INNOVATIVE FINANCING AND SUSTAINABLE DEVELOPMENT: LESSONS FROM GLOBAL HEALTH

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Abstract: The growth of innovative financing for development over the last decade has demonstrated the enormous potential of new mechanisms for generating resources beyond traditional official development assistance. In the global health sector, diverse innovative finance institutions provide a window into the relative merits of approaches that rely on taxation, bonds, and advanced contract arrangements. The experience of IFFIm, UNITAID, and the AMC offer broader insights into the importance of sustainability and participation in ensuring the success of innovative finance mechanisms, as well as the potential for innovative financing to contribute to realizing the Sustainable Development Goals. The most successful of these innovative mechanisms are generally the most automatic in terms of financing and the most participatory in terms of governance. More participatory approaches to designing and governing innovative financing seem to foster better outcomes in terms of the ultimate market impact of these financing mechanisms.

I. INTRODUCTION

The Millennium Development Goals (“MDGs”) catalyzed a dramatic era of innovation in financing global health and development. With the launch of the Sustainable Development Goals (“SDGs”) in 2015, the challenges of financing will be even greater, and drawing valuable lessons from the past decade of experience with innovative financing mechanisms will be especially crucial. Preliminary estimates suggest that achieving the SDGs could cost somewhere between USD 2 and USD 3 trillion dollars.1 While much of these resources will come from domestic resource mobilization and private financing, some thirty countries around the world will likely require substantial development assistance in order to achieve the goals.2 Innovative financing could be an important enabler of success for a much wider range of countries. Over the last decade, innovative approaches

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to development financing have become increasingly important and much of this experimentation has been in the global health sector. Estimates of the scale of innovative finance reveal a tenfold increase in non-traditional flows of development assistance, and the World Bank calculates that the flow reached a total of USD 57.1 billion between 2000 and 2008.3

Innovative approaches to global health financing offer a unique window into the relative merits of mechanisms that rely on taxation, bonds, and advanced contracting arrangements. While these efforts share common inspiration in realizing the MDGs, the involvement of a range of different state and non-state actors has fostered distinct governance structures and approaches. While most of these mechanisms have generated additional resources, some have also created substantial future liabilities. The more participatory examples of these innovative finance mechanisms have aggressively sought to reshape relevant markets for essential medicines and vaccines while others have undertaken a more limited mandate.

Innovative finance became a central feature of development debates in the wake of the Monterrey Conference on Financing for Development in 2002, as many G8 countries sought to contribute to achieve the MDGs while limiting the overall domestic budgetary cost. At Monterrey, countries agreed “to study, in the appropriate forums, the results of the analysis requested from the Secretary General on possible innovative sources of finance.”4 At the 2005 UN World Summit to review progress on the MDGs, seventy-nine countries issued a Declaration on Innovative Sources of Financing, reflecting an evolved sophistication of thinking about the issue.5 Among other developments, the Summit catalyzed the launch of innovative financing mechanisms such as UNITAID.6 In 2008, the United Nations established a High Level Taskforce on Innovative Financing for Health Systems to build on the experience of first generation innovative financing efforts.7 The Secretary General of the United Nations, Ban Ki-Moon, appointed former French Foreign Minister Philippe Douste-Blazy as the Secretary General’s special advisor on innovative financing for

development.\textsuperscript{8} By 2012, about twenty different countries had established or actively participated in at least one innovative financing mechanism.\textsuperscript{9}

Amidst dramatic innovation within development finance, a growing number of scholars have sought to re-conceptualize the interaction between public and private actors and the important role of innovative governance within these institutions.\textsuperscript{10} Some scholars have suggested that literature on the accountability of international institutions should be applied to analyzing the structures of development financing.\textsuperscript{11} Others have pointed out that traditionally sharp distinctions between the areas of public and private law are not helpful in analyzing the rapidly evolving area of development finance.\textsuperscript{12} Hybrid frameworks, which involve public and private actors in governance and catalyze both public and private resources, are central to the innovative financing mechanisms that have emerged in recent years.

Scholars focused on the governance of international institutions are becoming increasingly interested in the role of non-state actors alongside states within these institutions. Some of this work focuses on the role of non-governmental organizations,\textsuperscript{13} while other work highlights the growing role of foundations and corporations, as well as the influence of bureaucrats within these institutions.\textsuperscript{14} Amidst growing interest in explaining the causes of participation by these diverse stakeholders,\textsuperscript{15} there remains somewhat limited analysis of the consequences of such participation. At the same time, scholarly interest in the relationships and interactions between different international institutions is growing. Recent work highlights how new institutions challenge existing ones in the context of “contested


\textsuperscript{11} See Robert Keohane & Ruth Grant, Accountability and Abuses in World Politics, 99 AM. POL. SCI. REV. 29 (2005) (defining accountability as “the right to hold other actors to a set of standards to judge whether they have fulfilled their responsibilities to these standards, and to impose sanctions if they determine these responsibilities have not been met”); Philipp Dann, Accountability in Development Aid Law: The World Bank, UNDP, and Emerging Structures of Transnational Oversight, 44 ARCHIV DES VÖLKERRECHTS 381 (2006).

\textsuperscript{12} See Davis, \textit{supra} note 10.

\textsuperscript{13} See David Gartner, Beyond the Monopoly of States, 32 U. PA. J. INT’L L. 595 (2010).


multilateralism,” how international institutions shape action through “orchestration,” and how existing international institutions contribute to the birth of new institutions. Yet relatively few scholars have analyzed the symbiotic relationship between the financing and implementing institutions. This article examines the causes of institutional variation within the realm of innovative global health financing and highlights the significance of participation by non-state actors in the governance of these institutions for shaping market reform.

This article examines three different innovative financing mechanisms that emerged after 2005: The International Finance Facility for Immunizations (“IFFIm”), UNITAID, and the Advanced Market Commitment (“AMC”) initiative. A single G8 country championed each of these innovative financing mechanisms and ultimately the entire G8 endorsed them to accelerate progress toward achieving the Millennium Development Goals. Yet each mechanism relied upon a different financial instrument: bonds in the case of IFFIm, taxation in the case of UNITAID, and long-term contracts in the case of the AMC. Despite their common inspiration, each utilized different approaches for their initial design and adopted distinct governance structures. These early decisions on the design and governance of these financing mechanisms had important implications for the evolution and ultimate success of each mechanism. Part II examines the emergence of these three innovative financing mechanisms. Part III analyzes the factors that shaped the design and success of each model. Part IV explores the implications of these mechanisms for efforts to achieve the Sustainable Development Goals and analyzes which structures and models of innovative financing hold the greatest promise for the future.

II. INNOVATIVE FINANCIAL INSTITUTIONS

A. International Finance Facility for Immunizations

The International Finance Facility for Immunizations was launched in 2006 by six donor governments as a mechanism to front-load assistance for global health. The original six donors, the United Kingdom, France, Spain, Sweden, and Norway, used legally binding commitments of overseas development assistance (“ODA”) to issue bonds on international capital

18 See Johnson, supra note 14.
markets, repayable over periods of up to twenty years.\textsuperscript{19} Between 2006 and 2014, IFFIm issued bonds in five different markets and raised USD 5 billion.\textsuperscript{20} An evaluation of IFFIm’s impact estimated that by 2011, these investments averted between 1.3 million and 2.08 million deaths.\textsuperscript{21}

The International Finance Facility (“IFF”) was an idea that was initially championed by Gordon Brown of the United Kingdom (then Chancellor of the Exchequer) as a hybrid approach to combining both public and private sources of development finance. Inspired by the UN Millennium Summit of 2000, Brown put forward the idea of a large-scale IFF for achieving the MDGs.\textsuperscript{22} By November 2004, the United Kingdom and France announced their shared commitment to launch a smaller scale version of the IFF focused on immunizations in partnership with the Global Alliance for Vaccines and Immunizations (“GAVI”).\textsuperscript{23}

At the 2005 World Summit, the United Kingdom, France, Italy, Spain, and Sweden committed nearly USD 4 billion to scale-up the work of GAVI through the IFFIm. Along with the founding donors, ten countries have so far contributed to IFFIm, including Norway, Brazil, South Africa, and Japan. However, the United Kingdom and France account for nearly three quarters of the total amount pledged by donors to IFFIm.\textsuperscript{24}

IFFIm quickly transformed the capacity of GAVI with the initial USD 1.2 billion raised, which allowed its vaccination programs to expand rapidly. Since its inception in 2006, IFFIm has raised USD 5 billion and provided the majority of overall financing to GAVI.\textsuperscript{25} Although IFFIm provides a net increase in funding in the short-to-medium term for GAVI, its approach means that the cost of servicing IFFIm bonds is currently greater than the resources that IFFIm generates for GAVI, and this negative balance will increase over the next decade.\textsuperscript{26}

IFFIm operates as a charitable company based within the United Kingdom, with a board consisting of seven individuals with strong experience either in the finance industry or in financial regulation. Although

\footnotesize\textsuperscript{19} Origins of IFFIm, IFFIM, http://www.iffim.org/about/origins-of-iffim/ (last visited May 16, 2015).
\footnotesize\textsuperscript{20} Donors, IFFIM, http://www.iffim.org/donors/ (last visited May 16, 2015).
\footnotesize\textsuperscript{21} MARK PEARSON ET AL., HEALTH & LIFE SCIENCES PARTNERSHIP, EVALUATION OF THE INTERNATIONAL FINANCIAL FACILITY FOR IMMUNISATION 26 (2011).
\footnotesize\textsuperscript{22} See Todd Moss, Ten Myths of the International Finance Facility 3 (Ctr. for Global Development Working Paper No. 60, 2005).
\footnotesize\textsuperscript{23} Origins of IFFIm, IFFIM, http://www.iffim.org/about/origins-of-iffim/ (last visited Apr. 28, 2015).
\footnotesize\textsuperscript{25} Donors, supra note 20.
several of these board members have some background in either health or development, the relevant expertise of each is primarily in the finance arena. The board reviews funding requests by the GAVI immunization program, oversees IFFIm’s governance and policies, and monitors its investment portfolio and efficacy.\textsuperscript{27} In contrast, the board of GAVI includes donor country governments, recipient country governments, foundation representatives, industry representatives, NGO representatives, and select individuals.\textsuperscript{28} While the IFFIm board periodically updates the GAVI secretariat, the GAVI board does not have any formal oversight authority over IFFIm.\textsuperscript{29}

IFFIm’s success in resource mobilization was closely tied to the AAA credit rating of its bonds at the time of issue. The AAA rating of IFFIm reflected the fact that governments that were rated AAA accounted for nearly 85 percent of IFFIm donor commitments, and the World Bank was selected as the treasurer of the funds. The overall level of front-loading was limited by the management agreement with the World Bank, which required IFFIm to maintain at least 30 percent of its resources as a financial cushion.\textsuperscript{30} Since the 2008 financial crisis, leading IFFIm donors such as France, Spain, Italy, and the United Kingdom have lost their AAA rating, which has in turn influenced the credit rating of IFFIm. In 2013, Moody’s Investors Services downgraded IFFIm to Aa1 with a negative outlook, and other rating firms have also downgraded the credit rating of IFFIm since the initial offerings.\textsuperscript{31}

A recent evaluation of IFFIm, five years after its launch, found it relatively successful in accelerating the flow of global health resources, but less successful in influencing the market for vaccines.\textsuperscript{32} In terms of resource mobilization, grant commitments by donors of USD 6.2 billion in legally binding pledges should enable IFFIm to disburse USD 4.3 billion by 2026. The low borrowing costs of IFFIm have exceeded initial expectations. While this innovative mechanism allowed for the front-loading of resources at relatively low borrowing rates, nearly a third of the committed resources will service the debt generated under this approach. Although IFFIm has paid the significant start-up costs required to gain access to funding on the

\textsuperscript{27} IFFIm Governance, IFFIm, http://www.iffim.org/about/governance/ (last visited Apr. 28, 2015).
\textsuperscript{28} GAVI Board, GAVI, http://www.gavialliance.org/about/governance/gavi-board/ (last visited Apr. 28, 2015).
\textsuperscript{29} PEARSON ET AL., supra note 21, at 64-65
\textsuperscript{30} \textit{Id.}
\textsuperscript{32} See PEARSON ET AL., supra note 21.
financial markets, it does not yet have enough financing to fully take advantage of those markets.\textsuperscript{33}

Expanding vaccine coverage can be a cost-effective intervention, because significant positive externalities come from the herd immunity that results from vaccinating a threshold percentage of a given population.\textsuperscript{34} In terms of the vaccine market, accelerating demand has contributed to the maturity of the market, but IFFIm has not catalyzed a transformation of the market. It is clear that IFFIm expanded the size of the pentavalent vaccine market, and thereby contributed to price reductions, but it is less clear that any broader market impact flowed from the substantial resources of IFFIm. While IFFIm’s founding documents did not specifically reference any objective with regard to shaping the market for vaccines, this dimension proved to be an important feature of other innovative finance mechanisms and was a key goal of IFFIm’s implementing partner GAVI.\textsuperscript{35}

Although IFFIm demonstrated the potential for a larger-scale IFF, the conditions that enabled IFFIm to secure relatively low costs of borrowing based on the strong credit rating of its core donors have not proven sustainable. The leadership of the United Kingdom was essential to the creation of IFFIm but the lack of participation by the United States and other major donors ultimately limited its scale. The World Bank’s role, while important in fostering financial credibility for the new enterprise, constrained the degree of front-loading of the overall resources.\textsuperscript{36} Among the keys to IFFIm’s success were the strong commitment by the UK, the rigorous design process, the credibility of the partnership with the World Bank, and the strong rating of IFFIm’s bonds.\textsuperscript{37}

\textbf{B. UNITAID}

The roots of UNITAID can be found in the 2000 Millennium Summit establishing the MDGs and the 2002 Monterrey Summit on development financing to achieve the MDGs. At the 2002 Monterrey Summit, French President Jacques Chirac asked his fellow heads of state to seriously consider a financial transaction tax as a mechanism to generate resources for development, but this idea received relatively little support at the time. In

\begin{itemize}
  \item \textsuperscript{33} \textit{Id.} at 30-31.
  \item \textsuperscript{34} \textit{See} TODD SANDLER, GLOBAL COLLECTIVE ACTION 105 (2004).
  \item \textsuperscript{35} IFFIm Board Response to the IFFIm Evaluation (June 1, 2011), http://www.iffim.org/Library/Documents/Evaluations/IFFIm-evaluation--IFFIm-Board-response/.
  \item \textsuperscript{36} World Bank Response to IFFIm Evaluation (July 1, 2011), http://www.iffim.org/Library/Document/evaluations/IFFIm-evaluation--The-World-Bank-response/ (arguing that the retention of a financial cushion is a core element of the financial credibility of IFFIm).
  \item \textsuperscript{37} \textit{See} PEARSON ET AL., \textit{supra} note 21, at 33.
\end{itemize}
November 2003, Chirac tasked Jean-Pierre Landau, a long-time French civil servant, with formally investigating a range of options with respect to innovative financing. By March 2004, Chirac and his top advisors reflected on the recommendations of the Landau report and settled on an airline ticket tax as the best approach.\(^{38}\) They determined that such a mechanism would be easy to implement, target those with greater discretionary income, and serve as a symbol of globalization while imposing limited burdens on the air travel market. Over the next year, Chirac and the President of Brazil, Lula Da Silva, became the leading champions for the imposition of an airline tax to help achieve the MDGs.\(^{39}\)

The impetus for UNITAID’s focus on the market for drugs for AIDS, tuberculosis, and malaria came from the French Foreign Minister Philippe Douste-Blazy. After his appointment in 2005, Douste-Blazy sought advice from former United States President Bill Clinton about the focus of the effort. Clinton’s suggestion was to focus on leveraging lower prices for drugs for AIDS, malaria, and tuberculosis through negotiation and volume discounts.\(^{40}\) Subsequently, Chirac and Lula agreed to create UNITAID as an international facility for drug purchases, and the United Kingdom joined in exchange for some of the resources of the French airline tax being used to support IFFIm.\(^{41}\)

UNITAID was designed to collaborate with other leading global health institutions, including the World Health Organization, the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and the Clinton Foundation.\(^{42}\) The exact details of the implementation of the airline ticket tax vary from country to country. In France, the tax is one euro for domestic flights and six euros for international flights in economy class, and ten and forty euros, respectively, in first class.\(^{43}\) UNITAID is innovative in its governance and use of funds as well as its approach to generating resources. The UNITAID Executive Board consists of twelve members, including the six leading donor country governments, government representatives from Asia and Africa, civil society representatives from the global North and South, a foundation representative, and a representative from the World

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\(^{39}\) PHILIPPE DOUSTE-BLAZY & DANIEL ALTMAN, POWER IN NUMBERS: UNITAID, INNOVATIVE FINANCING, AND THE QUEST FOR MASSIVE GOOD 23 (2010).

\(^{40}\) Id. at 21-22.

\(^{41}\) Id. at 28-29.

\(^{42}\) Id. at 24.

The governance of UNITAID reflects a larger role for diverse stakeholders from the affected populations and countries than in most innovative financing mechanisms.

The scale of investments by UNITAID opened up space for negotiating prices with pharmaceutical companies across a range of diseases. One example of market innovation is the Affordable Medicines Facility, which pays bulk subsidies to the manufacturers of antimalarials in order to facilitate low-cost purchases by consumers in low-income countries. Through this facility, UNITAID has successfully helped bring down the cost of leading malaria treatments, such as artemisinin. UNITAID also contributed to developing new pediatric anti-retroviral formulations for HIV, new pediatric tuberculosis treatments, and to significantly lowering prices for drugs against HIV/AIDS and multi-drug-resistant tuberculosis. UNITAID is distinctive among most major innovative financing mechanisms in that it does not rely on donor governments to either directly supply or guarantee its resource flow.

The role of UNITAID in re-shaping the market for drugs reflects the innovative nature of its governance structure. In the view of Douste-Blazy, the balanced representation of both donors and affected populations has been a crucial feature. More specifically, he cites the involvement of NGO representatives who were unwilling to accept anything less than an approach designed around the potential for significant market impact as critical to the ultimate success of UNITAID: “Like Bill Clinton, [Northern NGO representative] Elouardighi was convinced that UNITAID had to be innovative in its spending as well as its fund-raising . . . [and declared that] ‘we set up UNITAID to have a market impact on drugs . . . . As a board member, I am going to refuse all the programs without market impact.’”

UNITAID has been successful, both in resource mobilization and in its strategy of limited but leveraged market interventions. By 2011, nine countries had imposed some form of tax on air tickets to support UNITAID. This mechanism accounted for approximately 61 percent of total UNITAID

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45 See generally Suerie Moon et al., Focusing on Quality Patient Care in the New Global Subsidy for Malaria Medicines, 6 PLOS MED (2009), available at http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000106#s1.
46 DOUSTE-BLAZY & ALTMAN, supra note 39, at 121.
47 Id. at 45.
48 Id. at 115.
49 Id. at 37-38.
resources and generated USD 1.48 billion for UNITAID.\textsuperscript{50} An evaluation of UNITAID, five years later, validated UNITAID’s approach of engaging in limited interventions with significant market impact in key markets for essential medicines. The evaluation found that: “UNITAID has been doing the right things to contribute to significant positive outcomes in the fight against the three diseases . . . . UNITAID has validated its business model of identifying, selecting, and funding market-shaping interventions carried out by implementing partners.” \textsuperscript{51} UNITAID’s substantial contribution reflects not only the leadership of the French government, but also important early strategic decisions during the design stage of the initiative, including the incorporation of diverse stakeholders in its governance structure.

\textbf{C. Advanced Market Commitment}

The genesis of the Advanced Market Commitment (“AMC”) began with the work of economist Michael Kremer of Harvard University.\textsuperscript{52} Kremer and his co-authors wrote about the potential for long-term contracts financed by donors to create incentives for the research and development needed to develop vaccines for low-income countries.\textsuperscript{53} Seeking to demonstrate leadership on development, the Italian government commissioned the Tremonti Report analyzing the concept of the AMC in 2005.\textsuperscript{54} The report raised the level of interest among other nations, and the G8 ultimately agreed to explore the feasibility of the idea. The first technical meeting of the AMC took place in Rome in 2006, and a pilot project focused on the pneumococcal vaccine was soon agreed upon.

Italy, the United Kingdom, Canada, Norway, Russia, and the Bill and Melinda Gates Foundation formally launched the AMC in February 2007. The donors committed to provide USD 1.5 billion in order to guarantee a market for the pneumococcal vaccine in low-income countries.\textsuperscript{55} The choice of the pneumococcal vaccine was based on the existence of a vaccine in an advanced stage of production that could demonstrate results quickly, as well as...

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\textsuperscript{51} See UNITAID, 5-YEAR EVALUATION SUMMARY 1 (2012).


\textsuperscript{53} See id.


\textsuperscript{55} Donald W. Light, Advanced Market Commitments: Current Realities and Alternate Approaches, HAI EUROPE/MEDICO INTERNATIONAL PAPER SERIES, ref. no. 03-2009/01, 2009, at 2.
as the fact that it is one of the largest vaccine preventable killers of children under five. Before the AMC, the pneumococcal vaccine was essentially a product for developed nations, which did not necessarily cover the strains of the disease that were most prevalent in low-income countries. However, the architects of the AMC did not clearly establish the relative priority of the longer-term market incentive role of the mechanisms versus the near-term capacity to implement a successful global health initiative. The seven week timeline for the selection of a target disease for the AMC very likely pushed the process toward the selection of a late-stage vaccine for which better quality data was available. The expert committee, despite strong representation from developing country governments, was largely limited to health officials with less of a background or focus on the market transforming potential of the AMC.

In May 2007, the AMC Donor Committee, consisting of the founding donors, created an independent Economic Expert Group. The Economic Expert Group consisted largely of academic economists to devise options for implementing the model. AMC’s ultimate design provided that each manufacturer would receive a share of the committed financing in proportion to its supply commitment. Two leading pharmaceutical manufacturers, Pfizer and GlaxoSmithKline, agreed to supply 60 million doses over ten years. The advanced contract provided that the first 20 percent of each manufacturer’s supply would be priced at USD 7 per dose, while the remaining 80 percent would be priced at USD 3.50 per dose. Based on the recommendations of the GAVI Expert Economic Group, the pricing level was intended to ensure a commercially viable market and to foster greater competition. The costs were designed to be shared between GAVI, which received the AMC funding, and recipient countries on a per capita basis. While the legally binding commitments on donor pledges were important to building confidence among manufacturers, these legal guarantees remained relatively weak and did not come close to covering all of the resources needed to fully implement the AMC.

The AMC had significant long-term financial repercussions for GAVI. In order to cover the cost of the AMC, GAVI needed to raise more overall resources than were ultimately contributed by the donors that launched the

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57 Id.
59 See Donald Light, Saving Pneumococcal AMC and GAVI, 7 HUMAN VACCINES 138, 139 (2011).
60 CHAU ET AL., supra note 56, at 69.
AMC. Critics such as Oxfam argue that the vaccines targeted by the AMC could have been acquired more cheaply through existing UNICEF procedures to purchase vaccines for developing countries. Nonetheless, the Chair of GAVI’s board explained that “GAVI would stick to its commitments under the AMC deal, but would in the future look at ways of getting better value.”

Although originally viewed as a mechanism to incentivize the development of new vaccines, the market impact of the AMC is more difficult to assess given the fact that the pneumococcal vaccine was already in existence before the launch of the initiative. The AMC targeting pneumococcal did catalyze a significant price reduction from the price established for developed countries for the vaccine. However, given that the research and development costs of vaccine manufacturers would already be recouped in the developed country market, the current AMC seems closer to a surplus contract than a research incentive scheme.

While the AMC accelerated the uptake of the pneumococcal vaccine in low-income countries, it remains less clear whether the AMC was necessary to catalyze pharmaceutical firms to enter this market in the first place. According to an independent evaluation of the AMC, one major pharmaceutical manufacturer was planning to establish a large-scale plant in Singapore to produce the vaccine for low-income countries even before the announcement of the initiative. However, other firms seem to have decided to enter this marketplace only after the AMC announcement. One recent study of innovative financing suggests that: “It is impossible to know if the opportunity to provide the vaccines to millions of people . . . would have been enough to entice low cost manufacturers to participate without the advance guarantee that vaccine would be purchased.”

While the counterfactual is difficult to analyze, the experience of GAVI’s efforts with other vaccines suggests that the AMC may not have been essential to achieving this outcome. For example, the market for pentavalent vaccine became relatively competitive, with six manufacturers building research programs and gaining pre-qualification from the World Health Organization, without any advanced purchase commitments.

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62 See Donald Light, Response to Commentaries, 7 HUMAN VACCINES 496 (2011).
64 See CHAU ET AL., supra note 56, at 68.
65 Id. at 69.
However, these vaccine purchases were backed by the resource guarantees of IFFIm, and the pentavalent vaccine is simpler to manufacture and requires a smaller initial investment than the PCV vaccine.\textsuperscript{67} Nonetheless, it seems quite plausible that at least some of the efficiencies in terms of pricing and the predictability of expanded manufacturing capacity could have been achieved without the long-term commitments of the AMC, which locked-in pricing and limited the future bargaining power of GAVI with leading manufacturers.

III. EXPLAINING THE EVOLUTION AND IMPACT OF INNOVATIVE FINANCING

UNITAID, IFFIm, and the AMC share a common catalyst, but each evolved in quite different ways that reflect the important role of path dependence in shaping innovative financing for development. The expansion of innovative financing for global health over the last decade reflects the influence of the MDGs and the incentives for donor countries to achieve these goals through innovative financing mechanisms. Even as formal United Nations processes drove much of the MDG agenda, G8 countries proved to be among the most important champions for launching innovative finance mechanisms for global health. Ultimately, the specific architecture of each mechanism depended a great deal on the range of state and non-state actors who participated in the process of design and governance.

In the wake of the 2005 Gleneagles commitments by the G8 to increase development financing, there was significant additional pressure on national governments to identify alternative approaches to meet these commitments.\textsuperscript{68} Although France and the United Kingdom were the competitive actors in promoting innovative finance mechanisms, both countries ultimately realized that their initiatives were much less likely to succeed without the participation of the other. While strong incentives existed for individual G8 governments to get credit for promoting specific innovative finance mechanisms, each national champion sought the legitimacy of formal G8 endorsement and the participation of a range of non-G8 governments in order to demonstrate broad international support.\textsuperscript{69}

\textsuperscript{67} CHAU ET AL., supra note 56, at 72.
\textsuperscript{68} See OECD Secretary-General, Innovative Financing Perspectives in the New Global Outlook, OECD (May 28, 2009), http://www.oecd.org/development/innovativefinancingperspectivesintheneewglobaleconomicoutlook.htm.
\textsuperscript{69} See G8 Summit, Promoting Global Health: L’Aquila G8 Health Experts’ Report (July 8-10, 2009), http://www.g8italia2009.it/static/G8_Alglegato/G8%20Health%20Experts%20Report%20and%20Accountability_30%202012%202009-%20FINAL%5B1%5D0.pdf.
Although these three innovative finance mechanisms share common roots, their specific approaches reflected the different national champions of each mechanism. The Landau report on innovative financing options commissioned by French President Jacques Chirac highlighted taxation mechanisms as among the most viable approaches. Both Chirac and his successor, Nicolas Sarkozy, shared a strong interest in implementing a broader financial transactions tax to support development financing. Chirac and his advisors quickly settled on the more modest airline ticket tax as a mechanism that would be consistent with these broader global taxation ambitions, while also having a limited impact on the national budget. By contrast, the United Kingdom, which spearheaded the Gleneagles commitments on development assistance and is home to a leading financial center, was more willing to expand its domestic budget investments in development financing, more eager to leverage private market financing, and more reluctant to support new forms of taxation. Meanwhile, Italy, with much more limited resources devoted to traditional development assistance, sought to promote a model that had already gained currency among some leading development economists and held the potential for a leveraged impact from finite donor financing over a relatively long time period.

These three national champions continue to be the leading financial supporters of each of these innovative financing mechanisms. IFFIm is now on track to generate USD 6.3 billion in resources by 2030. UNITAID has already raised USD 2.2 billion, of which over USD 1.4 billion was generated through the airline levy. With UNITAID, France alone has raised over USD 1.2 billion, Spain has raised USD 81 million, and Brazil has raised USD 37 million. The AMC catalyzed donor commitments of USD 1.5 billion and has so far led to actual contributions of just under USD 1 billion and disbursements of over USD 850 million. With the AMC, Italy committed USD 685 million, while the United Kingdom committed USD 485 million, Canada committed USD 200 billion, and all other donors committed less than USD 100 million.

The specific architecture and design of each mechanism depended a great deal on the range of stakeholders that participated in the design process and the governance structure. The French ultimately embraced a multi-stakeholder governance model for UNITAID, including diverse civil society...
actors and developing country governments; the board of IFFIm consists of finance experts; and the design of the AMC was shaped by its major donors and select groups of experts. Both the IFFIm and the AMC, in selecting GAVI as the core partner for implementation, had some links to a multi-stakeholder governance structure. Yet, in contrast with the UNITAID governance model, GAVI’s board involves non-state actors as independent individuals even as it has representatives from the vaccine industry, research institutes, foundations, and NGOs.75

While the rise of innovative financing over the last decade reflects a broader shift in norms tied to the launch of the Millennium Development Goals, the evolution of each specific mechanism reveals the important role of state sponsors and non-state actors. The innovative financing model in the context of global health strongly reflected the initial visions of founding governments, and these early decisions continued to shape the evolution of these institutions over time. While states remain the central actors in catalyzing the launch of innovative financing mechanisms, non-state actors are no less important in influencing the ultimate trajectory of these initiatives.

While UNITAID includes affected populations in its governance structure, IFFIm and the AMC rely much more heavily on experts to shape the strategic direction of the initiatives. With IFFIm, expertise within the finance industry was central to its design and implementation; with the AMC, experts in health and economics were each given important roles at different stages. These different models have important implications for the ultimate impact of each mechanism in terms of market impact.

In the case of UNITAID, the involvement of affected groups and other non-state actors significantly influenced the focus of the initiative on shaping the market for essential medicines.76 Although officials within the French government shaped the adoption of a tax on airline tickets as the central financing mechanism, non-state actors strongly influenced the innovative approach to the pharmaceutical market. Initial conversations with the leadership of the Clinton Foundation suggested focusing on medicines for AIDS, tuberculosis, and malaria, and the persistent role of civil society board members contributed to UNITAID’s consistent focus on its ultimate market impact across these three diseases.77

76 See DOUSTE-BL AZY & ALT MAN, supra note 39.
77 See DOUSTE-BL AZY & ALT MAN, supra note 39, at 21-22.
By contrast, the finance officials on the IFFIm board proved to be ingenious at identifying low bond spreads in the Japanese markets but were much less interested in the ways in which front-loaded financing might re-shape vaccine markets. The AMC is a somewhat confusing case since the initial premise was to create powerful incentives for research and development for new vaccines but the pressures of G8 decision-making led to a focus on a vaccine that already existed. As a result, the AMC had a much more limited impact on re-shaping vaccine markets than originally anticipated, and the potential of the original idea of incentivizing vaccine development remains largely untested.

The three innovative financing mechanisms also have profoundly different financial implications in the medium to long run. The airline ticket tax, which UNITAID utilized, appears to be the most sustainable of the three financing mechanisms because it relies on a relatively steady stream of individual consumer transactions. However, this approach is not necessarily as predictable as some of the other mechanisms since it depends on a potentially fluctuating level of air travel. By contrast, IFFIm is proving to be the most predictable of these innovative financing mechanisms but it is far from sustainable. In fact, the front-loading of IFFIm has already peaked, and the debt servicing on IFFIm bonds will outweigh the resources it generates for GAVI over the decade to come. In addition, the unique conditions, which enabled IFFIm to succeed on the bond markets, are no longer present. Amidst weakening bond ratings for both IFFIm and key donor governments, this model does not appear to be quite as sustainable in periods of heightened economic uncertainty. Finally, the AMC seems to be quite predictable in specifying advanced contracts with vaccine manufacturers, but this very predictability is becoming a significant financial liability for GAVI. The initial donor contributions, which catalyzed the AMC, fell far short of the overall costs of the arrangement. Although a lower price for the vaccines might be possible today, the lock-in effect of the advanced contract is a significant downside for GAVI as prices continue to decline.

The most successful of these innovative financing mechanisms seem to be the most automatic and the most participatory. The airline ticket tax, once implemented, does not depend on the future actions of national institutions.

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78 See TANIA CERNUSCHI ET AL., GAVI, PNEUMOCOCCAL ADVANCED MARKET COMMITMENT: LESSONS LEARNT ON DISEASE AND DESIGN CHOICES AND PROCESSES 6-7 (2011).
80 See id.
81 See TANIA CERNUSCHI ET AL., supra note 78.
governments to generate resources. By contrast, even the binding commitments involved in IFFIm and the AMC ultimately require national governments to fulfill their commitments. More participatory approaches to designing and governing innovative financing seem to foster better outcomes in terms of the market impact of these financing mechanisms. The expert-led model of the AMC design did not achieve the level of market impact of the multi-stakeholder model utilized by UNITAID. While there are certainly other important differences in the underlying mechanisms that contributed to this result, there is evidence that the participation by affected groups was important in shaping the ultimate market impact of UNITAID. Table 1 highlights the diverse models of innovative financing and governance of each of these mechanisms. Additionally, it highlights the impact of each in terms of the predictability and sustainability of financing, as well as in terms of ultimate market impact:

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<td>MODEL</td>
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<td>Tax</td>
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<td>GOVERNANCE</td>
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<td>FINANCING</td>
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<td>MARKET IMPACT</td>
<td>Medium</td>
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IV. IMPLICATIONS FOR FINANCING THE SUSTAINABLE DEVELOPMENT GOALS

As negotiation of the final Sustainable Development Goals is accelerating, the challenge of financing these ambitious goals is catalyzing renewed interest in a range of innovative financing mechanisms. A High Level Task Force on Innovative Financing for Health, including World Bank President Robert Zoellick and Gordon Brown, issued recommendations for expanding existing financing mechanisms. The report called for the expansion of UNITAID and IFFIm, the extension of the airline ticket tax to more countries, the possible expansion of the mandate of IFFIm, and further
investigation into the viability of levies on tobacco and currency transactions. Amidst declining donor commitments to overseas development assistance (“ODA”), some commentators have cynically viewed these latest efforts as a response by governments failing to meet their ODA obligations. Nonetheless, as national budgets continue to tighten, innovative approaches are generating greater interest. Lessons from the experience of global health financing over the last decade can contribute to a better assessment of these recent proposals and offer some guidance on the direction of innovative financing for development.

Among the most important features of these innovative financing mechanisms are the sustainability of financing and the breadth of participation in the governance of these initiatives. While the challenge of achieving the MDGs has highlighted the significance of ensuring both predictable and sustainable development financing, innovative financing mechanisms that promise sustainable approaches are likely to be more effective in the long run. Predictability can take many forms and can sometimes pose a constraint on innovation and learning. The predictability of accelerated financing under IFFIm came with a long tail of debt financing, which will limit GAVI’s ability to incorporate lessons from its initial implementation efforts. Similarly, the predictability of advanced contracting under the AMC limits the potential for capturing the savings from accelerating declines in drug pricing over time.

Amidst growing donor fatigue in the wake of the financial crisis, the sustainability of development financing will be even more crucial over the next decade. Although the revenue generated from the airline ticket tax can fluctuate in relation to the economy, the automatic nature of the mechanism and its relative independence from the annual budget process of donor countries ensure greater sustainability. Automatic mechanisms that do not rely on domestic cross-pressures and fragile donor commitments are likely to become even more important to future efforts at development financing.

No less important than the sustainability of innovative financing mechanisms is the structure of governance of these initiatives. Based on these three mechanisms, the more participatory models seem to demonstrate more promising market impact than the less participatory models, which rely more heavily on expertise and offer more limited roles for affected


populations. The NGO representatives on UNITAID’s board proved to be forceful and effective advocates for the institution becoming an aggressive player in reshaping the markets for medicines. The less participatory approaches to governance within IFFIm and the AMC contributed to a more limited focus on the potential long-term market impact of these mechanisms. It is quite possible that a more participatory design process might have led the AMC to focus on spurring the development of an earlier stage vaccine of the type that the mechanism was originally designed to incentivize.

Applying these insights from the experience of innovative financing for health suggests that a broader bond-financed IFF for development financing may prove challenging. A broader IFF faces major obstacles because the leading governments behind IFFIm no longer hold the stellar credit ratings that they once did, so the cost of borrowing could be much greater. In addition, the potential benefits of accelerated financing under a broader IFF would still not address the lack of sustainability in this model of innovative development financing. However, the IFF is but one model of bond financing. More decentralized approaches, including supporting municipal bond offerings, may prove more attractive in the context of financing the SDGs.

At least as important as the overall model of financing is the approach to the design and governance of innovative mechanisms and the extent to which diverse stakeholders are involved. The more participatory governance structure of UNITAID contributed to its success in reshaping the market of medicines for AIDS, tuberculosis, and malaria. UNITAID contributed to the development of new pediatric anti-retroviral formulations and tuberculosis treatments, to dramatic price cuts in the cost of medicines for AIDS and tuberculosis, and to greater efficiencies in the supply of anti-malaria medicines.84 By contrast, IFFIm had a much smaller impact on the vaccine market relative to its overall resources, and the AMC fell short of its potential to catalyze the development of important new vaccines.

The apparent relationship between participation and the success of innovative financing mechanisms is consistent with research on recently created vertical funds in the area of development financing. More independent, more participatory, and more performance-based vertical funds are outperforming the less independent, less participatory, and less performance-based vertical funds on the dimensions of resource mobilization, learning, and impact. Less-independent institutions are less likely to involve non-state actors in governance and participation seems to

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84 DOUTE-BLAZY & ALTMAN, supra note 39, at 121.
play an important role in shaping resource mobilization and effective implementation at the country level. 85

The significance of participation for innovative financing also extends to the feedback mechanisms and potential for learning within this new generation of institutions. Recent studies highlight the ways in which openness to the participation of diverse stakeholders can contribute to furthering deliberation in the process of institutional decision-making. Involving civil society actors in the process of agenda setting is an important feature of this pattern within international institutions, but no less important are the mechanisms for continuous feedback, the involvement of local contextual knowledge in implementation, and peer review. 86 Despite the requirement of independent five-year evaluations for each of the three innovative finance mechanisms examined, there are not yet the type of continuous feedback mechanisms that would contribute to institutional learning.

Expanded participation within innovative financing mechanisms also responds to concerns about the overall accountability of development financing institutions. 87 Scholars examining the accountability of international institutions have identified “hybrid intergovernmental-private administration” as an increasingly important form of global administration in which non-governmental actors participate alongside government representatives in standard-setting. 88 With the growing role of non-state actors in the governance of development financing and international institutions more generally, identifying the mechanisms which foster greater accountability within the context of multi-stakeholder governance will be increasingly important to the future of development financing. 89

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85 David Gartner & Homi Kharas, Vertical Funds and Innovative Governance, in GETTING TO SCALE: HOW TO BRING DEVELOPMENT SOLUTIONS TO MILLIONS OF POOR PEOPLE 103, 131 (Laurence Chandy et al. eds., Brookings Institution Press, 2013).
87 See Dann, supra note 11.
V. CONCLUSION

The growth of innovative financing for development over the last decade has demonstrated the enormous potential of new mechanisms for generating resources beyond traditional official development assistance. In the global health sector, diverse approaches to innovative finance among different institutions provide a window into the relative merits of approaches that rely on taxation, bonds, and advanced contract arrangements. The experience of IFFIm, UNITAID, and the AMC offer broader insights into the importance of sustainability and participation in ensuring the success of innovative finance mechanisms and the potential for innovative financing to contribute to realizing the SDGs.

Although none of these innovative approaches would have been established without the catalyst of the Millennium Development Goals and the leading role of members of the G8, the ultimate direction and success of each reflected the diversity of the non-state actors involved in the process and the level of independence of these financing mechanism from reliance upon traditional donor financing commitments. Greater sustainability is easier to achieve with automatic mechanisms that generate resources regardless of whether donors fulfil their financing commitments. Greater market impact appears to be more likely when affected populations are included in the design and governance of innovative financing mechanisms.

Further research is needed to better assess how well these lessons from first generation innovative financing efforts translate into the diverse types of investments required to achieve the SDGs. While it is plausible that sustainability and participation will remain important variables in the success of innovative financing, the relative importance of these dimensions may well be contingent on the capacities and the incentives of the state and non-state actors involved in a given sector. As resources are often fungible, new approaches to innovative financing in support of the Sustainable Development Goals will face the twin challenges of ensuring that new resources are, in fact, additional amidst tightening donor funding, and maintaining a sustainable development focus when the very success of these financing models invites significant competition over scarce resources.