduce to 3 percent of GDP by 2015. It will make recommendations by December 1, 2010. The commission will include both Democratic and Republic members. This bi-partisan composition, and the requirement that a majority is necessary to certify recommendations, should increase likelihood of the commission producing policies that are palatable to both parties. Unfortunately this commission will only be able to make recommendations to Congress, and these recommendations will not receive an automatic vote in congress. This commission is a positive step in towards bringing down American’s deficits in the long term, but the lack of an automatic up and down vote will limit the effectiveness of commission and hinder the quick adoption of this critical legislation. We put forth the following suggestions to the congress:

1. Consider actions to reform Social Security and Medicare to bring down their growing long-term costs.
2. Consider a Federal VAT tax to increase government revenues and encourage savings.
3. Consider giving the Presidents Commission on Fiscal Responsibility and Reform an up or down vote in the Congress to speed up the adoption of critical long-term deficit reforms.

Promoting Exports and Moving Up the Global Value Chain
Exports have been growing in the US for the last century, but the growth is still very slow compared to overall growth in world trade. China has used the recession as an opportunity to increase the competitiveness of its industries and move up the global value chain. In order for the US to remain competitive, we must clearly identify and actively support those sectors and industries where the US maintains or has the potential to develop a competitive advantage in the world market. Transportation and Clean Technology are just two of many industries in which the US can and should be able to maintain global leadership. The future of America’s continued economic prosperity lies in our continued capacity to innovate and lead the economy of the future.

Innovation is not necessarily something that happens mysteriously or spontaneously. Innovation occurs in highly localized industries where a number of innovators are working around a significant enabling scientific development.⁴⁰ The US is “uniquely good at coaxing innovation out of its research and translating those innovations into commercial products.”⁴¹ Americans inventors in 2007 registered more patents in the US patent system than the rest of the world combined⁴². Innovation is the engine of the US economy; innovation will allow the US to remain competitive and maintain its economic position in the world.

Building a smart energy grid, high-speed rail, as well as clean technology are all sectors of our economy which this report identifies as areas that the US has the potential to lead. This list is not exhaustive; there are many other such industries where the US has a technological edge including nanotechnology, biotechnology, medical technology.⁴³ The US government can have a role in promoting innovation, and is an advantages position to do so, mainly because it has the ability to provide the long-term investment necessary to

foster and develop innovative technologies with potential commercial application. Boeing, the US' largest exporter, is an example of where US government spending fostered the development of an American company that became a world leader in an important industry. The US early preeminence in the computing industry also had similar roots in government, specifically the Department of Defense (DoD) spending that supported the initial technological breakthroughs that later spilled over into the industry cluster in the Silicon Valley.⁴⁴

The US also maintains a competitive advantage in our service industries, including finance, engineering, logistics, and architecture.⁴⁵ Finance is an industry in which the US has the capacity to become leader, but the risks associated with de-regulation combined with implicit government guarantees create perverse incentives, which must be recognized. Prudent regulation is necessary if this industry is to remain profitable and facilitate economic growth through the efficient allocation of capital without posing systemic risk to the entire economy. "The US has historically benefited from the deepest and most efficient capital markets of any nation."⁴⁶ The appropriate role of finance is to facilitate the development of new technologies into commercial success by providing capital that allows businesses to grow.

The US can promote innovative scientific developments through investment in basic research. The Obama administration, has proposed large increases in research funding in their 2011 budget. This included doubling the budget of three key science agencies, (the National Science Foundation, the Department of Energy's office of Science, and the Department of Commerce National Institute of Standards and Technologies), as well increasing funding for DoD basic research.⁴⁷ These are positive developments. However, as we move forward in this direction we must ensure that this funding accurately targets those industries, which have the highest potential for positive returns for the entire economy. When these innovations occur, the US government can actively support the development of new technologies in regional industry clusters, and facilitate the development of markets at the appropriate scale to turn research breakthroughs into commercial successes. While the US remains the leader in research and development investment, it has declined as percentage of GDP.⁴⁸ Other countries are making these investments, and the US must respond with decisive action.

National Competitiveness Strategy

The events of the great recession have demonstrated that we need to move past the notion that any government interference in the market is inherently negative. US policy makers should also avoid the misperception that the US should unnecessarily protect declining industries or bring back lower value added production to our shores. The globalization of production is a fact of the global economy, and the US should be actively developing the industries of the future. Government can and should have a role in providing the initial investment in basic research education, developing the infrastructure that facilitates the adoption of these innovations, and consciously facilitate the creation of markets for these innovations. To place our economy on a more sustainable path and maintain our competitive edge Congress should create a bi-partisan National Competitiveness Commission to address the deficiencies in our economy, and identify and promote those industries where American has the potential to lead.

This commission should function as such, that the suggestions it puts forth automatically receive an up and down vote in the legislature. By allowing the commission to function in this way, it could overcome the increasingly partisan nature of the legislative bodies in the current US political context. In this way we can channel investment efficiently into the correct industries and overcome wasteful spending on individual congressmen's parochial interests through earmarks. The financial crisis and current recession, and China's response thereto, has demonstrated the immediate need for concerted action to address the competitiveness of our national economy. A National Competitiveness Commission can function as a mechanism through which the US can make concrete first steps towards re-orienting the US economy onto a more sustainable path.

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Towards a New American Strategy

James Connelly

China's Challenge

The Great Recession of 2007-09 marks a shift in the political and economic balance of power between the US and China. The recession has exposed the weakness of America's financial and fiscal account position, while China's performance in the face of a drop off in world demand, particularly in its primary export markets in large developed economies, demonstrated a surprising resilience. The financial crisis that precipitated the recession has also shown a weakness in the prevailing neo-liberal free market wisdom that has been the dominant economic paradigm over the past 30 years, a paradigm centered on a belief that governments should get out of the economy and let the markets work unimpeded.¹

China's impressive economic performance, based on a model of state-led development – a Beijing Consensus as opposed to a Washington Consensus – has inspired a new confidence in China and a new assertiveness in global affairs. Developing countries now see China's development as an attractive model.² A more politically and economically powerful and assertive China will inevitably come into conflict with US national interests. China's confidence in its state-led export-driven economic model challenges the current global economic system based upon increasingly free trade and relatively limited government interference. How well the US adapts and responds to China's new economic position and rises to China's economic challenge will largely determine the future of American prosperity.

So far, Beijing's growing power and presence has not resulted in China becoming a more responsible stakeholder in global affairs. The obstructionism China displayed during the Copenhagen Climate Change Conference, and their refusal to support concerted UN action against Iran, demonstrates China's continuing reluctance to accept responsibilities

corresponding to their new global position.³ These events have also demonstrated China's even greater willingness to pursue matters perceived to be in its national interest in the face of international pressure.

Moreover, the global financial crisis and the subsequent recession itself is not only the result of the failure of the US system of deregulated financial markets to curb the excessive risk taking of US Homeowners and Wall Street Bankers, but is also a product of the large trade imbalance between the US and China. The US has been running a net international trade deficit every year since 1976, and as manufacturing shifted from East Asia and consolidated in China in the 1990's, China's portion of this deficit has increased. China's impressive economic growth over the past 30 years was achieved through an explicit export-led development. Throughout this development, the Chinese government held down the value of its currency and provided support and incentives to exporters while limiting imports and domestic consumption.⁴ The government retained these surpluses in order to continue holding down the value of the renminbi (RMB), and largely lent the surpluses back to the United States by buying US Treasury bonds. These purchases pushed down US interest rates and fueled a home building and consumer consumption boom, which precipitated the financial crisis.⁵

Concurrently, US economic growth over the past thirty years, and increasingly since the bursting of the Tech Bubble in 2000, has been largely predicated on an unprecedented rise in asset values, mostly home prices and stocks.⁶ The purchase of US bonds by countries running a trade surplus has helped the Federal Reserve keep interest rates low, which has encouraged Americans to expand their corporate, personal, and government debt. Among these countries buying bonds, China is the leader, now holding US obligations totaling 2.5 trillion.⁷ The US budget deficit is huge, about \$1.6 trillion in 2010 and prospects

of nearly \$9 trillion in deficits over the next decade due the increasing fiscal obligations of Social Security, Medicare and the rising costs of health care.⁸ However, it is unlikely that the Chinese could or would sell off their debt as many commentators fear.⁹ Selling it off would cause a decline in the value of the dollar, lower the value of China's remaining dollars holdings, as well as damage their export industries.¹⁰ Americans owe so much money that they couldn't be expected to pay it all back at once, and if they did it would severely damage the Chinese economy. Therefore we are locked in a relationship of mutual dependency: America the borrower and consumer, China the lender and producer.¹¹

China's response to the global recessions reflects a continuation of its undervalued currency and export-oriented policies that contributed to global imbalances in the first place. China's response also shows a disturbing trend to deviate from the overall policy followed since 1978, which increased liberalization and opened the economy to the outside world, to a more state directed model. As China's economy continues to grow, in part through the continuation and expansion of these market-distorting policies, and as the rate of US unemployment hovers around 10 percent, the specter of a strongly protectionist and antagonist response from the US Congress increases. Therefore, it is a critical moment to objectively analyze the Great Recession, China's response and its implication for continued American prosperity.

Chapter 1: Historical Background of China's Economic Growth

China has achieved a nearly 10 percent per annum growth over the past 30 years, raising more people out of poverty faster than any country to come before, and transforming the structure of the global capitalism.¹² On the one hand, this growth was based upon domestic economic reform, beginning with agriculture that transformed China from a completely collectivized system under Chairman Mao, into a vibrant although thoroughly complicated socialist-market economy today. While, on the other hand, this incredible growth can be attributed to China's connection to East Asian production networks that were centered around Japan and are now shifting their focus to China, networks driven by demand from US merchandisers and retailers.

Historical analysis of China's economic reforms

prove that domestic increase in productivity, mostly by moving farmers from low productivity agriculture to high productivity factory jobs has been a fundamental driver of economic growth.¹³ FDI and China's connection to the East Asian market has also played a role in building factories and transferring technological and managerial skills. As mentioned above, China has also benefited from its connection to an East Asian production network. This network began in the Cold War hothouse, as the US supported East Asian development as a bulwark against Chinese and Soviet aggression.¹⁴ Japan was the lead in this "flying geese model," and its surprising export-oriented success led to fears that Japan would overtake the US economy. However, with the Plaza Accord and a steep currency revaluation, as well as the bursting of a massive asset bubble Japan's economy flat-lined. US advances in computing technology using East Asian production networks for cheap labor also began to overcome the competitive advantages held by Japanese firms.

China's evolution into the final point of assembly in an East Asian division of labor helps to explain the US trade deficit with China. While China has a net trade surplus with the US it maintains a net deficit with the rest of East and Southeast Asia.¹⁵ China serves as processing platform for intermediate goods from across Asia. Furthermore, China's export oriented growth has come as the result of a retail revolution in America, that gave retailers great control over their manufacturers and suppliers, allowing them to force continuous decreases in prices that led suppliers, as well as the retailers, to set up shop in low wage East Asia.

The Asian Financial Crises redirected much of the foreign direct investment (FDI) flowing to other parts of Asia into China. China's stable state-owned banking sector was isolated from banks in Asian economies that were affected by the crisis, and stable currency made it an attractive destination for investors. Beijing capitalized on these trends by modifying its FDI policy and facilitating investment. While this globalization of production is a process that can be encouraged in some ways by some state-led policies, it is also a process that occurred independent of government control.¹⁶ Right now, China appears to enjoy a nearly insurmountable advantage in light and medium manufacturing and assembly, but the evolution of China's export-oriented growth demonstrates the mobility of capital and firm directed production networks. China appears poised

to maintain its comparative and competitive advantage in light manufacturing and some capital intensive goods, taking advantage of massive economies of scale, in the short-term,¹⁷ but if this advantage declines or the business environment in China becomes more hostile, production could shift again to lower wage sites, where government policy is more amenable to foreign investment.

China's performance during the Great Recession, when faced with a steep reduction in external demand, has demonstrated that China's large domestic market has become a significant source of strength. However, two-thirds of Chinese exports still originate from companies with direct investment by foreign firms.¹⁸ The Chinese economy remains dualistic, divided between, on the one hand, a large and growing internal market that is in many ways protected and isolated from the global marketplace through tariffs, government incentives, and state owned firms, and on the other hand, a free market export-oriented zone that takes full advantages of the globalization of production.

The story of China's economic growth, viewed through either the lens of domestic growth or the lens of China's intimate connection to international markets, has been the story of the triumph of an uneven but gradual transition from a completely state-run system to a market system, albeit with significant government intervention today.

Chapter 2: Introduction – The Crisis and its Immediate Effects

The roots of the global recession lie in global trading imbalances, which were fueled by China's export driven policies and its role as the center of an East Asian export-oriented production network. China's foreign currency reserves, the result of a net international trade surplus, mostly with the US, as well as trade surpluses from oil producing nations, produced a global savings glut. This savings glut was invested in the US financial system. Some of the money went directly to banks, and some of the money went into the government sponsored mortgage lenders, Fannie Mae and Freddie Mac. Mostly it was invested in US government bonds.¹⁹ The purchase of US bonds helped keep US interests rates low and fueled an expansion in US debt: From 1991 through 2006, the US budget deficit rose from roughly zero to 6.5 percent of US GDP, with 40 percent of the increase

coming after 2001.²⁰ The rapid expansion in the availability of credit, helped push up home prices and consumers took on increasing amounts of debt. The US financial sector also expanded, and earned record profits from rising asset values as well as channeling or intermediating money from foreign surplus into credit for American consumers and business.

Once these processes began, they gathered inertia and were mutually reinforcing. The US was intent on maintaining low interest rates, allowing a growth in asset prices, stock indexes, and consumer credit, while China was intent on increasing exports and accumulating surpluses. The fundamental instability of this system, while receiving warnings,²¹ remained unchallenged by either side. Why would they? China was becoming rich through export-oriented growth and US consumers were getting cheap goods and were able to maintain their lifestyle through an expansion in consumer credit.

This unsustainable growth ended, dramatically, with the bursting of the housing bubble in 2006. The collapse of housing market, revealed huge amounts of risky leverage on the books of the US financial firms, as well as the shadow banking industry, that were assumed to be "safe" investments. These revelations undermined confidence in the system, and banks suffered a sharp increase in the cost of borrowing.²² Analysts began to question the solvency of many large Wall Street firms burdened by massive leverage; leverage made possible through expansion in cheap credit as well as advances in hedging and concealing risk through esoteric financial derivatives.²³

Internationally integrated markets, firms, and investment portfolios, spread the contagion quickly across the developed economies of Europe and Japan. In September 2008, Lehman Brothers went bankrupt after a failed government intervention, and US financial institutions saw the short-term capital markets dry up; they had difficulty financing day-to-day operating expenses.²⁴ Central governments from the US to Germany responded with bailout programs and emergency funding in a desperate attempt to fend off another Great Depression. The financial crisis exposed the underlying vulnerability of our poorly regulated and globally interconnected financial system, and even staunch free market conservatives advocated the use of government funds to rescue banks. The events of 2008 were thus a de facto rejection of neo-liberal dogmatism and free

market fundamentalism.²⁵

The global financial crisis marked the “first outright contractions since the end of World War II”: global output declined by 1.5 percent in 2009.²⁶ Initially China’s leaders believed the Chinese economy would remain unaffected by the financial crisis; imports increased overall in 2008, and the government continued fighting inflation well into 2008.²⁷ However, in July and August of 2008 they began to feel pressure from a continuing world recession. While China registered a year-to-year 9 percent growth rate in 2008, this disguised an annualized quarter-to-quarter growth rate of 2.6 percent in the last quarter of 2008.²⁸ In 2009 Chinese business felt the drop off in global demand, with exports declining by 15 percent.²⁹ Export oriented industries in coastal regions around Guangdong, Zhejiang and Fujian province experienced even more severe declines. Export industries were hit hard, and 20 million of the 80 million foreign sector jobs evaporated in 2008.³⁰ While this export oriented growth model left China vulnerable to external drops in demand, strong capital controls, especially those governing outflows, prevented complete integration with the global system. Thus Chinese banks were not directly vulnerable to private sector investments and sub-prime US mortgage investments.³¹

Despite these macroeconomic shocks, China’s overall economy was not devastated, unemployed workers did not threaten the authority of the CCP, and growth rebounded. China’s strong fiscal standing, a result of a trend of low government deficits and a positive balance of trade, allowed the Chinese government to respond aggressively to a drop off in external demand.³² Growth exceeded the government target of 8 percent by 2009, despite the sluggish recovery of G3 (EU, Japan, and US) demand.³³ China’s effective response to the global recovery can be explained by: the massive stimulus package funded by a government sponsored increase in bank lending, and a continuation of the state-led export oriented growth – continuing the policy of artificially holding down the value of the Chinese currency. While effective in the short-term, these policies pose long-term macroeconomic risks as detailed in the discussion below.

Chapter 2, Section 2: The Stimulus Response

In November of 2008 Chinese premier Wen Jiabao announced a massive RMB 4 trillion (\$548 billion) stimulus package. This

package represented an opportunity to achieve the Chinese leaders stated goal of reorienting their economy away from an over-reliance on exports by strengthening their consumer markets, while continuing to upgrade the competitiveness of the export industries.³⁴ The largest portion of the stimulus was allocated to investments in transportations and power infrastructure, largely rail infrastructure. These investments led to increased output and employment in the short-term, and may pay off in the long-term by increasing industrial capacity and improving the mobility of labor and resources.³⁵ The stimulus also allocated funds for a “ten pillar” industrial re-invigoration plan to support key industries during the downturn, to upgrade into higher value-added production, to increase Chinese exporters competitive advantage,³⁶ as well as to strengthen the capacity of domestic firms to provide consumer goods to growing domestic market.³⁷ The plan also provided consumer subsidies with the dual goal of supporting key domestic industries as well as increasing domestic consumption.³⁸ Although a \$124 billion health insurance program represented a positive development in developing a consumer market, overall there was only a minor focus on social spending.

From the composition of the stimulus, we conclude that China is attempting to build a self-reliant economy by supporting key export industries, as well as by strengthening Chinese firms producing consumer goods with the goal of developing these companies so they can become competitive in the global market. However, it is not clear if the stimulus will accomplish the goal of rebalancing the Chinese economy; in fact, analysts have noted that the plan adds too much investment in infrastructure in an economy already over-invested in industry,³⁹ and does not include enough social spending for China to develop a consumption driven economy.⁴⁰

The short-term effectiveness of the stimulus has been impressive: in January of 2010 imports were up 40 percent from previous year, and trade recovered to 2008 levels.⁴¹ Subsidy programs increased consumption and Chinese car sales surpassed the US.⁴² However, this expansion of consumer spending on the back of increased subsidies, and without a serious focus on a necessary social safety net, is unlikely to decrease saving and create a broad based consumer culture.⁴³ Furthermore, the massive injection of liquidity to fund these projects poses some risks: overheating,

asset bubbles (particularly in real estate), and inflation. The emphasis of this stimulus funding on SOEs, at the expense of the private sector, represents a move towards increased state control in the market and poses some unclear future risks. Furthermore, the composition and results of the stimulus suggest that while it may be paying lip service to rebalancing its economy based upon domestic consumption, in practice the stimulus was more focused on building up the domestic industrial base through infrastructure and supporting key export industries to move up the value chain in global production. The Chinese stimulus was effective, but it entailed an aggressive increase in lending that may cause long-term problems such as persistent inefficient allocation of capital and a rise in non-performing loans (NPLs). It is unclear whether the stimulus will accomplish the goal of rebalancing the Chinese economy away from a over-reliance on exports towards more domestic oriented growth. If there is a continuation of China's export dependent growth it will likely continue to exacerbate global imbalances.

Chapter 2, Section 3: China's Banking Structure

The structure of the Chinese banking system poses some long-term risks and contributes to the inefficient allocation of capital. As explained in Chapter 2, Section 3 China's currency peg limits the ability of the central bank to control inflation through traditional monetary policy. The government cannot use interest rate adjustments to regulate the economy because increases in rates too far from foreign rates stimulate huge inflows of speculative "hot money" betting the RMB will appreciate. This behavior forces the Peoples Bank of China (PBoC) to use administrative tools, primarily credit quotas, window guidance, and changes to the deposit reserve requirement, that are blunt instruments compared to interest rate controls, and can lead to inefficient allocation of capital.⁴⁴

The stimulus was funded primarily through an expansion in bank lending implemented through this type of administrative push; the government lowered credit requirements and asked banks to increase lending.⁴⁵ These funds primarily flowed to political safe projects and SOEs, and loans were made under an implicit government guarantee. This increase in lending has exacerbated an inefficient allocation of capital to SOEs, and did little to relieve the private

sector small and medium sized enterprises (SMEs). While the government has responded effectively to the recession through monetary policy and increased bank lending, a rise in the number of non-performing loans (NPLs), and asset bubbles fueled by increases in liquidity pose uncertain long-term risks.

Chapter 2, Section 4: China's Currency Peg

China's currency peg is a major point of contention between the US and China, and many analysts argue China's artificial low currency is the root cause of the US massive trade imbalance with China.⁴⁶ However, US trade deficit with China must be understood as the result of the Chinese economy's historical development as an export processing center, not as simply bilateral deficits between the US and China. Much of US trade deficit with China can be traced to a transfer of industries and investment away from Asia's Newly Industrialized Economies (NIE), Hong Kong, Singapore, South Korea, and Taiwan, as well as Southeast Asia, especially after the Asian Financial Crisis in 1997. China now serves as the processing platform for intermediate inputs from the NIEs. Therefore, appreciating the RMB would not fully eliminate the US of its large net international trade deficits, because a large portion of these deficits would likely transfer back to other countries, especially countries in East and Southeast Asia and around the world that are competitive economically with China.

Furthermore, if there is a modest ten percent increase in the value of the RMB, China's exports have been demonstrated to have a negative elasticity to price, implying that export volumes from China would continue relatively unchanged.⁴⁷ A larger revaluation (some economists estimate China's currency is undervalued between 15-40 percent) would likely have a correspondingly larger effect on global imbalances as well as the US trade deficit with China.⁴⁸ However, global trade imbalances, as well as US trade deficit, should be understood as the result of a number of interrelated factors; lack of social safety net in China and the correspondingly high levels of saving and low levels of consumption, China's export oriented economic structure as platform for an Asian division of labor, as well as low rates of savings and high rates of consumption in the US. China's currency undervaluation is one facet of the complex evolution of these global imbalances. Most analysts agree the

RMB is undervalued, but a RMB appreciation alone will not fully correct US trade imbalances with China or the world. There must be more fundamental changes to the structure of the US economy.

Chapter 2, Section 4: China's Outbound Foreign Direct Investment

China's effective response to the global recession and its strong external position has also allowed it to take advantage of a global drop in prices to pursue a policy of foreign acquisitions. Historically Chinese outbound foreign direct investment (OFDI) was focused primarily on resource acquisition investment due to government concerns about resource security. However, increasingly, especially following the financial crisis, business and profits have also motivated China's OFDI strategy. These investments seek to absorb technology, gain international management experience, and access new markets through branding and marketing; in short, jump-start Chinese companies up the global value chain.

Chinese OFDI raises concerns in the US, especially when the investments lack transparency, and may be motivated by strategic government objectives, as opposed to purely profit motives. Innovation has been the fundamental driver of global growth in developed economies, especially in the United States; more precisely it is the spillovers from innovation through imitation into a localized industrial ecosystem that has brought the greatest economic benefit. Therefore a government directed policy of "technology transfer, for strategic political advantage," is a very real concern and, although it should not be overstated, a threat to US technological advantage.⁴⁹ Low returns on government bonds, as well as recent Chinese officials' comments about shifting from their dependence upon the dollar as their only global reserve, implies that there will be a gradual shift to real rather than nominal assets, increasing China's OFDI.⁵⁰

However, China's current policies and current OFDI composition implies that the threat is largely overstated. Chinese OFDI actually could represent an opportunity for needed investments in US companies, as well as integrating Chinese firms into the world economy. Rosen and Hanemann (2009) find that most OFDI decisions are driven by economic motives, and not strategic political considerations.⁵¹ While US companies should carefully weigh the benefits of trading

technology for the incredible opportunity of Chinese market access, more integration of Chinese firms into the international business environment can be helpful in mitigating their "home field advantage." Interaction over time could "make China less threatening to its economic partners."⁵²

Chapter 3: Challenges to China's Continued Economic Growth

Although China appears poised to continue its export oriented expansion, as well as building up its domestic economy, there are some important challenges to China's economic growth that lay ahead. China's effective response to the recession was predicated upon a massive increase in lending, which exacerbated an inefficient allocation of capital, and poses some future risk that could limit or slow China's growth. The most pressing of these risks is a possible housing bubble in both commercial real estate and high-end housing. Indicators point to a housing bubble, especially in major cities – prices in 2009 jumped 50-60 percent in Shanghai, 95 percent in Shenzhen.⁵³

Factors fueling this rise in real estate values include: limited access to other investment to Chinese citizens, lack of a property tax that reduces the holding cost and facilitates speculation, and spending from the stimulus package that is finding its way from SOEs into the property market.⁵⁴ Inflation worries encourage investors to buy property as a hedge against rising prices, while an expected currency appreciation has encouraged overseas Chinese to speculate on housing trends. Not only do they see prices on an upward trend, but they also expect higher returns when the RMB increases. In fact, real estate investment counted for 10 to 15 percent of FDI between 2006 and 2009.⁵⁵

Many analysts compare the growing real estate values in China, fueled by a massive expansion in credit, to the housing bubble in Japan in the 1980's that precipitated a recession and a "lost decade."⁵⁶ However, China's economy is not as mature as Japan's was at the time, and still has significant gains to be made by importing foreign technology and boosting productivity through migrations from farms to factories.⁵⁷ China will likely recover from the effects of a possible bursting housing bubble rather quickly compared to Japan in the 1990's because its potential growth rate is much higher.⁵⁸

A bursting housing bubble in China, is also unlikely to lead to China's selling of their US treasure bonds to recapitalize their banks as some commentators speculate.⁵⁹ As long as China wants to maintain the currency peg, it must continue the opposite position of the market and buy US bonds. Thus a substantial rise in nonperforming loans that necessitates a bailout would increase China's debt without directly harming the US.⁶⁰

Long-term sustainable growth will be predicated on the ability of China to move up the global value chain, generate a service sector, and increase domestic consumption. Hu Jintao at the end of 2009 stressed the need, to "[wean] the economy away from exports and towards service industries, and accelerate development in rural areas and promote more energy and resource efficient developments."⁶¹ Currently, China remains far too dependent upon capital investment (47 percent of GDP last year, higher than at any time in Japan, or any of the NIEs)⁶² and too little on consumption (consumption contributing only 36 percent to overall GDP the lowest percentage of any major economy in the world).⁶³ Re-orienting their economy away from its dependence on exports is essential, because as the global financial crisis has demonstrated, China is simply too large to rely on exports alone. The rest of the world will not be able to absorb China's exports indefinitely.

Furthermore, recent actions, by increasing funding to SOEs, as well as the development of a more hostile operating environment for foreign business within China, highlighted by Google's threatened pullout after a cyber-attack, and the arrest of two Rio Tinto mining executives, reinforce the notion that Beijing is not fully committed to promoting a mature developed economy.⁶⁴ More state-intervention in the market and greater restrictions placed on foreign firms competing in China's domestic economy is pushing companies to consider moving out of China.⁶⁵ Inefficient allocation of capital, lack of a social safety net, an un-enforced IPR regime, as well as limits on freedom of expression and transparency, will limit China's ability to create the mature economy that will foster innovative and competitive multinational companies.

Rapid development has brought about environmental destruction on an unprecedented scale. Concerns over energy, water scarcity, and the effects of airborne pollution threaten China's continued economic expansion, and represent huge future costs that China will eventually be forced to

pay. China's energy, resource, and capital-intensive heavy industrial development is pushing up against the limits of resource and environmental constraints, and inciting social unrest. China has been able to secure most of the energy resources necessary for its growing economy, but air pollution will continue to have important public health consequences. The coming water crisis on the North China plain poses the greatest unknown danger. The effects of global warming could further complicate this crisis.⁶⁶ Although there are some positive developments regarding China's environmental problems, notably China's huge investment in clean energy, the Chinese economy remains dependent on resource and environmental exploitation for growth, and the Chinese government continues to believe high growth is necessary for social stability.

The CCP must also handle a number of political conflicts, from ethnic violence in Xinjiang and Tibet to a huge disenfranchised migrant urban population. These conflicts will be exacerbated by an economic slowdown or an environmental disaster. So far Beijing, has weathered the great recession without the predicted unrest from unemployed urban populations or university grads.⁶⁷ In fact, in some ways the CCP has seized this moment of relative social stability to reassert its legitimacy and authority; recently Beijing has allowed intellectuals to re-identify with the party by allowing a measure of increased political freedom, but has firmly and publicly clamped down if this increased freedom leads to any overall question of the Chinese Communist Party's authority. The recent 11-year sentence handed down to democracy advocate, Liu Xiaobo, is an example of this new trend.⁶⁸

The paradox of the CCP's rule is that it relies on economic growth for maintaining social stability; yet this economic growth is based upon short-term gains – through exploitation of resources and the environment, increased social inequality, increased investment in the inefficient state sector, and an over reliance on export-oriented growth. And these short-term gains pose long-term challenges to continued economic growth and stability. Furthermore, China's clear movement away from western conceptions of greater political and economic liberalization, and a growing confidence on the world stage, challenges the current liberal economic world order that the US and other like minded powers have so carefully crafted.

Chapter 4: A New American Strategy for a Changing World

The financial crisis and the recession has not only damaged the neo-liberal economic paradigm espousing the reign of the free market, but has also demonstrated the inadequacy of our international economic institutions to diffuse the risk from global imbalances.⁶⁹ China's performance during the downturn demonstrates that this architecture no longer reflects the economic balance of power in the global economy. China is now the world's second largest economy; yet this standing is not reflected in the most important world economic institutions, namely the IMF and the World Bank. Furthermore, the financial crisis has demonstrated that America's current economic trajectory, based upon increasing amounts of credit given provided by foreign countries combined with a poorly regulated financial industry is unsustainable. Our ability to influence world events through sustained economic or military intervention, as well as make important domestic investment to re-orient our economy, is now limited by our larger and growing national debt.

This decline in US economic strength relative to China necessitates a new strategy, a strategy that recognizes that America's future lays in its ability to shape an international environment in which China is a prominent player. The US should give China a role in actively shaping key institutions, the IMF the World Banks and the WTO, and strengthening these institutions' roles and mandates. Robust institutions that include China can influence the course of its economic development. Strengthening these institutions' oversight and enforcement roles, as well as giving China more power over decision-making processes within these institutions, will necessarily involve ceding a measure of our authority. But this reduction of authority has the potential to foster robust institutions that promote our values of free trade, pluralism, and transparency, as well as promote a stable international environment. These reforms, by bringing other countries to the table, will place less of the burden of maintaining stability on Washington and more on Beijing and the multilateral institutions themselves. In order to make China a stakeholder in world affairs and international institutions, it must first be given a stake.

Furthermore, the great challenges facing our world, global climate change, preventing terrorism or the spread of

weapons of mass destruction, as well as maintaining global economic stability, require the cooperation of the world's two largest economies. China and America have a common interest in addressing these challenges. We must avoid a policy that treats China's growing economic and political strength as a threat and be willing to work together on critical issues. To accomplish this goal the US should place a renewed emphasis on the strategic economic dialogue that has been an effective forum for building trust and cooperation between our countries in the past. However, this forum should not be relied upon to correct issues on which China and the US have strongly divergent interests. Historically, pressuring China bilaterally on issues of disagreement, such as currency policy, have not only failed, but have also jeopardized cooperation on other matters. Make no mistake, however. This is not a policy of appeasement. Nor do we advocate ceding the stage to accommodate China's rise. America must continue to take actions to secure our national interest. It should, however, pick the correct forum for addressing these issues.

China has used the incredible expansion in government spending in response to the global recession to increase government interventions in the market, moving away from a gradual process of greater openness and liberalization that we document as the source of China's economic growth over the past thirty years. While effective in promoting development and growth in the short-term, increased state interventions in the market and maintenance of China's artificial lowered currency policy will pose long-term economic challenges and threaten global economic stability. Strategic engagement through critical multilateral institutions, as opposed to unilateral economic pressure through Congressional action, has the best chance of convincing Beijing leaders that it is in their interest to curb some of their short-term policies in the interest of long-term Chinese and global economic security.

The US has made progress in the past in addressing industrial policy, as well as some progress enforcing intellectual property rights through multilateral institutions like the WTO. The IMF, on the other had, has largely failed in its mission of maintaining monetary stability and fair-exchange rate policies.⁷⁰ US policy makers should bring China into multilateral organizations like the IMF as a larger voting member, to increase their stake and encourage them to follow institutional norms. The US should also press for

reforms of the IMF that strengthen its oversight role, and link IMF oversight of unfair currency practices to enforcement through the WTO.

China is using its increasing economic and political strength to gain influence in resource rich countries in Latin America, Africa, and Southeast Asia, and signing low quality bi-lateral trade deals that undermine the international economic system.⁷¹ America should respond to this growing influence by actively increasing economic ties to these regions as well and opening up multilateral trade agreements that seek to bring more countries into the global economic system. The US should also support closer ties and economic linkages between China and America's historically strong allies in Asia, Japan and Taiwan, thereby encouraging China's greater global economic integration and reducing the likelihood of conflict. By renewing America's soft power and bringing more countries into the global economy, as well as facilitating China's greater integration into the global economic system, America can build robust markets as well as a broad multilateral coalition that can encourage China to abide by international economic rules and global norms and curb some of its unfair trade practices.

Lastly, the US must avoid scapegoating China for its economic troubles. While it's clearly true that global imbalances are one of the underlying causes of the financial crisis, and China's currency policy was part of the problem, the US also bears responsibility. Not only were US consumers happy to purchase the cheap goods provide by China, they were also happy to maintain their standard of living through China's, and other trade surplus countries' massive loans. Congressional action to force China to revalue its currency is not only unlikely to force China's hand if China perceives it to be against its national interest, but as argued above such actions may also endangers a critical relationship. It would likely be more effective, as well as less risky, for the US to pursue issues of contention through a renewed focus on multilateral institutions. China's 'beggar thy neighbor' currency policy does not only hurt the US, but it is even more damaging to developing countries, particularly those engaged in export-led development in competition with China. A broader coalition coordinated through multilateral institutions is much more likely to encourage China to modify its exchange rate policy than rhetoric or protectionism.

US trade imbalances are based upon the historical

development of China as an export platform for the rest of East Asia, and a revaluation in China would likely lead to the transfer of US current account deficit to competing economies in Asia and around the world. A more fundamental re-structure of our economy is needed to address our massive trade deficits. Much of our low-value added manufacturing was shipped overseas beginning in the 1980's with the reorganization of the supply chains of the largest American retailers and merchandisers. Instead of upgrading the American economy into higher value-added industries, we were content to profit from rising asset values and from the intermediation of increasing amounts money from foreign surpluses to the US consumer through an expansion in our financial sector. In fact, "as manufacturing declined from 21 percent of GDP in 1980 to 14 percent in 2002, finance grew to fill the gap – exactly".⁷² Top college graduates who could have been leading the industries of the future entered the financial sector instead, where they "innovated" new financial products like financial derivatives and mortgage backed securities that turned out too have disastrous consequences. The financial crisis has demonstrated the flaws in America's recent mode of economic growth predicated on the ever-increasing availability foreign credit and a poorly regulated financial system.

Even if the US pursues all the above policies, it is still possible that China may not willingly become a responsible stakeholder in international affairs, or work with international economic institutions and within global norms. In the end, it is really only the US economic trajectory that American policy makers control. Therefore Congress must view the crisis as a critical opportunity to place the US economy on a more sustainable path to ensure America has the continued economic influence to shape the international environment of the future. The global recession and China's response should be a wakeup call that US must do more to renew our economy and build upon our strengths. Policy makers must invest in America's capacity to innovate and lead the economy of the future. While we see some progress being made by the Obama Administration to start addressing US long-term deficits, promote exports, and invest in basic research, clean tech, and infrastructure projects like high-speed rail and a smart-energy grid.⁷³ These efforts are largely un-coordinated, and in the case of the stimulus package full of parochial interests. To streamline America's increasingly fractured political system

and overcome partisan ideological divides Congress should create a bi-partisan national competitiveness commission with the power to force up or down votes on critical economic reforms.⁷⁴ China is already threatening America's position as a leader in green technology and is investing heavily in research, as well as supporting the upgrading of its industrial and manufacturing capacity; these efforts demand swift and decisive action from the US. The US must develop a national competitiveness strategy to address the failures of the current economic system and take advantage of opportunities in the future.

Through a renewal of our technological, innovative, and economic strength America can rise to China's economic challenge and continue to influence a stable and robust international order and ensure our nation's future prosperity.

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