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**JAPAN'S WAR ECONOMY AND THE US  
STRATEGY OF BOMBARDMENT AND  
NAVAL BLOCKAGE**

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TERM PAPER

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**JAPAN'S WAR ECONOMY AND THE U.S. STRATEGY  
OF BOMBARDMENT AND NAVAL BLOCKAGE**

The use of atomic bombs on Hiroshima and Nagasaki has been one of the most controversial issues in the American history. Historians have different ideas whether it was needed to be used and what were the alternatives to atomic bombs. Right after the end of the war, orthodox view of historians who were involved in the decision-process of using the atomic bomb tried to justify their decision claiming that the atomic weapon was no different from any other conventional weapon; it saved millions of American soldiers which would have been lost in case of an invasion of Japan; it put an early end to the war and the decision not to use the bomb would have been indefensible to the American people.<sup>1</sup> Revisionist view of historians, on the other hand, claim that it was used for political reasons rather than military ones because the U.S. wanted to intimidate the Soviet Union with its new devastating weapon. The third school of historians think the Japanese emperor was responsible for the A-bombs because he did not bring about surrender earlier even though he could have done. The fourth group assert that the unconditional surrender policy resulted in unconditional resistance, which led to the use of A-bombs. Among all these interpretations except for the orthodox historians, on the other hand, some evaluate the issue of using A-bombs from morality and humane perspectives and emphasize that the alternatives to use A-bombs such as clarifying the Potsdam Declaration, waiting for the Soviet entry to the war, demonstration of bombs in a remote place and naval blockade and conventional bombing were not given a detailed thought at all.

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<sup>1</sup> Kenneth B. Pyle, "Hiroshima and the Historians: History as Relative Truth," *Asia-Pacific Review*, Vol. 22, No. 2, (2015), p. 20.

This paper aims to focus on the strategy of naval blockade and conventional bombing of Japanese cities. Through the end of the war, Japanese economy was in shreds, people were starving and there was a lack of oil, rice, medicine and other crucial materials. Considering all the economic, political, sociological and psychological situation through the end of the war, this paper asserts that pummeling and strangling Japan with bombardment and blockade could have pushed Japan to surrender without the use of A-bombs. Although there is no guarantee for the time of surrender, postwar documents show that Japan had food only enough for a few days and people had already started to die of starvation. If the war had continued more, there would have been an internal upheaval with a high probability, which would push the emperor to end the war.

The question is if the U.S. had not used the atomic bombs, would Japan have surrendered before November or would this strategy have prolonged the war? There is no one certain and clear answer to this question but there is only one thing that we are sure about: the strategy of bombardment and naval blockade was not thought throughly by American leaders when the A-bomb was available. This paper will look for answers to those questions by examining the Japan's war economy and the worsening situation in the country. In the first part of the paper, war preparations, economic mobilization and fundamental materials of the war economy will be discussed. In the second part, the strategy of bombardment and blockade from June to August, and the worsening domestic situation will be touched upon. In the final part, dropping A-bombs on Hiroshima and Nagasaki, the Soviet entry to the war and psychological and sociological despair among Japanese civilians will be explained and the question what would have happened if the A-bombs were not used will be answered.

Before talking about how things escalated and led Japan to enter the war, it will be beneficial to explain the economic background before and during the war time. From the early 1920s to the end of the Pacific War, the Japanese economy can be divided into three parts: economic depression from the 1920s to 1931, economic recovery and heavy industrialization from 1932 to 1937 and total war deployment and collapse from 1938 to 1945.<sup>2</sup>

During the First World War, Japanese companies controlled a substantial portion of the East Asian markets because the U.S. and European countries had to withdraw from those markets in order to focus on winning the war. Japan enjoyed the economic advantages of the war as a non-combatant country. Japanese exports increased from 600 million yen in 1914 to 2,200 million yen in 1919 while the value of Japan's industrial production increased five-fold, reaching 6.5 billion yen in the same time period.<sup>3</sup> The boom of Japanese economy, however, came to a halt when the war was over. Various economic problems started to emerge from the beginning of the 1920s and the great Kantō earthquake in 1923, the Shōwa financial crisis in 1927 and the world economic depression in 1929 added to the economic problems of Japan.<sup>4</sup> While the capitalist system of the Western countries started to crack and lose its charm, the planned economy of the Soviet Union seemed attractive to intellectuals across the world. Likewise, in the 1930s, Japan started to think that a planned economy was better a liberal free-market economy because of 1) the influence of Marxism; 2) the economic success of the Soviet Union; 3) the Shōwa Depression; 4) the common belief that deflation was exacerbated by excess

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<sup>2</sup> Kōzō Yamamura, The Economic Emergence of Modern Japan, (Cambridge, UK; New York: Cambridge University Press, 1997), p. 116.

<sup>3</sup> Hidemasa Morikawa, Zaibatsu : The Rise and Fall of Family Enterprise Groups in Japan, (Tokyo: University of Tokyo Press, 1992), p. 123.

<sup>4</sup> Erich Pauer, Japan's War Economy, (Routledge Studies in the Growth Economies of Asia; 21. London; New York: Routledge, 1999), p. 1.

competition; and 5) a loss of faith in politicians and political parties.<sup>5</sup> Thus, the idea of the a “national defense state” (*kokubō kokka*) was developed by military planners in the 1930s<sup>6</sup> and Japan started to shift from economic liberalism to a planned economy under government control.

While the idea of planned economy was gaining support among the Japanese public, the political parties in the country held two opposing positions on this issue. The two main policies of the *Seiyukai* Party, which was established in 1900, was based on 1) fiscal activism through public investment and industrial infrastructure; and 2) acceptance of military expansion while the *Minsei* Party supported 1) a free economy with minimum government interference; 2) return to prewar gold parity; and 3) peaceful cooperation with other countries especially with the U.S..<sup>7</sup> When people became disappointed with the economic policies of the *Minsei* Party, the *Seiyukai* was able to take office on December 13, 1931.<sup>8</sup> Finance Minister Korekiyo Takahashi of the *Seiyukai* carried out economic policies which put the Japanese economy on the road to recovery.<sup>9</sup> In 1934, Takahashi wanted to tighten the budget due to fiscal pressure but the army and navy continued to demand more military spending and when Takahashi resisted, he was assassinated by a military group on February, 26, 1936.<sup>10</sup> The newly formed cabinet under the Prime Minister Kōki Hirota was dominated by the military; therefore, instead of fighting against the military, Finance Minister Baba Eiichi chose to cooperate with it by approving large scale armament

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<sup>5</sup> Kenichi Ōno, The Economic Development of Japan: The Path Travelled by Japan as a Developing Country, (Tokyo: GRIPS Development Forum, 2006), p. 128.

<sup>6</sup> Pauer, Japan's War Economy, p. 3.

<sup>7</sup> Ōno, The Economic Development of Japan: The Path Travelled by Japan as a Developing Country, p. 130.

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid.*, p. 131.

<sup>10</sup> Yamamura, The Economic Emergence of Modern Japan, p. 141-42.

expansion plans for the army and the navy.<sup>11</sup> The Japanese economy was getting away from rationality.

Japan gradually came to be dominated by military officers in the Japanese Imperial Army and Navy. Any semblance of civilian control further deteriorated when the Second Sino-Japanese War broke out on July 7, 1937. Initially, Japanese and Chinese troops engaged in a relatively small skirmish at the Marco Polo Bridge near Beijing, but Japan decided to send more troops to China which transformed the fighting into a full-scale war that continued into August of 1945.<sup>12</sup> The outbreak of the Second Sino-Japanese War transformed Japan's post-depression economy into a full-blown wartime economy. Furthermore, looking at the military movements of Nazi Germany and fascist Italy in Europe, Japan anticipated that there would be another world war soon so it mobilized all of its material and human resources to win the current war with China and prepare for a possible war with the U.S..

According to some historians, Japan crossed the threshold of "no return from total war" when it invaded Manchuria in 1931 because it violated the so-called "Open Door Policy" which the major Western Powers had established for China.<sup>13</sup> However, the real economic transformation towards war occurred with the outbreak of the Second Sino-Japanese War in 1937 because military expenditures during the first three months of the war reached a record high 2.5 billion yen, which was almost equal to the 1937 national budget.<sup>14</sup> For this reason, new laws and

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<sup>11</sup> Yamamura, *The Economic Emergence of Modern Japan*, p. 142.

<sup>12</sup> Ōno, *The Economic Development of Japan: The Path Travelled by Japan as a Developing Country*, p. 135.

<sup>13</sup> Kenichi Ōno, *The Economic Development of Japan: The Path Travelled by Japan as a Developing Country*, (Tokyo: GRIPS Development Forum, 2006), p. 135.

<sup>14</sup> Yamamura, *The Economic Emergence of Modern Japan*, p. 146.

measures were necessary to control and mobilize people, natural resources, and the economy. For example, in 1937 the Planning Board was founded directly under the Prime Minister to execute policies for wartime resource mobilization and the best bureaucrats from various ministries were chosen for this purpose. In 1938, Japan's first major economic plans – the Resource Mobilization Plan and the National Mobilization Law – were issued. In 1940, in the wake of German victories in Europe, Japan felt the need to establish a strong, one-party political system. Therefore, the government dissolved the existing political parties and founded *Taisei Yokusankai* (The Society for Humbly Supporting Great Politics) to mobilize people. In 1943, the Military Needs Company Act was issued to place designated companies under state control thereby allowing the government to oversee and influence top management and production plans of those companies.<sup>15</sup> Apart from these comprehensive laws, some special laws covering the synthetic oil, iron machine tools, aircraft-manufacturing, shipbuilding, aluminum and light metals, organic chemicals and heavy machinery industries were issued from the early 1930s to the end of the war.<sup>16</sup> With these laws, the government aimed to control manufacturing and distribution activities of the companies to be able to boost the production as a preparation for a total war.

During the process of heavy machinery development, the government executed a strict control on key industries such as steel, gold mining, coal mining, oil, ammonium sulfate, soda, coal liquefaction, electric power, automobile transport and air transport.<sup>17</sup> Thus, the Japanese economy was rapidly transformed into a wartime controlled economy. The main purpose of the

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<sup>15</sup> Ōno, *The Economic Development of Japan: The Path Travelled by Japan as a Developing Country*, p. 136.

<sup>16</sup> Yamamura, *The Economic Emergence of Modern Japan*, p. 116.

<sup>17</sup> *Ibid*, p. 140.

government was to maximize military products such as ships and warplanes with limited resources and raw materials. Therefore, light industries such as textiles industry were strongly suppressed or completely eliminated to channel resources and labor force to heavy industries, therefore, many Japanese had to live without new clothes and footwear.<sup>18</sup>

With each passing day, however, it became more difficult to reach raw materials and energy because the resources located in the “Yen Bloc” (including Korea, Taiwan, Manchuria and some other occupied territories of China) were not sufficient to maximize the military output of Japan and trading with other countries was not an option anymore.<sup>19</sup> Therefore, the Japanese army started to invade other territories in Southeast Asia beginning with French Indochina. This aggressive military act of Japan caused the U.S. to impose oil embargo on Japan and freeze its assets since the U.S. knew that Japan could not survive long without importing oil and reducing its economic power would keep it out of the imminent war. Once Japan, whose petroleum reserves were only enough to fight a war for two years, could not persuade the U.S. to lift its embargo via diplomatic ways, it attacked on Pearl Harbor on December 7, 1941. Instead of losing its status and dignity by accepting the terms offered by the U.S., Japan chose to get in war with it even though it knew that the U.S. was so much more powerful than Japan. “War with the United States was not chosen. The decision for war was rather forced by the desire to avoid the more terrible of losing status or abandoning the national objectives.”<sup>20</sup> Japan did not know how to fight against the U.S. but it was encouraged by the victories of Nazi Germany in Europe and

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<sup>18</sup> Ōno, The Economic Development of Japan: The Path Travelled by Japan as a Developing Country, p. 137.

<sup>19</sup> *Ibid*, p. 138.

<sup>20</sup> Kenneth B. Pyle, Japan Rising : The Resurgence of Japanese Power and Purpose, (Century Foundation Book. New York: Public Affairs, 2007), p. 65.



believed in the superiority of the totalitarianism of Japan, Germany and the USSR over American capitalism and individualism.<sup>21</sup>

When the Pacific War began in 1941, Japan was behind its wartime economic mobilization because its early military success exceeded expectations, which is why the Japanese leaders were late to grasp the necessity of all-out economic mobilization.<sup>22</sup> However, when the U.S. started to attack Japan, the Japanese government realized that they urgently needed to mass-produce aircrafts and ships. Therefore, the government established many small and medium

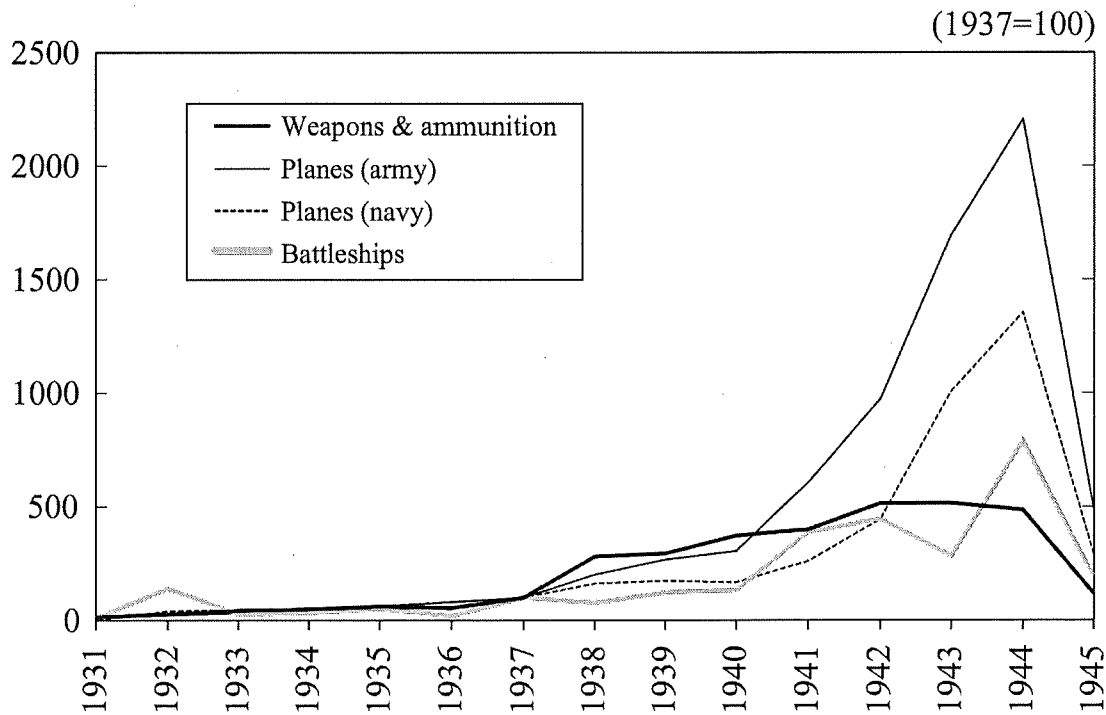


Table-1: Production of Military Goods<sup>23</sup>

<sup>21</sup> Ōno, *The Economic Development of Japan: The Path Travelled by Japan as a Developing Country*, p. 138.

<sup>22</sup> Yamamura, *The Economic Emergence of Modern Japan*, p. 153.

<sup>23</sup> Ōno, *The Economic Development of Japan: The Path Travelled by Japan as a Developing Country*, p. 137.

scale furnaces in Korea, Manchukuo and China to increase steel production but they did not meet the expectation.<sup>24</sup> While the war situation was getting worse in Japan by October 1943, the government thought that increasing the production of aircraft, steel, ships, aluminum and coal would determine the fate of the war.<sup>25</sup> There was a shortage of raw materials so the government collected city street car rails, the handrails of bridges and the bells in Buddhist temples to deal with shortages of metal materials.<sup>26</sup>

In 1943, the shipbuilding industry was achieving good results in shipbuilding because all the iron ore in hands was used to build only ships and those ships were used to import more iron ore.<sup>27</sup> Again in 1943, a Ministry of Munitions was established to increase munitions production; key companies were designated as munitions companies; managers were given titles as government officials; employees were not allowed to quit their jobs without permission; and the companies were supposed to increase their production in accordance with instructions coming from the government.<sup>28</sup> As seen in Table-1, there was a steep increase in the production of weapons and ammunitions, planes and battleships starting from 1941 and the point where the production reached its peak was through the end of 1944. After this year, a drastic decrease was observed because Japan could not reach raw materials, factories were damaged and transporting goods within the country became more difficult due to the bombing of the U.S. air forces. In other words, Japan did not have enough power left to resist against the U.S. through the end of

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<sup>24</sup> Ōno, The Economic Development of Japan: The Path Travelled by Japan as a Developing Country, p. 155.

<sup>25</sup> Takafusa Nakamura, "The Japanese War Economy as a 'Planned Economy'", in Erich Pauer ,(ed.), Japan's War Economy (London: Routledge, 1999), p. 19.

<sup>26</sup> Yamamura, The Economic Emergence of Modern Japan, p. 155.

<sup>27</sup> *Ibid.*

<sup>28</sup> *Ibid.*

1944. Additionally, the government so much focused on increasing the production of munitions that it neglected the production of consumer goods such as food and clothing which caused catastrophic results in later years. For instance, textiles factories were shut down and their machinery was used as scrap iron for the production of munitions so there was a sharp decrease in the production of consumer goods through the end of the war years (Table-2).

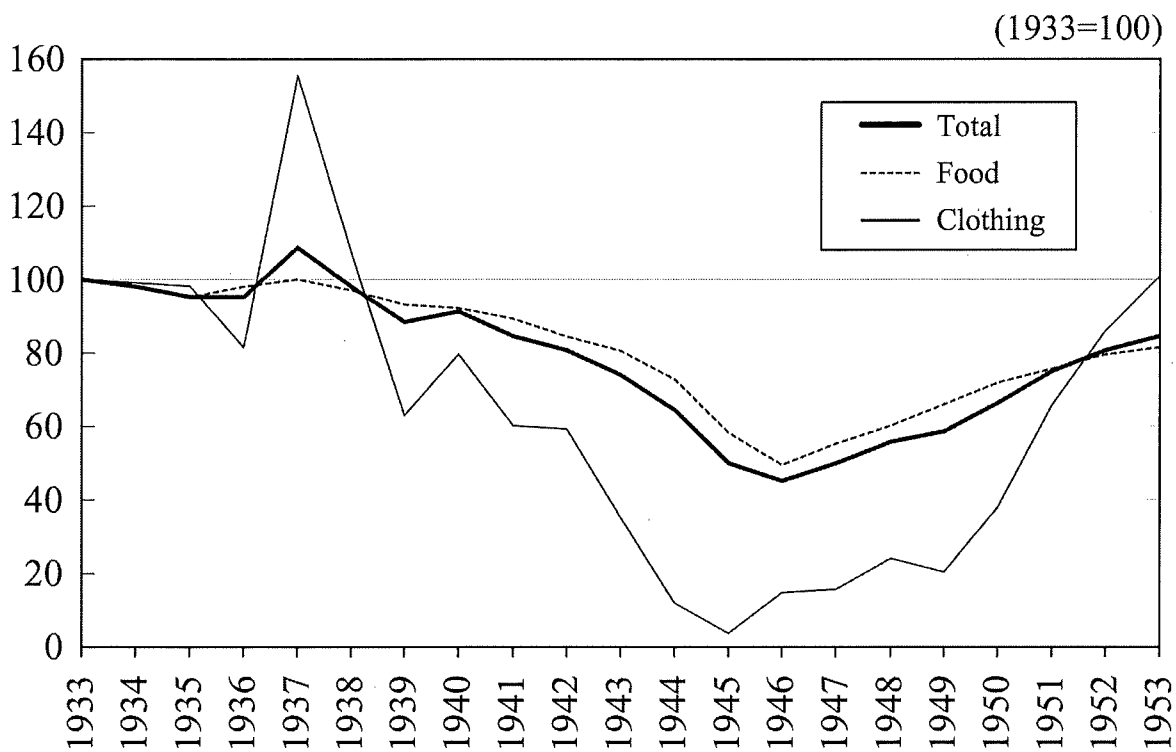


Table-2: Production of Consumer Goods<sup>29</sup>

The shortage of labor force was another severe problem. 2.4 million out of nearly 80 million Japanese were conscripted into military service by the end of 1941 and this number reached to 7.2 million by August 1945.<sup>30</sup> To deal with the labor shortage, young men in working

<sup>29</sup> Ōno, *The Economic Development of Japan: The Path Travelled by Japan as a Developing Country*, p. 138.

<sup>30</sup> Yamamura, *The Economic Emergence of Modern Japan*, p. 155.

consumer goods were conscripted and mobilized to work in factories and mines and after 1944, even students from the middle-school up were forced to suspend their studies and work in munitions.<sup>31</sup> A first-year high school student at Takasaki Commercial School, Nagai Kenji (16), who was forced to work in Nakajima Aircraft's Koizumi plant and stay in the plant hostel in 1944, described the situation as follows:

When there was a larger helping [of food] it would be a "lucky day," when we were out of luck it would be a "bad day." The rice of course was not the white rice that we eat today. At first, the rice was mixed with dried sweet potato, soybeans, dried noodles, or sorghum, but over time, the difference between the amounts gradually decreased, and eventually it was reversed, so that the main portion consisted of sweet potato, soybeans, dried noodles, sorghum, o maize, with only a tiny amount of rice mixed in. On top of that, the quantity was unimaginably small. Once breakfast was over, we started thinking about lunch, and once we had finished lunch, we were immediately ready for dinner... [the plumper members of the group] were especially tragic. When the meal was over, they would look unhappy and suggest that it would be better if lunch and dinner were served at the same time.<sup>32</sup>

There is another perspective to the close relationship between the government, military and the private industry because family-owned big conglomerates known as *zaibatsu* played a significant role in the Japanese military aggression. The structures of Japanese *zaibatsu* conglomerates and powers of *zaibatsu* families changed with the arrival of the total war mobilization. While the Japanese Imperial Army was running wild in the Pacific Ocean and Asia, the *zaibatsu* companies were operating as if they had been an arm of the military and they were providing the necessary ships, aircrafts, equipment and finance to maintain the war. The war-oriented economy and military directives were the major powers behind the war.

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<sup>31</sup> Yamamura, The Economic Emergence of Modern Japan, p. 155.

<sup>32</sup> Nakamura Takafusa, Lectures on Modern Japanese Economic History : 1926-1994, (Tokyo: LTCB International Library Foundation, 1994), p. 121.

The *zaibatsu* companies focused on heavy industries, foreign trade and banking. “From 1914 to 1929, the three *zaibatsu* of Mitsui, Mitsubishi, and Sumitomo possessed twenty-eight percent of the total assets of the top one hundred companies in Japan. In 1945, these three complexes possessed 22.9 percent of the total assets of all Japanese stock companies.”<sup>33</sup> As a result of the solid business results during World War I, those companies managed to increase their capitals and entered into new industries by incorporating numerous subsidiaries.

The *zaibatsu* companies partnered with the Japanese military while it invaded Manchuria in 1931 and this incident was a turning point in this close relationship between *zaibatsu* and the Japanese military government. Because when Manchuria was invaded in September 1931, the Japanese army introduced the concept of a planned economy; thus, the region became an experimental area for Japan.<sup>34</sup> Observing this planned economy achieving success in Manchuria, the government decided to apply the same model in the whole of Japan by increasing expenses on the growth of certain industries, such as the automobile, refinery, machine, shipbuilding and aircraft.<sup>35</sup> To carry out the planned priorities, the government increased its control on industrial production, investment level and structure, profit allocation, and foreign trade.<sup>36</sup> Then, Japan invaded Inner China in 1937, attacked Pearl Harbor in December 1941, and invaded the Philippines, French Indonesia, Malaysia, Singapore, Thailand, Burma and Indonesia in 1942.<sup>37</sup>

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<sup>33</sup> Andrew H. Thorson and Frank Siegfanz, “The 1997 Deregulation of Japan's Holding Companies,” *Pacific Rim Law & Policy Journal*, Vol. 8, No. 2, (1999), p. 269.

<sup>34</sup> Jerzy Grabowiecki, Keiretsu Groups: Their Role in the Japanese Economy and a Reference Point (or Paradigm) for Other Countries, (Chiba-shi, Chiba, Japan: Institute of Developing Economies, Japan External Trade Organization, 2006), p. 16.

<sup>35</sup> *Ibid.*

<sup>36</sup> *Ibid.*, p. 17.

<sup>37</sup> Eleanor M. Hadley and Patricia Hagan Kuwayama, Memoir of a Trustbuster : A Lifelong Adventure with Japan, (Honolulu: University of Hawai'i Press, 2003), p. 53.

Starting with the invasion of Manchuria, the Japanese government believed the country needed to expand its production to be able to strengthen the national defense; thus, the *zaibatsu* expansion and the issue of national defense became intertwined, which increased the power of *zaibatsu* in government affairs. Thanks to their hand-in-glove relationships with the government and army during the war mobilization, the *zaibatsu* companies witnessed a rapid growth and became heavily involved in the development of strategic industries such as heavy industry, chemical industry, financing and banking. The *zaibatsu* companies increased their power so rapidly from the mid-war period to the World War II that only 14 *zaibatsu* were controlling nearly more than half of the all strategic industries in Japan by 1947.<sup>38</sup>

The close relationship among the government, the military and the *zaibatsu* as well as the strict control over economy and planned food distribution looked very profitable in the first years of the war because Japan was able to continue the war with its limited resources. To achieve this, “Japan had to allocate materials and funds to munitions production and reduce the production of consumer goods and commercial activities, conscript labor into the military industry, and to lower the standard of living to a subsistence level.”<sup>39</sup> However, the entire system started to fail and cause terrifying results such as food shortages and the rise of a black market through the end of the war years.

Japan lost four of its key aircraft carriers during the Battle of Midway in June 1942, until which it thought it was winning the war and after this battle, Japan was forced into a defensive

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<sup>38</sup> Mitsubishi Keizai Kenkyūjo, Mitsui-Mitsubishi-Sumitomo, Present Status of the Former Zaibatsu Enterprises, (Tokyo: Mitsubishi Economic Research Institute, 1955), p. 11.

<sup>39</sup> Takafusa, “The Japanese War Economy as a ‘Planned Economy,’” p. 20.

position for the rest of the war.<sup>40</sup> It lost a lot more ships and aircrafts with the U.S. bombings and marine attacks than it anticipated. Japan lost 2,070,000 tons and 4,110,000 tons of merchant fleet in 1943 and 1944, respectively.<sup>41</sup> The number of the newly produced ships was far below the number of ships lost in the war (Table-3). Therefore, Japan had only 1,500,000 tons of merchant fleet by the end of war, which was less than one-fourth of the prewar fleet and Japanese economist Nakamura Takafusa says this was the biggest economic miscalculation of the Pacific War.<sup>42</sup> Because when the ships were sent under waters or became unusable, transportation got a severe blow, which was like the beginning of the end for Japan.

	<b>New Ships Built</b>	<b>Losses During the Year</b>	<b>Fleet at Year-End</b>
<b>December 1941</b>	44	52	6,376
<b>1942</b>	662	1,096	5,942
<b>1943</b>	1,067	2,066	4,944
<b>1944</b>	1,735	4,115	2,564
<b>August 1945</b>	465	1,502	1,527

Table-3: Depletion of Merchant Marine (in thousand tons)<sup>43</sup>

In June 1944, the U.S. forces landed in Saipan in the Marianas and it became possible for the U.S. to bomb Japanese cities with B29 airplanes. With the loss of the Marianas, the closing of southern shipping routes and loss of tons of ships and aircrafts, the Japanese government

<sup>40</sup> Takafusa, Lectures on Modern Japanese Economic History : 1926-1994, p. 114.

<sup>41</sup> *Ibid.*

<sup>42</sup> *Ibid.*

<sup>43</sup> *Ibid*, p. 113.

understood that the defeat was close, which could be seen from the report prepared by officials of the Munitions Ministry and sent to the Supreme War Council in August 1944.<sup>44</sup>

Since the outbreak of the Great East Asian war, the material strength of our nation has declined with each successive year owing to depletion of reserves and supply sources. Damage to shipping, chiefly from enemy submarines, has been far greater than anticipated just prior to the war and has far outstripped the volume of vessels built. Not only has the number of ships in our possession rapidly dwindled, but the successive conscription of vessels for A- and B- (army and navy) use has cut sharply into C- (merchant) use shipping capacity. Thus, although we have met growing military demands the sacrifice of the civilian sector and under the present situation are able in general to secure supplies of major foodstuffs, the situation is one in which other industries have been forced to reduce or shut down operations across the board, and even in munitions production, which constitutes our highest priority, there has undeniably been a declining trend since the peak at the beginning of fiscal 1944. The momentum is such that it will be increasingly difficult to maintain the national standard of living at present levels. In other words, at the end of fiscal 1944, in the fourth year of the war, we recognize that our national resilience has been lost.<sup>45</sup>

As seen, both the government and the military officials were well aware that they had already lost the war. By the beginning of 1945, most of the oil refineries were out of oil and the alumina plants out of bauxite, the steel mills lacking out of ore and coke and the munitions factories had low levels of steel and aluminum.<sup>46</sup> In other words, before the U.S. started its air raid campaign from March to August 1945, Japan's war-making power had already started to collapse.

In 1945, the U.S. Army Air Forces started to bomb Japanese cities heavily starting from 1945 but the strategic points such as railways, ports and munitions could not be demolished completely. On January 7, 1945, General Curtis LeMay became the leader of XXI Bomber

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<sup>44</sup> Takafusa, Lectures on Modern Japanese Economic History : 1926-1994, p. 114.

<sup>45</sup> *Ibid*, p. 115.

<sup>46</sup> Jerome B. Cohen, Japan's Economy in War and Reconstruction, (Minneapolis: University of Minnesota Press, 1949), p. 107.



Command and made four significant changes in the bombing strategy of the air forces: 1) the bombers would fly at low altitudes; 2) they would fly and bomb their targets individually instead of flying in formation; 3) they would carry no armament; and 4) they would fly at night to be able to escape from radars.<sup>47</sup> Thus, fire bombings became much more destructive. The U.S. started to pummel and strangle over tens of Japanese cities from June to August.<sup>48</sup> During those air raids, thousands of people were killed, hundreds of factories were demolished and tens of strategic transportation points were harmed. Transporting food to major cities through railways started to become difficult. American scholar Jerome Cohen also says “Japan’s economy was destroyed twice over, once by cutting off of imports and secondly by air attack.”<sup>49</sup>

Food shortage hit so low by 1945 that the Foreign Ministry urged that “the last shipping space should be set aside to the greatest possible extent for the importation salt, cereals and soy bean, abandoning the former principle of having as the main import items iron ore, coal, pig iron and other non-ferrous metals.”<sup>50</sup> Japan prioritized the production of munitions, ships and aircrafts to the extreme levels and ignored the daily needs of its own people; thus, people who had already been dealing with hunger since the beginning of the war started to suffer from starvation because the availability of everyday commodities was reduced each passing day (Table-4).

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<sup>47</sup> Leon V. Sigal, Fighting to a Finish : The Politics of War Termination in the United States and Japan, 1945, (Ithaca: Cornell University Press, 1988), p.172.

<sup>48</sup> Richard B. Frank, Downfall : The End of the Imperial Japanese Empire, (New York: Random House, 1999), p. 150.

<sup>49</sup> Cohen, Japan’s Economy in War and Reconstruction, p. 107.

<sup>50</sup> *Ibid.*

	1941	July 1945		1937	July 1945
<b>Rice</b>	11.74 million kg	9.42 million kg	<b>Cotton textile goods</b>	100	2%
<b>Meat</b>	100	20%	<b>Woolen textile goods</b>	100	1%
<b>Fish</b>	100	30%	<b>Workman's light boots</b>	100	10%
<b>Condiments</b>	100	50% or less	<b>Soap</b>	100	4%
			<b>Paper</b>	100	8%

Table-4: Availability of Everyday Commodities<sup>51</sup>

When the war started in 1941, an average Japanese consumed nearly 2,000 calories daily, which was 6.4 percent above subsistence level but this figure dropped to 1,680 calories daily by 1945.<sup>52</sup> There was a shortfall of 40 percent in harvest in 1945 because of adverse weather, manpower shortages, insufficient tools and a decrease in the production of fertilizer.<sup>53</sup> Malnutrition caused tuberculosis, beriberi and digestive, skin and vitamin-related diseases to increase among people. For example, 30 percent of the workers at the Mitsubishi glass factory in Tsurumi was suffering from beriberi in 1945 and food shortages were hindering the war effort because people were taking time off to look for food in the countryside.<sup>54</sup> “The People’s Association for a Policy Against Starvation” announced on November 1, 1945 that, six individuals were dying of malnutrition on average a day among the homeless people living in Tokyo’s Ueno station.<sup>55</sup> As a solution to malnutrition, the government encouraged the Japanese

<sup>51</sup> Takafusa, *Lectures on Modern Japanese Economic History : 1926-1994*, p. 120.

<sup>52</sup> Frank, *Downfall : The End of the Imperial Japanese Empire*, p. 351.

<sup>53</sup> John W. Dower, *Embracing Defeat : Japan in the Wake of World War II*, (New York: W.W. Norton & Company / The New Press, 1999), p. 93.

<sup>54</sup> *Ibid*, p. 91.

<sup>55</sup> *Ibid*, p. 93.

citizens to supplement their food intake by acorns, grain husks, peanut shells and sawdust; to eat used tea leaves and the seeds, blossoms and leaves of roses for minerals and silkworm cocoons, worms, grasshoppers, mice, rats, moles, snails, snakes or a powder made by drying the blood of cows, horses and pigs for protein.<sup>56</sup> It was a common practice to send out children to catch frogs to eat and after the war ended, a young school girl confessed that she felt relieved when she heard the emperor's surrender broadcast because she thought she never had to catch frogs anymore.<sup>57</sup> People were selling their watches, jewelry and kimonos to trade for food, which caused to coin one of the most famous phrases of the time: "bamboo-shoot existence," referring to city people who were taking off their clothing and jewelry as the edible bamboo shoot can be peeled off in layers.<sup>58</sup>

The free rice market was abolished in 1941 and the Food Control Law was issued on July 1, 1942, according to which, only the government was entitled to buy rice from farmers and distribute to shopkeepers' cooperative.<sup>59</sup> This practice opened the path for the black market because instead of selling their crops to the government at low prices, farmers preferred to make more profits by selling them to private customers. The distribution given by the government was not sufficient so people had to buy more food from the black market even though it was illegal; thus, the crime rate in the country rapidly increased. For example, 46 percent of all economic crimes in Osaka involved food in 1944.<sup>60</sup> People who could not feed themselves or their families

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<sup>56</sup> Dower, Embracing Defeat : Japan in the Wake of World War II, p. 91.

<sup>57</sup> *Ibid*, p. 93.

<sup>58</sup> *Ibid*, p. 95.

<sup>59</sup> Anke Scherer, "Drawback to controls on food distribution: food shortages, the black market and economic crime," in Erich Pauer ,(ed.), Japan's War Economy (London: Routledge, 1999), p. 110-11.

<sup>60</sup> Dower, Embracing Defeat : Japan in the Wake of World War II, p. 90.

or who got caught while stealing food were committing suicide. The domestic situation was getting worse and worse with each passing day and the officials were noticing that. One of the statistical reports on economic incidents in 1944 stated that:

In a situation of general discontent resulting from a feeling of insecurity among workers and their families, all kinds of strange things are occurring. Especially numerous are rumors; however, theft and other crimes as well as the distribution of inflammatory pamphlets are (also) on the rise. So we have to admit that the rice shortage is causing more and more complicated ideological problems in society.<sup>61</sup>

The black market changed everybody's daily life and influenced people's morality because the only thing what everybody could think about was food. People were stressful and had to be cautious with their food, which drastically reduced their trust in the government and its ability to protect its citizens.

Japan had only enough rice in government's reserves for four days of consumption (133,000 tons) by the time of surrender on November 1, 1945.<sup>62</sup> Moreover, the government dependent on the thought that if it could distribute food to food-deficient areas through its railway system, it might make it to 1946 without a disaster. If the U.S., on the other hand, had decided to continue bombing Japan's railways and strategic points such as bridges connecting cities and main islands to each other, the government would have lost its last and only hope to prevent a food crisis.

The U.S. devised the new strategic-bombing plan to take place on August 11th, 1945 but when the atomic bombs were available, President Henry Truman did not avoid the use of the

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<sup>61</sup> Scherer, "Drawback to controls on food distribution: food shortages, the black market and economic crime," p. 109.

<sup>62</sup> Frank, Downfall : The End of the Imperial Japanese Empire, p. 354.

bomb. Either for military purposes or diplomatic reasons, the U.S. dropped its first atomic bomb on Hiroshima on August 6 and the second on Nagasaki on August 9, 1945. Having learned that the U.S. dropped the atomic bomb on Hiroshima, Russian leader Joseph Stalin rushed the Red Army to enter the war against Japan on August 9. Even after the twin shocks of the atomic bombs and the Soviet entry into the war, the deadlock in the Big Six could not be broken until the emperor intervened in and asked the Supreme Council to accept the terms of the Potsdam Declaration. Even though the atomic bombs and the Soviet entry to the war were the major reasons why the emperor accepted to surrender, they were not the only reasons. The growing public unrest among citizens, the threat of Communism and the fear of destruction of the *kokutai* from within also had a huge influence on the emperor's decision.

According to a police report named "Internal Security" in 1944, the Communist movement in Japan was progressing and the worsening domestic situation was laying down the necessary groundwork.

In the course of the present year, with the deteriorating military and domestic situation, the Communist movement has progressed and gone from a preparatory stage to a stage of active resistance. That is, the communists are trying to organize their scattered groups into an illegal, radical vanguard organization. In the meantime, they have formulated a plan to encourage popular discontent by drawing attention to those problems which, under the present strained domestic situation, are directly affecting the living conditions of the people. They are attempting to prompt outbursts of this discontent in every sector of society.<sup>63</sup>

Another police report held in 1945 proves that the number of anti-government movements were increasing:

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<sup>63</sup> Jeremy A. Yellen, "The Specter of Revolution: Reconsidering Japan's Decision to Surrender," The International History Review, Vol. 35, No. 1 (2013), p. 208.

Recent rumors, scribblings and [other] manifestations are numerically increasing . . . They say that the Japanese war leaders, or the leading circles, are responsible for the decisive battle against Japan proper, for intensified air raids, shortage of foodstuff, acute inflation, etc., all of which have made people's lives hard. This indignation against the ruling class was shown in criticisms of military strategy and misrepresentation of the attitude of military circles. Others speak ill of government measures and government communique's. They explicitly assume a hostile attitude toward government circles. Some dare to speak of class antagonism.<sup>64</sup>

Various groups were formed to put an early end to war before an uprising happened in the civil society and the Yoshida Anti-War Group (Yohansen) was one of them. It was a group formed in 1942 by Yoshida Shigeru who was a former ambassador to Rome and London.<sup>65</sup> Members of the group included politicians and upper-class Japanese who wanted a negotiated end of the war such as court adviser and former premier Prince Konoe Fumimaro, Admiral Suzuki Kantarō, Count Makino Nobunaki, a Mitsui *zaibatsu* financier Ikeda Seihin, a parliamentarian and ex-minister of education Hatoyama Ichirō and a former bureaucrat and emperor system ideologue Ueda Shunkichi.<sup>66</sup> The main purpose of the group was to preserve the monarchy by bringing the war to an end because they believed the biggest danger to the *kokutai* would come from three resources: 1) the military clique that had seized power and which was said to have Communist tendencies; 2) the Communist movement outside of Japan's borders; and 3) a revolutionary movement within the country.<sup>67</sup> The group believed that the U.S. would offer Japan a general peace, keep the Communists away and preserve the *kokutai*.<sup>68</sup> The Yoshida group initially tried to achieve their goals through backstage politics but when it did not work,

<sup>64</sup> Yellen, "The Specter of Revolution: Reconsidering Japan's Decision to Surrender," p. 209.

<sup>65</sup> Eiji Takemae, The Allied Occupation of Japan, Translated by Robert Ricketts and Sebastian Swann, (New York: Continuum, 2003), p. 220.

<sup>66</sup> *Ibid.*

<sup>67</sup> Takemae, The Allied Occupation of Japan, Translated by Robert Ricketts and Sebastian Swann, p. 220.

<sup>68</sup> *Ibid.*, p. 220-21.

they decided to issue a direct appeal to the emperor on February 14, 1945.<sup>69</sup> This appeal included the reports that Konoe had gathered from police officials and emphasized that a leftist revolution was imminent in Japan.

Regrettably, defeat is already inevitable . . . according to the principles of maintaining the *kokutai*, we should not be as concerned with defeat itself as with a communist revolution that would accompany defeat...I feel that at the present time, both conditions internal and external to Japan are rapidly progressing toward a communist revolution.[...] There is already a significant danger that the Soviet Union will interfere in Japan's domestic affairs . . . and I feel that if one looks at the domestic situation, one can see that day by day all the conditions necessary to achieve a communist revolution are being prepared. Namely, there is impoverishment, an increase in the voice of labor, a rise in hostility toward America and England being expressed alongside a friendly attitude toward the Soviet Union. There are also reformist movements of a ring in the military elite, a movement of 'new bureaucrats' that have jumped on the military bandwagon, and leftist elements that secretly attempt to pull the strings from behind the scenes.<sup>70</sup>

As seen, politicians were well aware that the worsening domestic situation in the country might cause a bigger problem to the *kokutai* than surrendering to the U.S. so they decided not to play in the backstage anymore and informed the emperor. Now the emperor too knew what was going on among his subjects. When he was called to break the deadlock within the Big Six on August 9, 1945, Privy Council President Hiranuma Kiichirō informed the emperor that a food crisis was imminent and dangerous thoughts were spreading among the citizens.<sup>71</sup> In one of the debates, he passed the following comments to Prime Minister Suzuki Kantarō:

It is essential to maintain domestic order, so what measures do you plan to take in the future? What is your plan regarding the food situation? Things are getting extremely bad. The domestic situation is little by little becoming a source of great

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<sup>69</sup> Yellen, "The Specter of Revolution: Reconsidering Japan's Decision to Surrender," p. 211.

<sup>70</sup> *Ibid.*

<sup>71</sup> *Ibid.*, 217.

concern. We should think about the possibility that continuation of the war will create greater domestic disorder than would termination of the war.<sup>72</sup>

Hiranuma concluded his appeal to the emperor with those words: "In accordance with the legacy of Your Imperial Forefathers, Your Imperial Majesty is also responsible for preventing unrest in the nation. I should like to ask Your Majesty to make his decision with this point in mind."<sup>73</sup> When Suzuki requested the emperor to break the deadlock, Hirohito told he had thought the situation prevailing at home and abroad and decided it was time to surrender.<sup>74</sup> It would be wrong to deny the shocking influence of the atomic bombs and the Soviet entry to the war and claim that the domestic situation was the only reason why the emperor decided to surrender but we know that every top government official including the emperor knew that there was an increasing social unrest in the country and any upheaval within the country might be much more dangerous for the *kokutai* than surrendering to the U.S..

One of the most striking evidences proving that the domestic situation had a great influence on the emperor's surrender decision is the statement of Navy Minister Mitsumasa Yonai that he made on August 12, 1945:

I think the term is perhaps inappropriate, but the atomic bombs and the Soviet entry into the war are, in a sense, gifts from the gods. This way we don't have to say that we have quit the war because of domestic circumstances. The reason I have long advocated control of the crisis of the country is neither fear of an enemy attack nor because of the atomic bombs and the Soviet entry into the war. The main reason is my anxiety over the domestic situation. So, it is rather fortunate that we can now control matters without revealing the domestic situation.<sup>75</sup>

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<sup>72</sup> Yellen, "The Specter of Revolution: Reconsidering Japan's Decision to Surrender," p. 217.

<sup>73</sup> *Ibid.*

<sup>74</sup> *Ibid.*

<sup>75</sup> *Ibid.*, p. 220.



Yonai was not the only politician thinking this way. While Konoe evaluated the Soviet entry into the war as a “gift from heaven for controlling the army,”<sup>76</sup> Suzuki told the atomic bomb was the “most convenient pretext for ending the war.”<sup>77</sup>

If the U.S. had followed the strategy of bombardment and naval blockade instead of dropping the atomic bombs in August, what would have happened? Considering all these evidences, we might say that the Japan would have fallen into a food crisis because any strategic attack on Japan’s railroad system would have blown the last hope of the government to resist against starvation. Japan’s highway system was primitive and insufficient to transport goods across the country therefore Japan was heavily dependent on its railway system, which was one of the most vulnerable railway systems in the world, according to the United States Strategic Bombing Survey.<sup>78</sup> The same survey stated that if the strategic air forces had focused on forcing Japan to surrender instead of facilitating invasion, an effective railroad attack might have brought about a very quick surrender.<sup>79</sup> When the railway system, the backbone of the Japan’s transportation system, had been broken down, a food crisis would have started in late 1945, which might have been the last straw that breaks the camel's back. Because people had already started to blame the leaders for the food shortage and other problems in the country and the social uprising was around the corner. In fact, nearly 150,000 people held a protest demonstration at the Imperial Palace on May 19, 1945.<sup>80</sup> “If the people who died of sickness and general physical deterioration are classified among those who died of starvation, the [actual]

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<sup>76</sup> Yellen, “The Specter of Revolution: Reconsidering Japan's Decision to Surrender,” p. 220.

<sup>77</sup> *Ibid.*

<sup>78</sup> Frank, Downfall : The End of the Imperial Japanese Empire, p. 352-53.

<sup>79</sup> *Ibid.*, p. 353.

<sup>80</sup> *Ibid.*, p. 351.

death toll comes to several hundred thousand,” noted Japanese historian Daikichi Irokawa, adding that “immediately after the defeat, some estimated that 10 million people were likely to starve to death.”<sup>81</sup>

Although the U.S. received the information of food shortage occurring in Japan through the Magic intercepts between March to June, those messages were interpreted in two different ways<sup>82</sup> like all the other Magic intercepts. Those intercepts reported that the imports from Asia should be increased to alleviate the food shortage in the country; however, some thought this might refer to an overall food shortage while others considered it might be a maldistribution rather than a lack of food and the Japanese government might be holding food in stocks against future invasion.<sup>83</sup> Either way, the President Truman and other leaders did not think the bombardment and naval blockade strategy as an alternative to the atomic bombs.

One of the counter arguments here might be about the deadlock in the Big Six. If the U.S. had not dropped the atomic bombs, would the war party in the Big Six have accepted to surrender? The answer is they probably would not because even after the atomic bombs and the Soviet entry into the war, they were not willing to accept to surrender and they were pressing for one final decisive battle. It was the Emperor Hirohito who broke the deadlock in the council. So, if there was an internal uprising against the emperor and the government due to the worsening domestic situation, this severe threat to the *kokutai* would have forced the emperor to step in and break the deadlock. After the war ended, General Douglas MacArthur suggested that

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<sup>81</sup> Frank, Downfall : The End of the Imperial Japanese Empire, p. 351.

<sup>82</sup> *Ibid*, p. 353.

<sup>83</sup> *Ibid*.

conventional bombings could have ended the war without atomic bombs.<sup>84</sup> Similarly, Admiral William Daniel Leahy told that Japan could have been pushed to surrender before November 1, 1945 without the use of the atomic bombs.<sup>85</sup> And the report of the United States Strategic Bombing Survey stated that:

Based on a detailed investigation of all the facts and supported by the testimony of the surviving Japanese leaders involved, it is the Survey's opinion that certainly prior to 31 December 1945, and in all probability prior to 1 November 1945, Japan would have surrendered even if the atomic bombs had not been dropped, even if Russia had not entered the war, and even if no invasion had been planned or contemplated.<sup>86</sup>

The second counter argument can be the number of Japanese people who would have died due to the starvation and air attacks might have been higher than the atomic bombs. First of all, according to the new strategic bombing plan, the U.S. was going to drop warning leaflets prior to attacks to give time to civilians to escape attacks, which would have decreased the civilian death toll. Secondly, the air forces were going to bomb the selected transportation targets and strategic points rather than the entire cities. Richard Frank claims that in the long term starvation would have caused more loss than the atomic bombs.<sup>87</sup> It might be true that if Japan had resisted instead of surrendering but evidences show that an upheaval was close and for this very reason, Japan would have had to surrender before it had been too late, which would have made the use of atomic bombs unnecessary.

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<sup>84</sup> Frank, Downfall : The End of the Imperial Japanese Empire, p. 351.

<sup>85</sup> *Ibid*, 65.

<sup>86</sup> *Ibid*, p. 355.

<sup>87</sup> *Ibid*, p. 350.

The strategy of conventional bombing and naval blockade was never thought as a separate strategy from the invasion by most American leaders. Admiral Ernest L. King was among few who defended this strategy to produce a surrender without invading Japan while others like General George C. Marshall thought this strategy was dangerous and wasteful.<sup>88</sup> Furthermore, Truman never received a separate assessment of bombing and naval blockade strategy conducted without the Kyushu invasion.<sup>89</sup>

We are not sure and will not be sure if people, who claimed Japan would have surrendered before November 1, 1945 without the use of the atomic bombs, were right or wrong but we know from the historical documents that almost none of the American chiefs explicitly discussed and evaluated the strategy of bombing and naval blockade before Hiroshima and they never informed Truman about the possibility of the Japanese surrender before November 1 due to the strategy of heavy conventional bombing and naval blockade without the Kyushu invasion.<sup>90</sup> For Truman, there were only two options: either the U.S. was going to use its available atomic bombs to put an end to the war to save American soldiers' lives at the cost of killing thousands of Japanese civilians or it was going to invade Japan, which would cost thousands of American lives. Today, we know that the third option of the strategic bombing and naval blockade which would have made the use of atomic bombs and the invasion unnecessary will stay in history as a missed opportunity.

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<sup>88</sup> Barton J. Bernstein, "Understanding the Atomic Bomb and the Japanese Surrender: Missed Opportunities, Little-Known Near Disasters, and Modern Memory," in Michael J. Hogan, (ed.), Hiroshima in History and Memory, (Cambridge ; New York: Cambridge University Press, 1996). p. 42.

<sup>89</sup> *Ibid*, p. 45.

<sup>90</sup> *Ibid*.

**BIBLIOGRAPHICAL ESSAY**

My main argument in this paper is if the U.S. had continued the war with the strategy of strategic bombing and naval blockade, Japan would have surrendered before November 1st, 1945 without the use atomic bombs because the situation in the country was getting exacerbating and the domestic upheaval was on the corner, which would have had worse impacts on the imperial system than the unconditional surrender to the U.S.. Due to my limited time and knowledge in this area, I drew this conclusion reading researches, books and articles of esteemed authors. I would like to expand on historiographical themes that other historians have written on and I benefitted from.

I have learned about the domestic situation in Japan during the Pacific War from Jeremy Yellen's article *The Specter of Revolution: Reconsidering Japan's Decision to Surrender*. Explaining Japan's decision to surrender, many authors place a special emphasis either on the atomic bombs or the Soviet entry to the war. However, Yellen looks at Japan's decision to surrender from a different perspective. She claims that even though the atomic bombings of Hiroshima and Nagasaki and the Soviet entry into the war had a huge impact on the emperor's decision, those were not the only reasons because the worsening domestic situation in Japan was also a major fact which forced the emperor to decide to surrender. She states that the fear of social revolution among the conservative ruling elite in Japan played a significant role in the process to make the decision to put an end to war. Yellen's article was the primary source behind my main argument. I used several research results and quotations from her article to support my argument.

Michael J. Hogan's book *Hiroshima in History and Memory* points out that Truman never received a separate assessment of bombing and naval blockade strategy conducted without the Kyushu invasion and American leaders had never given enough thought to this strategy. In my paper, I preferred to combine the main argument of Bernstein and Yellen and said "while Japan would have been surrendered due to the conventional bombing and naval blockade because an internal upheaval was on the corner but when the atomic bomb was available, American leaders chose to ignore alternatives to use this new weapon."

Another major research that I used as a reference was Richard B. Frank's book *Downfall*. In his book, Frank gives a detailed explanation of the events that led up to the use of the atomic bombs and he discusses the alternative options of the U.S. to end the war. He claims that the strategy of conventional bombing, naval blockade and destruction of the transportation system might have been even worse than an earlier ending with the atomic bombs. I used this claim to support my main argument and said that Japan knew that the domestic situation was getting worse and the destruction of its transportation system would have exacerbated the food shortage problem and pushed the Japanese leaders to surrender before any kind of social revolution start to emerge in the country.

To explain how bad the domestic situation during and immediate after the war, I used John Dower's book *Embracing Defeat*. It explains the postwar situation in great detail from the fate of Emperor Hirohito to the daily lives of men and women. The book also sheds a light on the end of the war situation, which I used as a reference to emphasize my argument "Japan had no power left to resist against the U.S.." In this regard, Anke Scherer's *Drawback to controls on food distribution: food shortages, the black market and economic crime* in Erich Pauer's book

*Japan's War Economy* was a great resource to explain the food shortages and the black market situation in Japan during and after the war.

Nakamura Takafusa's book *Lectures on Modern Japanese Economic History: 1926-1994* and his article *The Japanese War Economy as a 'Planned Economy'* in Erich Pauer book *Japan's War Economy* are valuable resources to learn about the Japanese war time economy. His book covers a time between the early 1920s and 1990s and provides a comprehensive research about the Japanese economy while his article focuses on the war time economy from the perspective of "planned economy" and explains economic planning, materials mobilization and production expansion in great detail. In this regard, Jerome B. Cohen's book *Japan's Economy in War and Reconstruction* is also an invaluable resource. It describes Japan's economic development from 1937 to 1949 using numerous statistical evidences. It explains the planned industrial expansion before 1941, gives details about the war years and points out the successes and failures of the planning and controlling of Japan's war industries. I used those books not only to give background information about the Japanese economy in the pre-war period, which was one of the reasons pushing Japan into the war but also to support my argument stating that Japan's planned economy focused on production of munitions, aircrafts and ships and ignored the production of consumer goods which caused horrifying results through the end of the war.

The paper above aims to offer a novel and detailed perspective to the use of atomic bombs by deriving supports from the early resources written on Japan's war economy and the strategy of bombardment and naval blockade of the U.S..

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