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Ranking, coordination, and global governance: The case of the Access to Medicine Index

Abstract: As a case study in the proliferation of global rankings, we examine the initiation, construction of, and response to the Access to Medicine Index, which ranks pharmaceutical companies according to their respective contribution to access to medicine for developing countries. Since it has served as the model for constructing global rankings in the fields of nutrition, seeds, mining, possibly in the future, oil, seafood, mobile internet, and agricultural commodities, and it serves as a blueprint for the development of corporate sustainability benchmarks in line with the United Nations Sustainable Development Goals, its significance goes well beyond public health. From an economic-sociological perspective we argue, first, that rankings can be conceived as symbolic classifications that serve predominantly as market-based coordination devices. To understand the proliferation of global rankings, we argue, secondly, that they are an integral part of the changing balance of power in the domain of global public health consisting of a historical shift from international organizations as the central mode of governance and coordination to a more decentralized and diversified global field structure. This global field is formed by an increasing number and variety of actors, but lacks a central decision-making body. The case of the Access to Medicine Index suggests that a historical-sociological field perspective has analytical advantages over both the micro-analysis of socio-technical devices and macro-level approaches to issues of governance in contemporary capitalism.

Keywords: ranking, access to medicine, global governance, coordination, field theory

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Introduction

In 2008 the Access to Medicine Foundation (AtMF) published its first biannual index—the Access to Medicine Index (AtMI)—ranking the twenty largest pharmaceutical companies in the world with regard to how well they perform in promoting access to medicine for developing countries. When the fourth edition was published six years later, all ranked companies collaborated with the AtMF in producing the AtMI. The report was by then widely covered in the press as well. The AtMI has been described as “an authoritative guide” in improving global access to medicine.¹ According to the head of the AtMF, the pressure the AtMI puts on pharmaceutical companies has caused them to become more open about their efforts, to change some of their policies, and to make board members or subcommittees responsible for improving access for developing countries.² The AtMI gained considerable support. The AtMF received funding from the Bill & Melinda Gates Foundation, the Dutch Ministry of Foreign Affairs, the UK Department for International Development, and is supported by three non-governmental organizations (NGOs).³ Its chairman represented the AtMF during the 2015 World Economic Forum in Davos, and early 2015 the AtMI was discussed in the European Parliament.⁴ Since the pioneering efforts of constructing the AtMI, the Gates Foundation, the Dutch government, and several other organizations have also supported similar initiatives such as the Access to Nutrition Foundation (AtNF), the Access to Seeds Foundation (AtSF), the Access to Vaccines Index (published by the AtMF), the Antimicrobial Resistance Benchmark (published by the AtMF), and the Responsible Mining Foundation (RMF). The AtNF published its first index, the Access to Nutrition Index (AtNI), in 2013, ranking the world’s largest food and beverages producers with regard to their commitments, practices, and performance relating to poor nutrition and nutrition related diseases. The AtS Foundation published its first Access to Seeds Index (AtSI) in 2016, ranking the efforts of the world’s largest seeds companies to improve smallholder farmers’ productivity. With the publication of the first Access to Vaccines Index in 2017 and the Antimicrobial Resistance Benchmark in 2018, the AtMF focused on how

1 *The Guardian*, 28 November 2012, “Big pharma ups its game in providing drugs to people in poor countries,” <http://www.theguardian.com/global-development/2012/nov/28/big-pharma-drugs-poor-countries> (accessed on 25 November 2015).

2 See *Het Parool*, 5 July 2008, “Index zet druk op de farmaceuten.” *De Volkskrant*, 28 November 2012, “Meer profijt medicijnen arme landen.”

3 Cordaid, Humanist Institute for Cooperation with Developing Countries (HIVOS), and Interchurch Organization for Development Co-operation (ICCO).

4 Access to Medicine Foundation (2015A).

pharmaceutical companies are promoting access to vaccines for developing countries and contribute to halting the rise of drug resistance. The RMF published the first Responsible Mining Index (RMI) to promote mining that respects and protects the interests of the local population and the environment in 2018. Building on the success of these indices, the founder of the AtMF initiated the Index Initiative Foundation (IIF) in 2015. This foundation operates as a center of expertise, which, together with other organizations, aims at developing indices for a variety of industries to stimulate companies to contribute to the United Nations Sustainable Development Goals (UN SDGs). Feasibility studies were conducted for the oil and gas industry, agricultural commodity traders, seafood companies, and mobile internet operators in 2017. Also in 2017, together with, among others, the United Nations Foundation, the IIF started the consultation phase of the World Benchmark Alliance. With this latter initiative, the IIF explores the possibility to develop global, freely accessible corporate sustainability benchmarks in line with the UN SDGs.

The use of rankings is by no means a new phenomenon; in recent decades rankings and other publicly available quantitative indicators and listings are increasingly used in different sectors, allegedly to satisfy demands for “accountability, transparency, and efficiency.”⁵ They are used by international organizations such as the World Bank and the UN, national governments, global businesses, organizations concerned with the compliance of legal standards regarding human rights, corruption, and environmental issues, advocacy groups, and scientific and other experts (e.g., policy makers and consultants). And it has been argued that the production and use of such indicators have “the potential to alter the forms, the exercise, and perhaps even the distribution of power in certain spheres of global governance.”⁶ It is therefore of considerable importance to study how such rankings are produced, what their consequences are for specific settings, and how they can be understood analytically.

In this case study of the AtMI we aim to answer the following questions:

- 1) When, by whom, and with what purpose was the AtMI initiated, who were the early supporters, and why?
- 2) How has the AtMI been constructed and how has this process of construction evolved over time?
- 3) What were the responses to the AtMI and how has it been used by various actors?
- 4) What are the more general consequences of the introduction of the AtMI for the functioning of the field of global public health?
- 5) How can we, more generally, understand the initiation and use of these types of rankings?

⁵ Espeland and Sauder (2007), 1.

⁶ Davis et al. (2012), 4.

Although a significant case, the AtMI is not the only example of its kind. Other rankings exist, such as investors' profitability ratings of pharmaceutical companies, which have already been in use for more than a century. More recent rankings have been undertaken to improve transparency and corporate responsibility. Well-known examples include the Dow Jones Sustainability Index (DJSI, founded in 1999) and the Global Reporting Initiative (GRI, founded in 2000). The difference between these initiatives and the AtMI is that while the DJSI and GRI focus on corporate responsibility on a general level, the AtMI targets large, for-profit pharmaceutical companies and attempts to improve their efforts in the advancement of access to medicine for developing countries. Another reason for focusing on the AtMI is that it has already been and will be emulated in other sectors, including the food and beverage industry and the seeds industry. Recently, feasibility studies for a range of other industries, including the chemical and oil and gas industries, have also been announced.⁷

Rankings, indices, and other quantitative and comparative indicators are studied primarily using a social study of science and technology perspective or from a governance perspective.⁸ As the AtMI aims to change the way pharmaceutical companies compete, it can also be studied using an economic perspective or by a combination of economic and political perspectives.⁹

Although the social study of science and technology provides interesting analyses of rankings and other valuation devices, scholars within this interdisciplinary field predominantly use a micro-perspective to analyze in detail how exactly specific technologies are constructed and used. They tend to ignore the broader context in which rankings are created, used, and may become successful. Economic and governance perspectives, on the other hand, focus primarily on this broader context to explain indicators' creations and roles. To properly understand the initiation and use of these type of indicators, we propose a meso-level, historical-sociological field approach to examine the AtMI.

Although there are different versions of field theory, they share a number of fundamental characteristics that are essential to our analysis.¹⁰ Fields are, briefly put, relatively autonomous social spaces where different actors organize

⁷ See Index Initiative (2017).

⁸ Higgings and Lerner (2010).

⁹ See, for instance, Tim Büthe's (2012) contribution to Davis et al.'s book *Governance by Indicators*.

¹⁰ Field theory has become prominent in sociology, primarily as an alternative approach to large-scale macro approaches to market economies and capitalist accumulation as well as to micro-level studies of interaction patterns and their outcomes. The approach has been developed mainly by Pierre Bourdieu and Neil Fligstein, see Bourdieu (2005), Fligstein (1996; 2001), and Fligstein and McAdam (2012). For general discussions, see Martin (2003; 2011) and Hilgers and Mangez (2015).

themselves around a specific interest, frame their policies and actions vis-à-vis one another, and compete for stakes that are particular to the social space in question. The relations between these actors are dependent on the position they occupy in the structure of the field and on the volume and composition of the resources of which they dispose. Together, these relations form a structure that, in turn, structures the future interactions of the actors. As a result, fields have a tendency to reproduce themselves. At the same time the entrance of new actors and changes in the conditions under which fields function result in changing patterns of interaction and occasionally in a transformation of the entire field structure.

This approach allows us to understand the dynamics of the institutional and competitive environment in which the AtMI was introduced, the way in which the index has been constructed, and the consequences of its introduction for the functioning of the field of global public health. It also suggests more general conclusions about the recent proliferation and uses of indices.

In the following, we first discuss the role and consequences of rankings for the functioning of global fields in general, before explaining the research methodology and analyzing the development of the field of global public health. Then, we present the case study of the AtMI, discussing its initiation, construction, and response, thereby providing an answer to the first three (empirical) research questions. Finally, we discuss the notion of “access to medicine” within the field of global public health and conclude by reflecting on how to understand the creation and use of this type of ranking, thereby answering the latter two (more theoretical) research questions.

What do global rankings do?

The coordination of human activities can take place either directly or through some form of mediation. Direct coordination is limited to relatively small groups. Indirect or mediated coordination becomes predominant when the scale of interaction increases and can roughly take two different forms: one based on the delegation of power and responsibility within an organizational unit, the other through cultural or symbolic forms.

International organizations such as the UN or the World Trade Organization (WTO), for example, function on the basis of national representation and political negotiation between country representatives. Since their emergence in the nineteenth century this type of organization has served as a form of (indirect) coordination and governance in international affairs.¹¹

¹¹ Hale and Held (2011), MacKenzie (2010), and Reinalda (2009).

The second type of indirect coordination is offered by what Cassirer called symbolic forms.¹² The primitive classifications studied by Durkheim and Mauss were religious world views, which guided human behavior to socially legitimate goals. With the advancement of the division of labor, classification systems have become more secular and specialized. Classifications of goods, services, and organizations help people make sense of the world and function as *coordination devices*.¹³ Rankings, indicators, indices, and other quantitative measures have been described as “technologies”¹⁴ or as “mechanisms”¹⁵ of governance or accountability.¹⁶ On the more general level, however, they are best viewed as *symbolic classifications* in the classical sense of Durkheim and Cassirer.¹⁷

Classifications are collective representations that produce a hierarchy of credibility, that is a symbolic ordering on the basis of which certain objects, organizations, or people are depicted as more worthy, honorable, or prestigious than others.¹⁸ Rankings attribute symbolic value to some and not to others. In the case of organizational rankings, the better ranked are more desirable to work for or do business with than the lesser ranked. If rankings are considered trustworthy, they thus produce a reputational effect, which has consequences for both the internal functioning of organizations and their external relations. Legitimate rankings therefore cannot be easily ignored, even if they can be contested on good grounds.

Among the oldest and best-known rankings are the credit ratings of firms and states. Produced by private companies, they have been routinely used in the financial sector to assess the risk of securities issued by companies and governments. These ratings are an essential intermediary between buyers and sellers, and as such a constitutive device for the functioning of modern, large-scale financial markets.¹⁹ Especially since the financial crisis of 2008, credit rating agencies have been criticized because of conflicts of interest, monopolistic practices, and herd behavior, but the principle of rating the credibility of financial instruments and institutions is not widely disputed. With the expansion of ratings to other sectors, however, criticism has significantly increased.

A well-researched example is that of higher education. Today, universities are ranked according to their excellence in teaching or research, their productivity, or

12 Cassirer (1977).

13 Karpik (2010). See also Lamont (2012).

14 Davis et al (2012), 6.

15 Higgins and Lerner (2010), 1.

16 Espeland and Sauder (2007).

17 Durkheim and Mauss (1963) and Cassirer (1977).

18 Bourdieu (1991).

19 Boot et al. (2006), Langohr and Langohr (2008), and Levich et al. (2002).

their international appeal. According to various authors this has led to the imposition of market principles to the educational sector, and in the case of business schools, for example, to the transformation from providing substance to presenting an image.²⁰ Rankings are used as instruments to implement reforms in higher education, and curricula are altered in line with the wishes of students and recruiters, as they are the most common actors being surveyed for these rankings.²¹ In a study on U.S. law school rankings, Espeland and Sauder found that rankings, first of all, cause a redistribution of internal resources, the redefinition of work, and the use of gaming strategies.²² Further, their research demonstrates that the effects of rankings depend on the specific structure of the field in question. The ranking of researchers and research institutes on the basis of bibliometric indicators, for example, takes on specific forms and have become widely used, although they rarely measure the quality of the ranked establishments as they pretend to (Gingras (2016)).

So, global rankings enable the (indirect) coordination of human activities and can be seen as symbolic classifications; they create a hierarchy of credibility and determine what objects, organizations, or, in this case, firms deserve to be seen as the best performing and most prestigious. As they have the potential to change the balance of power in national as well as international fields, it is of great importance to study the structure and development of the field in which they are introduced, who initiates them, with what strategic purpose, how they are being constructed, and how the other actors within and outside of the field respond.

Methodology

To analyze the structure and development of the domain of global public health in which the AtMI was introduced, we conducted a study of the history of global public health and the norm of access to medicine. As the purpose of this literature study is to situate the creation of the AtMI in the institutional context of global public health and the pharmaceutical industry, we have restricted our analysis to the period after the Second World War and limited ourselves to describing the development of the sector and its main characteristics.²³

20 Amsler and Bolsmann (2012) and Gioia and Corley (2002).

21 Hazelkorn (2008); Trank and Rynes (2003).

22 The manipulation of rules and numbers in order to improve appearance and, with that, their ranking, see Espeland and Sauder (2007) and Gingras (2016).

23 A more elaborate description of the historical development of global public health can be found in Quak et al. (2016).

Our study of the initiation, construction, and response to the AtMI consisted of interviews and document analysis. We conducted twelve semi-structured interviews with representatives of the AtMF, the pharmaceutical industry, an NGO, philanthropic foundations, and the Dutch government (for a complete list of the conducted interviews, see Appendix A). Even though we have tried to balance the interviews among the various types of actors involved, only one (former) employee of an NGO was willing to participate in our research. Interview requests to the Dutch and international offices of Oxfam and Médecins Sans Frontières were unsuccessful. The document analysis consists of all publications by the AtMF for the period 2008–2014, publications of the other stakeholders, and newspaper articles on the AtMF in leading international newspapers, including the *Financial Times*, *The New York Times*, and *The Guardian*, using the LexisNexis newspaper database.²⁴

The transformation of global public health

From the latter half of the nineteenth century, and especially since the Second World War, a variety of intergovernmental organizations were created for the governance and coordination of activities with an international impact, including those related to public health (e.g., the League of Nations' Health Organizations, the World Health Organization, and the United Nations Children's Fund). In recent decades, more diversified modes of governance, such as public-private alliances, have been developing. Non-state actors, including private firms, civic organizations, and intermediaries, have obtained an important role in these alliances (e.g., the Global Fund to Fight Aids, Tuberculosis and Malaria and the GAVI Alliance). By entering the domain of global public health, they profoundly changed the structure of the sector and its functioning. Parallel to the new modes of governance, coordination is increasingly ensured through specific classifications of reality such as market-based rankings.²⁵ The AtMI is an example of a ranking that has been initiated with the explicit goal of influencing the activities of the primary actors in the field of global public health. With their ranking, the AtMF has developed a device that contributes to the coordination of global public health by prioritizing certain public health policies over others. It thereby satisfies a demand for coordination by the most powerful actors in the field, comprised of both public and private organizations and including the Gates Foundation, and

²⁴ The interviews and document analysis were conducted by the first author.

²⁵ Davis et al. (2012) and Hale and Held (2011).

offers them a market-based solution instead of relying on a hierarchical structure, like the World Health Organization (WHO).

After the Second World War, an international health system was set up to take responsibility for the improvement of public health in both developed and developing countries. This system was based on the UN-model of national representation, and its primary organization was the WHO. In developed countries, local and national governments continued to take primary responsibility for the improvement of public health; for these countries, the WHO primarily functioned as a center of expertise and coordination. In the developing countries, the WHO had a more active role; besides functioning as a center of expertise and coordination, the WHO assisted in the initiation of large-scale immunization programs, such as the Expanded Program on Immunization (EPI). This international health system and its primary organizations were part of a more widespread infrastructure of intergovernmental institutions that had developed since the end of the nineteenth century and experienced significant growth after the Second World War.²⁶

From its foundation until the early 1980s, the WHO initiated several public health initiatives and, through its regional offices, functioned as the central actor in global public health. But this leading role was progressively undermined after the economic crises of the 1970s and early 1980s, the spread of neoliberal policies of economic deregulation, the stimulation of cross-border trade, investment, and competition, and the more limited role for governments and intergovernmental bodies as compared to private actors. The WHO, first of all, had to reckon with the increasingly prominent role of the World Bank, which began to invest in public health after acknowledging in 1980 “that improving health and nutrition could accelerate economic growth.”²⁷ Throughout the 1980s the World Bank became more influential, but it was especially in the 1990s, exemplified by the *1993 World Development Report: Investing in Health*, that it obtained an important role in the field of global public health.²⁸ The World Bank directly linked the improvement of health to countries’ economic development and accompanied its loans to developing countries by a call for the “efficient use of available resources” while favoring “free markets and a diminished role for national governments.”²⁹ Besides seeing its field of expertise being threatened by the World Bank, the WHO also experienced a funding crisis. In 1982 the World Health Assembly

²⁶ Hale and Held (2011).

²⁷ Brown et al. (2006), 67.

²⁸ Youde (2012).

²⁹ Brown et al. (2006), 67.

decided to freeze the WHO's budget.³⁰ This was followed by the decision of its largest donor, the United States, to pay only one fifth of its annual contribution and withhold its contribution to the WHO's regular budget in the mid-1980s. From its foundation until the late 1970s, the WHO had primarily focused on two functions: (1) setting normative standards with regard to health and medicines, and (2) providing technical advice and assistance on health issues around the globe. Both functions approached the improvement of health from a technical, disease oriented standpoint and avoided possible political or cultural controversy. In the late 1970s this approach ran into difficulties when it became clear that "technology alone was not enough."³¹ To further improve global public health, basic health care systems needed to be built up in developing countries, but this also meant that the WHO would touch upon more politically sensitive issues. In the late 1970s the World Health Assembly passed an international code to stop the marketing of breast milk substitutes in developing countries. Like WHO's Essential Drug Program, which encouraged countries to develop their own drugs, this was opposed by the United States. The United States had substantial economic interest in both of these markets and argued that these initiatives interfered with the requirements of free trade.³² These decisions resulted in a fundamental change in the budget of the WHO. While in the early 1980s the WHO primarily relied on its regular budget consisting of contributions from its member states related to their population size and gross domestic product, by the early 1990s its extra budgetary funds, consisting of donations, comprised the majority of its yearly funding. While the World Health Assembly had authority over the regular budget, its wealthy donors, such as the World Bank and other multilateral aid agencies, controlled the extra-budgetary funds. As a result of diminished funding and power shifts to donor funding, the WHO lost some of its organizational capabilities and its leading position in the field of global public health was under pressure. This provoked the entry of new actors that changed the balance of power and resulted in a profound reconfiguration of the way public health was structured around the globe.

While in the decades after the Second World War international health policies had been developed by the WHO based on national representation, expert advice, and political negotiations between the member states, since the 1990s a more

30 The World Health Assembly is the WHO's decision making body in which all member states are represented.

31 Godlee (1994), 1491.

32 Around that time, Nestle, which had substantial holdings in the United States, controlled one third of the global market in breast milk substitutes. Also, eleven of the eighteen largest pharmaceutical companies of that time were located in the United States.

diversified and global structure has emerged. In this emerging field of global health public-private alliances and a global philanthropic foundation have taken center stage, and manufacturers from developing countries, civic organizations, and new intermediaries have entered and claimed a position. The previously dominant actors, the WHO and the traditional pharmaceutical industry in the developed world, still have a central role, but have been forced to rethink their operations and business models. This new global structure is more diversified as it not only consists of strictly public organizations, such as the WHO, and private organizations, such as pharmaceutical companies, but also of public-private alliances and a variety of for-profit and non-profit private organizations with an interest in public health.

The first important change in the organization of global public health in the past two decades was the entrance of the Bill & Melinda Gates Foundation. Through its Global Health Program the Gates Foundation has made large donations to initiatives regarding diseases such as AIDS, tuberculosis, malaria, and polio, aiming to help “all people to lead healthy, productive lives.”³³ The Gates Foundation is also one of the founders and an important financier of the GAVI Alliance, a public-private health partnership founded in 2000 committed to increasing immunization in developing countries. Other partners include the WHO, UNICEF, the World Bank, national governments of developed (donor) countries and developing countries, other philanthropic organizations, civil society organizations, and vaccine developers and manufacturers from both developed and developing countries. The Gates Foundation is also an important financier of the Global Fund to Fight AIDS, Tuberculosis, and Malaria. This financing institution was established in 2002 by a variety of donor and multilateral agencies, including the WHO, the G8, and the Gates Foundation.

Another change in the reconfiguration of global public health is the rise of manufacturers from developing countries and small innovative biotech companies. In the decades following the Second World War, the pharmaceutical industry was dominated by large Western pharmaceutical companies that functioned on the basis of a business model that enabled research and development (R&D) investments through patent protection. In recent years, pharmaceutical companies from developing countries, initially focusing on the production of generic drugs, are slowly increasing their R&D efforts and have improved their position. On the other hand, small biotech companies focusing on innovative research have successfully challenged the leading position of traditional pharmaceutical companies. Large Western pharmaceutical companies have reacted to these

³³ See factsheet on website of Bill & Melinda Gates Foundation: <http://www.gatesfoundation.org/Who-We-Are/General-Information/Foundation-Factsheet> (accessed on 25 November 2015).

developments by acquiring some of these biotech companies, manufacturing their own (branded) generics, cooperating with manufacturers from developing countries, and introducing tiered pricing schemes.

A final critical change is the entrance and prominence of, what we call, *new intermediaries*, that is of organizations that are neither producers nor funders, but that have an intermediary role between the primary groups that make up the field. Intermediaries can be defined as groups that try to influence the relationships between the primary actors in a field through publications, lobbying, and other initiatives.³⁴ These include NGOs, advocacy groups, centers of expertise (both independent and academic), think tanks, and other independent organizations, such as Médecins Sans Frontières, Oxfam, the Center for Global Development, and the Access to Medicine Foundation. Although intermediaries have always existed, their number, variety, and prominence have greatly increased since the 1980s.³⁵

Together, these developments constitute a fundamental transformation of international public health: a shift from a centrally governed international order based on political representation and the mobilization of experts toward a more decentralized global field consisting of a plurality of different actors, with an important role for disease specific public-private alliances, an increased significance of private funding, and without a clear central decision-making center. The current field of global public health consists of a variety of interdependent actors concerned with the improvement of public health across the globe, including research institutes, large Western pharmaceutical companies, small biotech firms, manufacturers of generic drugs from developing countries, public health agencies, multilateral organizations (e.g., WHO, UNICEF), public-private-partnerships (e.g., Global Fund to Fight AIDS, Tuberculosis and Malaria, GAVI Alliance), NGOs (e.g., Médecins Sans Frontières, Oxfam), new intermediaries (e.g., AtMF, Center for Global Development), philanthropic organizations (e.g., Bill & Melinda Gates Foundation, Clinton Foundation, Rockefeller Foundation, Rotary International), as well as special interest groups. These interrelated actors are concerned with the research, development, production, distribution, and use of medicines, the construction and improvement of health infrastructures, public health measures, health governance, and funding. The transformation the organization of public health has experienced in recent decades is summarized in [table 1](#).

Because the domain of international public health has increased in size and has diversified in terms of the variety of actors involved, whereas the power of

³⁴ The primary actors are those organizations concerned with the research, development, production, distribution, finance, and governance of public health across the globe.

³⁵ Youde (2012).

Table 1: Historical development of the organization of public health across the globe

	International health system	Field of global public health
Historical period	1945–1990	1990–present
General characteristics	International expert regime with centralized governance structure based on negotiations between representatives of national states, which were also the main funders	Decentralized global field structure with plurality of public and private actors without central decision-making structure
Actors	World Health Organization as central actor Limited role of intermediaries	Position of World Health Organization contested, its role diminished Growth and increasing significance of intermediaries (NGOs, including “new intermediaries”)
Principle	State based	Market based
Governance	Central and stable governance structure (WHO)	Disease specific and more flexible public-private alliances
Coordination	Ensured by central actor (WHO)	Increasing role for rankings as coordination device
Funding	Contributions by national governments and donations	Shift to more private funding
Business model for production and R&D	Patent protection enables large R&D investments Limited degree of tiered pricing	Patents are running out and are contested Search for new model Tiered pricing schemes expanded

central decision-making bodies has diminished, a new demand has arisen for coordination. Rankings, we argue, are best conceived as one of these relatively new coordination mechanisms. Historically they can be seen as a response to the demise of the international organization as the previously dominant mode of governance and coordination.³⁶

Now the structure and recent changes of the field in which the AtMI was introduced has been explained, we turn to the initiation, construction of, and response to this market based coordination device.

Initiation of the Access to Medicine Index

The AtMI is published by the AtMF, an independent non-profit organization based in Haarlem, the Netherlands. The foundation was founded in 2005 by Wim Leereveld, a former pharmaceutical marketing entrepreneur. The AtMF describes its goal as to “help give millions of people on the planet better access to medicines that they urgently need.”³⁷ It aims to do so by publishing the AtMI and, thereby, (1) supplying all stakeholders, including the investment community, with independent information on pharmaceutical companies’ access policies and practices, (2) giving pharmaceutical companies an instrument to compare their own policies and practices with their competitors, and (3) providing a tool to all stakeholders to discuss access policies and practices.³⁸ The AtMF wants to provide a “consistent benchmark report every two years,” which highlights best practices, holds the best performing companies up “as shining examples to others,”³⁹ and provides pharmaceutical companies “clear guidance, by reporting on what they and their peers are already doing well, and by showing where solutions are still needed.”⁴⁰ By publishing this index, the AtMF wants to stimulate competition between pharmaceutical companies and encourage them to improve their access policies and practices for developing countries. It argues that the index rewards companies that take responsibility for improving access to medicine for those in need by recognizing their achievements and in this way “helps spark competition.”⁴¹ As part of this study, we determine whether the AtMF succeeds in these goals and whether the other actors in the field accept the AtMI as a legitimate and

36 Levi-Faur (2012).

37 Access to Medicine Foundation (2008), 3.

38 Ibid.

39 *The New York Times*, 17 June 2008, “Index ranks companies on efforts to get their drugs to poor countries.”

40 Access to Medicine Foundation (2014), 5.

41 Ibid. (2010a), 10.

credible tool to improve pharmaceutical companies' access policies. However, we first discuss the background of the AtMF and its founder.

Wim Leereveld, the Dutch founder of the AtMF, has extensive pharmaceutical marketing experience in a career spanning forty years. In 2003, he founded a Dutch foundation called Stichting Wereldbedrijf in an effort to foster cooperation between the business world and development aid. After rethinking this idea for some time, he renamed it Access to Medicine Foundation in 2005 and decided to focus on the role of pharmaceutical companies in improving access to medicine for developing countries. During his career, Leereveld had acquired intensive knowledge about these companies and was convinced that even though a variety of stakeholders share the responsibility, "pharmaceutical companies [are] essential actors in proving access to drugs to those in need"⁴² ... "as the owners of vital knowledge, technology and infrastructure, [they] have particular roles to play."⁴³

Large pharmaceutical companies are regularly called upon to share their patents and increase their efforts to improve access to medicine. While methods of naming and shaming are used by many NGOs and while national governments rely on regulations and guidelines to coordinate corporate behavior, Leereveld was convinced it would be better to establish a dialogue with these companies. From his work experience he had learned that pharmaceutical companies are constantly comparing themselves with their competitors. When trying to stimulate them to improve their efforts regarding access to medicine, he therefore argued it was best to compare their access policies and practices. This idea was inspired by a report published by Oxfam, VSO, and Save the Children, entitled, "Beyond Philanthropy: The Pharmaceutical Industry, Corporate Social Responsibility and the Developing World."⁴⁴ This report suggested to compare pharmaceutical companies' policies and practices and Leereveld decided to do just that.

In its first years the AtMF received financial support from a variety of governmental organizations, NGOs, and banks.⁴⁵ The foundation did not yet have any results, but these organizations believed in the idea behind the AtMI. Prior to the index's publication in 2008, Leereveld presented his idea to representatives of the Gates Foundation. At that time, they were unwilling to support the initiative, as they perceived it as an initiative that was too critical of the pharmaceutical industry's efforts. Presentations at the Soros Foundation and pharmaceutical

⁴² Ibid. (2007), III.

⁴³ Ibid. (2008), 3.

⁴⁴ Oxfam, VSO, and Save the Children (2002).

⁴⁵ The UK DFID, the Dutch Ministry of Foreign Affairs, Oxfam Novib, Hivos, Cordaid, the Interchurch Organization for Development Co-operation (ICCO), European Agency for Development and Health (AEDES), Rabobank, and SNS REAAL.

corporation Pfizer were not greeted with positive responses either. But after publication of the first AtMI in June 2008, Leereveld was invited to a health summit funded by the Gates Foundation. This meeting was also attended by the chairman of the Wellcome Trust, Sir William Castell, who had earlier introduced the project to Bill Gates after reading about it in the *Financial Times*.⁴⁶ Gates himself had called rankings an important mechanism in stimulating companies to take responsibility for a variety of social issues in an interview with *Time* magazine in August of the same year.⁴⁷ During his speech at the Davos World Economic Forum a few months earlier he had argued that large companies could be stimulated to improve their social responsibility and sustainability policies by recognizing them for their efforts.⁴⁸ Since then, together with the Dutch Ministry of Foreign Affairs and the UK Department for International Development (DFID), the Gates Foundation has become a major financier of the AtMF.

So, the AtMI was introduced to the field of global public health by an independent actor with inside knowledge of how pharmaceutical companies work. In order to decide upon their actions and strategies, pharmaceutical companies watch one another and the AtMF uses this insight. The foundation argues that the index, first and foremost, encourages pharmaceutical companies to increase their efforts to improve access to medicine for developing countries by stimulating competition between them. Instead of using strategies of naming and shaming, as often used by NGOs, or by implementing regulations and guidelines, the AtMF argues that through this index it stimulates a “race to the top” in pharmaceutical companies’ access practices by comparing their policies and practices and recognizing their achievements. The AtMF introduced a new market based coordination device that fits more closely with the recently transformed, decentralized field of global public health consisting of a plurality of public and private actors. Before going into what the consequences of the introduction of the index have been for the functioning of this global field, we discuss the process of constructing the index.

Construction of the Access to Medicine Index

The process of constructing the AtMI began with developing its methodology. This started with a review of the literature and a consultation round among experts

46 The second largest charitable foundation in the world, after the Gates Foundation, focusing on improving human and animal health.

47 *Time*, 31 July 2008, “Making Capitalism More Creative,” Barbara Kiviat and Bill Gates, content.time.com/time/magazine/article/0,9171,1828417,00.htm (accessed on 25 November 2015).

48 Kinsley (2008).

(NGOs, health organizations, pharmaceutical companies' shareholders, academics, and consultants). For the 2008, 2010, and 2012 indices, this process was conducted by a research company on behalf of the AtMF. By the time the methodology for the 2014, 2016, and 2018 indices were updated, the AtMF had established its own research team to undertake this endeavor. For each of the six indices the scoring of all companies was carried out in cooperation with a market research company.⁴⁹

The initial consultation consisted of background research on access to medicine related reports published by third parties such as the UK DFID, Oxfam, the WHO, and the Pharmaceutical Shareowners Group. Then, for each of the six indices, a questionnaire was distributed among experts from academia, consultancy firms, the financial industry, health organizations, and NGOs from developed and developing countries, to collect their opinions on the role and practices of pharmaceutical companies in improving access to medicine for developing countries. Roundtable discussions followed with representatives from all stakeholders for developing a framework for company comparisons. In the process of updating the methodology for the 2010, 2012, 2014, 2016, and 2018 indices, a roundtable was also organized in Nairobi or Ghana to get input from developing country NGOs. For the 2008 index, the pharmaceutical companies were consulted separately. After other stakeholders were consulted, both individual pharmaceutical companies and industry representatives were contacted to discuss the results, to find out which data could realistically be expected to be disclosed, and to refine the indicators and their relative weight. For the 2010 and following indices separate consultation phases were no longer deemed necessary. A final consultation round with all stakeholders, including pharmaceutical companies and the industry's representatives, was then organized to get comments on the updated methodology.

To improve the methodology, in 2009 an Expert Review Committee (ERC) was installed consisting of representatives from academia, governmental organizations from both developed and developing countries, the pharmaceutical industry, investors, NGOs, the WHO, consultancy firms, and the Gates Foundation. The AtM Foundation team remained ultimately responsible. In 2011 Technical Subcommittees (TSCs), consisting of health professionals, academics, and consultants, were added to the ERC focusing on specific parts of the Index. While the ERC

⁴⁹ This was done by Innovest for the 2008 index, RiskMetrics (had acquired Innovest in 2009) for the 2010 index, and MSCI ESG Research (had acquired RiskMetrics in 2010) for the 2012 index. Innovest already had significant experience with analyzing companies' social policies and practices and was responsible for the stakeholder process, gathering and analyzing the necessary data, and the report writing. Now the AtM Foundation has ensured funding to publish at least two more indices in 2016 and 2018, it is expanding its research team and will, for future, indices, conduct some of these tasks by itself, e.g., the stakeholder consultation process. The scoring for the 2014 index was carried out in cooperation with Sustainalytics.

was created to ensure the political representation of all stakeholders in the update of the Index, the TSCs were created to ensure technical expertise. For the 2012 index, representatives from generic manufacturers were added to the ERC. Additional consultations with stakeholders outside these formal committees also took place. Pharmaceutical companies themselves actively took part in the process. In 2013, for instance, the AtMF invited representatives from all companies ranked in the 2012 index to give feedback on the methodology, the procedures used, and the results. Eleven of them participated in conference calls with the AtMF discussing these topics.

The consultation rounds resulted in a methodology to determine the score of each pharmaceutical company's access policies. For the 2008 index eight technical areas were distinguished, of which two were merged for the following indices. Each of these technical areas was given its own weight in the total score. These weights have changed slightly over the years. To determine how companies performed on each of the eight technical areas, for the 2008 index a total twenty-eight indicators were identified and divided into ninety-four metrics. This setup was changed for the following indices when the companies were ranked for each technical area on the basis of various indicators, which were grouped into four strategic pillars. Again, each of the technical areas and strategic pillars had their own specific weight for the 2010 and following indices.

Company selection for all four indices was done on the basis of market capitalization, but as pharmaceutical companies have different business models, the relative weight was adjusted to take these differences into account. While the 2008 index consisted of twenty generic and originator companies, in 2010 twenty originator and seven generic companies were ranked separately because of their clearly distinct business models. In 2012 and following years, the generic companies were excluded because of difficulties with comparability, only twenty originator companies were ranked. Compared to the 2008 index, the pharmaceutical companies were ranked for their access policies and practices in an increasing number of countries⁵⁰ for an increasing number of diseases for the 2010 and

50 The selected countries for the 2008 index are all low and medium human development countries as identified by the UN Human Development Index. For the 2010 index, countries classified as high or upper middle income by the World Bank were excluded. The 2012 index, focused on low and lower-middle income countries based on World Bank classifications. To include countries that show high inequality, the UN Human Development Index was used in addition to the World Bank classifications. For the 2014 index, the 2013 World Bank country classifications were used to determine low and middle income countries. All of them were included in the index. Also, the UN Human Development Index was used, including all countries that score under 0.55 on the UN Inequality-Adjusted Human Development Index.

following indices.⁵¹ While in 2008, the valuing process of companies' access policies and practices was conducted using a relative ranking,⁵² for the subsequent indices a mix of an absolute and a relative rating system was used; quantitative indicators were rated relatively while qualitative indicators were rated using an absolute rating system. For future indices, the AtMF strives for more quantitative indicators and an overall absolute rating system.⁵³ Table 2 summarizes the characteristics of the first four indices as discussed above.

Because of significant changes in the methodology for the 2010 index, one can question its comparability with the 2008 index. And even though the changes to the 2012 and 2014, 2016, and 2018 methodology were less radical, one could still pose the question how to interpret changes in individual companies' rank.

The average change in rank of individual companies did not differ much between 2010 and 2012 with respectively 3.1 and 3.0 places. However, this decreased to only 2.2 places in 2014 and 2016.⁵⁴ As the changes in the methodology were far more radical in 2010 than in 2012, 2014, and 2016, this suggests that individual companies' changes in rank were not caused by changes in the index's methodology. According to the AtMF, companies were more willing to share information for the second index, resulting in an overall improvement in scores and, for some individual companies, an increase in rank. The best example is Gilead Sciences which moved up eleven places in 2010 (from fifteenth to fourth place) among others by increased disclosure across all areas.⁵⁵ In 2012 companies were, again, more willing to disclose information. But, according to the AtMF, they also improved their actual policies and practices as seventeen out of the twenty companies ranked were awarded with higher scores compared to the 2010 index. Merck KGaA⁵⁶ gained the most places in the 2012 Index (seventeenth to eighth place), largely because of increased disclosure regarding specific areas, but also because of improvements in areas such as R&D and pricing. AstraZeneca,

51 The list of neglected diseases and diseases which accounted for at least 1 percent of the global burden of disease. This list is based on the Disease Control Priorities Project, an ongoing joint project by the World Bank, WHO, National Institutes of Health, the Population Reference Bureau, and the Gates Foundation, which tries to establish priorities for global disease control (Access to Medicine Foundation, (2007 and 2008)).

52 Companies displaying best practices were awarded 5 points (on a 1–5 point scale) and all other companies were rewarded accordingly.

53 Access to Medicine Index (2007; 2010b; 2012a; and 2013).

54 This is based on own calculations of the authors on the basis of the companies ranked in two consecutive Indices.

55 Access to Medicine Foundation (2010a).

56 The company headquartered in Darmstadt Germany, also known as German Merck, not Merck & Company, or Merck Sharp & Dohme, but known as Merck in North American and as MSD in the rest of the world.

Table 2: Overview of the 2008, 2010, 2012, and 2014 ATM Indices

Companies (based on market capitalization)	2008 20. Both generic and originator companies	2010 27. Separate list for 20 originator and 7 generic companies	2012 20. All originator companies	2014 20. All originator companies
Technical areas (in 2008 referred to as criteria) (weightings 2010: originator (generic) %)	8 1) ATM Management – 20% 2) Public Policy Influence & Advocacy – 10% 3) Research & Development – 20% 4) Patents & Licensing – 10% 5) Manufacturing, Distribution and Capability Advancement – 15% 6) Equitable Pricing – 15% 7) Drug Donations – 6% 8) Philanthropy – 4%	7 1) ATM Management – 10 (10)% 2) Public Policy & Market Influence – 10 (10)% 3) Research & Development – 15 (25)% 4) Equitable Pricing, Manufacturing & Distribution – 20 (30)% 5) Patents & Licensing – 15 (10)% 6) Capability Advancement in Product Development and Distribution – 10 (15)% 7) Donations & Philanthropy – 10 (10)%	7 1) ATM Management – 10% 2) Public Policy & Market Influence – 10% 3) Research & Development – 20% 4) Equitable Pricing, Manufacturing & Distribution – 25% 5) Patents & Licensing – 15% 6) Capability Advancement in Product Development and Distribution – 10% 7) Donations & Philanthropy – 10%	7 1) ATM Management – 10% 2) Public Policy & Market Influence – 10% 3) Research & Development – 20% 4) Pricing, Manufacturing & Distribution – 25% 5) Patents & Licensing – 15% 6) Capability Advancement in Product Development and Distribution – 10% 7) Donations & Philanthropy – 10%
Indicators Metrics (2008)	28 94	112	101	95
Strategic Pillars (2010, 2012 and 2014)		4 Commitment – 30% Transparency – 30% Performance – 30% Innovation – 10%	4 Commitment – 25% Transparency – 25% Performance – 40% Innovation – 10%	4 Commitment – 25% Transparency – 25% Performance – 40% Innovation – 10%
Diseases	24	33	33	47
Countries	88	88	103	106

at the same time, lost nine places (from seventh to sixteenth place) in the 2012 Index, primarily because it had not advanced much in its access policies and practices compared to most other companies. Finally, according to the AtMF, the 2014 index tells us that pharmaceutical companies continue to improve their access practices and policies, although more than half of the new products are introduced by only five companies and more than half of these products target one of only five diseases. GlaxoSmithKline occupied the first position for the fourth consecutive time, while NovoNordisk and Eisai both rose four places, from respectively sixth to second and fifteenth to eleventh.⁵⁷

The process of constructing the AtMI is set up as a joint project between the AtMF and various stakeholders. The index's methodology has been created and updated through consultations with NGOs, investors, experts from academia, health organizations, consultants, and pharmaceutical companies themselves. This can be interpreted as a newcomer's strategy to obtain a position in the field of global public health by exercising symbolic power that can affect the behavior of the other actors, in this case the access policies of pharmaceutical companies. In the next section, we will discuss the response to the AtMI.

Response to Access to Medicine Index

All pharmaceutical companies ranked in the 2008 index were approached during the consultation phase for obtaining data and for feedback about the index's methodology. However, the index was greeted "with skepticism by some drugmakers."⁵⁸ Thirteen out of twenty-one companies responded during the 2008 consultation round.⁵⁹ However, from the twenty companies selected only eight⁶⁰ were willing to provide data,⁶¹ while ten of them were interviewed, and eleven commented on the draft version of their scores.⁶² The 2010 and following consultation processes differed from the process in 2008, but all pharmaceutical companies as well as their representative organizations now participated. Also, the International Federation of Pharmaceutical Manufacturers & Associations

⁵⁷ Access to Medicine Foundation (2008; 2010a; 2012b; and 2014).

⁵⁸ *The New York Times*, 4 December 2012, "Pharmaceuticals: GlaxoSmithKline retains top ranking measuring outreach to poor countries."

⁵⁹ Initially, twenty-one companies were identified as potential candidates for the index, of which was one was deleted for the final list.

⁶⁰ These were all originator companies. The three generics companies included in the 2008 index did not respond.

⁶¹ Only publicly available information was used to rank the other companies.

⁶² Access to medicine Foundation (2008).

(IFPMA) provided a member for the Expert Review Committee. For the 2010 index, nineteen out of twenty originator companies that were ranked and three out of seven generics companies responded to the foundation's request for information. All originator companies used the opportunity to give feedback on the company profile included in the 2010 Report. Finally, in 2012, 2014, and 2016 all companies responded to the request for information. Besides cooperating with the AtMF in producing the index, an increasing number of companies mentioned their inclusion in the AtMI in their annual CSR/Sustainability reports: four in 2008, six in 2010, seven in 2012, and ten in 2014. Also, various companies have contacted the AtMF to help them expand and improve their access policies and practices.⁶³ Together, this suggests that the pharmaceutical industry has acknowledged the significance of the AtMI in the field of global public health.

Among stakeholders investors are a particularly important group. When the first index was published in 2008, ten institutional investors committed to stimulating companies to display sustainable and socially responsible behavior. Moreover, they signed an investor statement acknowledging that pharmaceutical companies have a role to play in improving access to medicine for developing countries and welcoming the efforts of the AtMF in this regard. These investors together had around EUR900 billion of combined assets under management.⁶⁴ In the following years this grew to around thirty institutional investors with a total of USD5.3 trillion combined assets under management.⁶⁵ They are primarily socially responsible investors who have signed the Institutional Investor Agreement. Investment bank Goldman Sachs cooperated with the AtMF by hosting a meeting for pharmaceutical industry analysts explaining the index after it was published for the third time in 2012. When the index was published for the fourth time in 2014 four investor meetings were held in New York, London, Paris, and Basel.

Advocacy groups including Oxfam, Médecins Sans Frontières, and Health Action International have reacted differently to the index at different points in time. While representatives of these organizations have cooperated with the AtMF in the construction of the index and the Dutch branch of Oxfam financially supported the foundation in its first three years, in later stages some were more critical pursuing a more activist approach towards the pharmaceutical industry. At the same time, various NGOs continue to participate in updating the index's methodology.

63 This does not mean that the AtM Foundation provides concrete advice to individual companies or acts as a consultant, as this would jeopardize their independence.

64 Access to Medicine Foundation (2007).

65 *Ibid.* (2015b).

Since it was first published in 2008, the AtMI, especially the latest edition, received attention from well-known media across the globe, such as the *Financial Times*, *The New York Times*, *El País*, *The Guardian*, *Die Welt*, *Le Monde*, *The Economic Times of India*, and *Time* magazine, with *The Guardian* calling it “an authoritative guide.”⁶⁶

Various key individuals in the field of global public health have also expressed their appreciation and support for the index. As mentioned previously, Bill Gates supports the idea of ranking companies to measure and encourage companies’ access policies. Also, Mary Robinson, the former UN high commissioner for human rights, and Margaret Chan, the director of the WHO, have expressed their support. Finally, the 2014 AtMI was presented at the European Parliament in early 2015; around the same time Leereveld (the AtM Foundation’s founder) was invited to lead a group discussion on health systems in developing countries during the 2015 World Economic Forum in Davos.⁶⁷ This high profile public endorsement no doubt helped to increase the credibility of the index, and encouraged others to use it as a model for indices in other sectors.

In March 2013, the first AtN Index was published, ranking the largest food and beverage manufacturers with regard to their policies and practices in relation to obesity and under-nutrition. This index was created with support from the Gates Foundation, the Wellcome Trust, and the Global Alliance for Improved Nutrition (GAIN).⁶⁸ Its development was housed by GAIN and largely conducted by the same research company responsible for the 2012 AtMI.⁶⁹ The idea to start the AtNI was inspired by the AtMI. During the 2008 Pacific Health Summit it was discussed that the food and beverage industry had an important role to play in the fight against obesity and under-nutrition. Prior to this summit, the first AtMI was published inspiring representatives from the Gates Foundation and the Wellcome Trust to start the AtNI. During the development phase of this index, the AtNI team regularly

66 *The Guardian*, 28 November 2012, “Big pharma ups its game in providing drugs to people in poor countries,” <http://www.theguardian.com/global-development/2012/nov/28/big-pharma-drugs-poor-countries> (accessed on 25 November 2015).

67 See www.accesstomedicineindex.org/news for articles related to these events and the articles in the various newspapers.

68 GAIN was created in 2002 at a Special Session of the UN General Assembly on Children. This alliance is located in Geneva and supports public/private partnerships fighting malnutrition. It has received funding from philanthropic organizations (the Children’s Investment Fund Foundation, the Bill & Melinda Gates Foundation, the Goldsmith Foundation, and the Wellcome Trust) and national governments (Canada, Dubai, Ireland, the Netherlands, the United Arab Emirates, the United Kingdom, and the United States).

69 MSCI ESG Research.

consulted the AtMF and its setup also closely resembles the AtMI. Subsequent indices were published in 2016 and 2018.

Besides rankings of the pharmaceutical and food and beverage industries, rankings of both seed companies and mining companies were also published for the first time in 2016 and 2018. The AtSF aims to improve the efforts of the world's largest seeds companies and regional players to improve smallholder farmers' productivity. This foundation is supported by the Gates Foundation and the Dutch government.⁷⁰ The RMI was developed by the RMF in cooperation with NGO Cordaid and the Dutch Ministry of Foreign Affairs. For many low- and middle-income countries mining is an important economic contributor. However, local populations often do not benefit and the environment suffers. By promoting transparency of mining companies with this index the RMF tries to encourage mining companies to improve their environmental, social, and governance practices.⁷¹ After the success of the AtMI the AtMF decided to publish two specialized indices focusing on important issues in public health: vaccines and antimicrobial resistance. These indices were first published in 2017 and 2018 respectively.⁷²

Finally, inspired by the AtMI, in 2015 the Index Initiative was founded by people involved and affiliated with the AtMF. In September of the same year this foundation published an introductory study in which it argued that indices are an effective way of encouraging companies from a wide range of industries to contribute to achieving the UN SDGs. The II Foundation announced feasibility studies for indices valuing the performance of companies in five of these industries: agricultural commodity traders, chemicals, mobile telecommunications, oil and gas, and seafood.⁷³ And, finally, together with, among others, the United Nations Foundation, it started the consultation phase of the World Benchmark Alliance. With this latter initiative, the II Foundation explores the possibility to develop global, freely accessible benchmarks ranking companies on the degree to which they promote the UN SDGs.

It seems that the AtMI has received a positive response from other actors involved in the field of global public health whereby two developments are noteworthy. First, the index is currently used by pharmaceutical companies themselves: internally to compare their access policies and practices with those of their competitors, externally as a tool for their public relations. In both ways, the index shapes the way these companies compete. For assessing more precisely how and to what extent the AtMI has reshaped actual business practices further

⁷⁰ See www.accesstoseeds.org/publications.

⁷¹ See <https://responsibleminingindex.org/>.

⁷² See <https://accesstovaccinesindex.org/> and <https://amrbenchmark.org/>.

⁷³ See www.indexinitiative.org (accessed on 18 November 2015).

inquiries are needed. For a more detailed assessment, furthermore, it is essential to include the views of NGOs, which have not been willing to participate in the present research. Second, the index has been used as a template for indices of other global industries. Those that share the vision of a business model approach to philanthropy support and use these rankings to pressure companies to improve their policies. This generalization of rankings to change business practices deserves more sustained attention from researchers.

Access to Medicine in the field of global public health

As an initiative started by a private foundation to encourage private, for-profit companies to improve and expand their public role, an effort supported by both public and private organizations, the initiation, construction, and response to the AtMI is a clear example of the recent transformation the field of global public health. While public health used to be primarily a public concern, private organizations are obtaining an increasingly dominant position leading to questions regarding their role and its consequences. At the same time, the AtMI also signifies the prominence the notion of access to medicine has gotten within this more decentralized and diversified field.

Even though the issue of access to medicine was already debated within the WHO around the time of this organization's inception following the Second World War, it was only in the 1970s, when the "recently decolonized nations of the global South"⁷⁴ started to voice their political presence, that access to medicine emerged as a central concern in the global public health debate. These developing countries, especially those with socialist governments, criticized Western pharmaceutical companies regarding the quality and price of their drugs. By the end of the 1970s "essential drugs" had become a key term in this debate and the WHO started to compile a list of medicines that needed to be universally available. However, political tensions between developing countries on the one hand and developed countries protecting their pharmaceutical industries on the other—characterized by the decision of the United States to withhold its annual contribution to the WHO in 1986 and 1987—made the WHO decide to no longer push the controversial essential drugs list in the late 1980s. It was only as a result of the entrance of relative newcomers to the field—NGOs, advocacy groups, and philanthropic foundations, such as Médecins Sans Frontières and the Bill & Melinda Gates Foundation—that

74 Greene (2015), 94.

in the late 1990s and early 2000s the issue of access to essential drugs was once again put on the global public health agenda. Around this time, various pharmaceutical companies, eager to improve their public image and boost employees' morale after scandals concerning drug safety and marketing practices, also started access programs for the world's poorest countries. But, instead of framing these medicines as public goods to which all people around the globe were entitled, they reframed "them as private goods that could be donated by altruistically minded corporations."⁷⁵ The introduction of the AtMI in 2008 is one of the most recent initiatives regarding access to medicine, one that fits well into the current field of global public health in which private actors are playing an increasingly dominant role.⁷⁶ Given the importance of public health for the well-being of every country and individual, the notion of access to medicine has a natural appeal. However, this does not mean that both the idea itself and the way it is currently being pursued are undisputed.

By putting access to medicine center stage and investing huge amounts of (financial) resources dedicated to public health into the development of new medicines and access to existing medicines, developments that are stimulated by the introduction and use of the AtMI, it is assumed that medicines are *the* key factor in the improvement of public health around the globe. Also, it is assumed that "scientific and technical aspects of health improvements can be separated from political, social, and economic aspects."⁷⁷ However, history has demonstrated that the improvement of public health, represented by a decrease in mortality, is the result of a combination of social, political, and health care measures. Also, various public health experts argue that the improvement of existing health-systems in developing countries and the more efficient use of existing health measures are more effective ways of improving public health.⁷⁸ Economic growth is an important precondition for improvements in public health and countries and regions with low inequality levels, such as Costa Rica and Kerala, India, enjoy higher life expectancy levels than regions and countries with high economic inequality. As the recent spread of the notion of access to medicine is largely the result of actions by private organizations, it is therefore important to reflect on the assumptions of their activities.

The Gates Foundation is one of the most important and well-funded proponents of stimulating access to medicine. Out of the fourteen challenges for the

⁷⁵ Greene (2015), 101.

⁷⁶ See Greene (2015) for a more elaborate description of the emergence of access to medicine as a central concern in global public health.

⁷⁷ Birn (2005), 516.

⁷⁸ Ibid.

field of global public health that Bill Gates identified and presented at the World Economic Forum in 2003, nine were directly linked to the improvement of access to existing and new medicines.⁷⁹ The Gates Foundation clearly focuses on technical solutions for the world's health problems; it not only invests in the development of new medicines, for instance, through grants and the development of new financing models, it also helps developing countries purchase existing medicine through organizations such as the Global Fund to Fight AIDS, Malaria and Tuberculosis and the GAVI Alliance.⁸⁰ As a result the Gates Foundation not only largely ignores the political, social, and economic aspects of improving public health, it has also obtained a dominant position in global public health, leading to questions regarding its "role, effect, and lack of accountability."⁸¹ Because of its connection to all of the major contributors to global public health, including academic research centers, health partnerships, think-tanks, non-profit organizations, and UN agencies, both through grants and board memberships, the Gates Foundation decisively influences the global public health agenda. It thereby not only focuses on technological solutions, such as access to medicine and the development of new vaccines, it also prioritizes certain diseases, even though other diseases may pose a greater threat.⁸²

Besides improving access to medicine through grants for the development and purchase of (new) medicine, the Gates Foundation also stimulates indirect ways of using technical solutions to improve access to medicine, such as with the AtMI. Rankings evaluate the policies and practices of individual organizations and, by creating a hierarchy through symbolic credit to those that perform best. This is in line not only with the tradition of the sociology of symbolic forms, but also with the statements of people such as Bill Gates who has argued that besides financial profits, recognition is a second market-based incentive that can be used to trigger good company behavior. According to Gates, recognition can work as a proxy in markets where financial profits are not feasible, because it helps companies attract and retain the best employees. He argues that we therefore need to develop a system in which the market incentives of profits and recognition are used to make sure that those people who cannot afford it themselves have access to, for instance, medicines and healthy food. This "creative capitalism," as Gates calls it, is an "approach where governments, businesses, and nonprofits work together to stretch the reach of market forces so that more people can make a

79 Greene (2015).

80 Birn (2005).

81 McCoy et al. (2009), 1645.

82 Ibid.

profit, or gain recognition, doing work that eases the world's inequities."⁸³ The support of the Gates Foundation given to the AtMI and AtNI can be interpreted as a way to promote creative capitalism. At the same time, at least until 2008, the Gates Foundation held significant shares, either directly or via its holdings in Warren Buffet's investment vehicle Berkshire Hathaway, in various food and beverage companies, such as McDonald's and Coca Cola, whose products are not beneficial to the improvement of public health, as well as pharmaceutical companies, which could lead to conflicts of interest.⁸⁴

And even if companies are actively trying to improve access to medicine and are being rewarded in the form of symbolic credit provided by rankings such as the AtMI, the question remains what the precise effects are of the actions these companies undertake. Donations of medicine to developing countries and regions, for instance, which is one of the areas on which pharmaceutical companies are scored for the AtM Index, seem an attractive way to improve public health in the poorest countries. However, these programs are also known to distort local health systems by changing its priorities and weaken local authorities as they become dependent on powerful foreign companies.⁸⁵ Also, even though various pharmaceutical companies are developing access programs, they are also fiercely protecting their patents, thereby weakening developing countries' abilities to provide good health care to their population. A well-known example is the lawsuit by pharmaceutical company Novartis against the Indian government regarding its anti-cancer drug Glivec.⁸⁶

Against this background, it could be argued that the AtMI in the field of global public health is, first of all, an example of the focus on technologies—in this case medicine—as *the* solution to a societal problem while the problem at hand requires a broader and more integral approach, which was already acknowledged by the WHO in the 1970s as we discussed earlier. Second, even though access to medicine has a natural appeal, the issue of access to medicine has been high on the global public health agenda for many decades, and the AtMI has therefore, not surprisingly, experienced high-profile support, the question remains to what extent it contributes to the improvement of public health around the globe. Does it not instead divert attention and resources from more effective ways of health improvement, such as the creation and improvement of health-systems in developing countries, stimulating economic growth, and reducing inequality?

⁸³ Gates (2008), 10.

⁸⁴ Stuckler et al. (2011).

⁸⁵ Samsky (2011).

⁸⁶ Ecks (2008).

Concluding remarks

Since the late nineteenth century various intergovernmental organizations have been founded to meet basic human needs, such as health and nutrition, and to fight for large causes, such as ending poverty or ensuring peace. It was primarily within these state-based governance structures that international activities were coordinated. National governments and multilateral agencies, such as the UN, World Bank, and WHO, fulfilled a central role within these endeavors.

Coordination within the international health system as it developed after the Second World War was organized around the WHO, with states negotiating on the actions to be undertaken. In the current, more diversified and market-based field of global public health, other forms of coordination have developed. Alliances between various public and private organizations, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and the GAVI Alliance, have been formed to discuss health policies and practices with a variety of stakeholders, including international organizations such as the WHO, UNICEF, and World Bank, and philanthropic foundations such as the Gates Foundation. These partnerships function as governance structures in which a variety of actors discuss and coordinate health policies. More indirect methods, such as the AtMI, are becoming an integral part of these new arrangements.

With its company ranking the AtMF has developed a market-based coordination device to set or, at least, influence public health priorities and thereby contribute to the coordination in the field of global public health, a task which is no longer only fulfilled by hierarchical structures such as the WHO. The fact that the index has been taken up demonstrates that it satisfies a certain demand in the more diversified field of global public health, probably especially of private organizations such as the Gates Foundation. Rankings such as the AtMI, the AtNI, and, in the future, possibly similar indices in other global fields put certain issues on the global agenda and are best viewed as classifications distributing symbolic credit to companies on top of the rankings.

For a proper understanding of the creation and use of these market based coordination devices, we have proposed a historical-sociological field approach. This not only enables us to study these devices on the micro-level (who initiated these rankings; how are they constructed; who supports them and why; what was the initial response to their introduction; how are they being used; what role are they actually fulfilling in the field in which they are introduced on the long term), it also provides tools to locate socio-technical devices in the broader context in which it functions and to reflect on the changes the field has undergone in the long-term. The AtMI was introduced in the field of global public health by someone with inside knowledge of the pharmaceutical industry. He recognized

that firms watch each other and used this insight to stimulate them to improve their access policies. The index's methodology was created and is updated in consultation with the main actors in the field. The index has been discussed in international media, received high profile support from various quarters, and is being used as template for indices of other global industries.

In the first decades after the Second World War negotiations on health priorities took place in a centrally governed international order based on political representation and the mobilization of experts. Since the 1990s global public health has become a more diversified domain with a public-private character. There is an increasing importance of private funding and private organizations, and public-private partnerships are increasingly gaining influence concerning the setting of global health priorities. These organizations favor measurable health goals, such as eradicating specific diseases. They thereby often rely on technological solutions, such as medicine, instead of improving global public health by, for instance, contributing to the health care systems of developing countries. The acknowledgement of the AtMI as an important tool in global public health can be understood as a part of this new global health configuration. The index functions as a coordination device in a more market based field of global public health and is used to pressure pharmaceutical companies to improve their access policies.

Even though this study sheds light on the construction of the AtMI and understands its proliferation as being part of the wider transformation of the field of global public health, it is only one of the first steps needed; several questions remain for further investigation. First of all, even though we have explained how the index is being constructed, it is not clear how exactly the consultation process with the various stakeholders and experts took place. Which parties argued in favor of which technical areas and indicators to be included in the Index? And what about the weightings of these metrics? How did the AtMF's research team decide on these matters? Which data was made available by the pharmaceutical companies and which not? Answering these questions requires an in-depth analysis of the (minutes of) actual meetings and draft versions of the methodology. Even when the AtMI exercises its effect on some of the companies' policies, it is also necessary to specify more precisely how ranking exactly affects business practices, whether companies will not be tempted to resort to gaming strategies, and, in the broader context, whether institutional and other investors will allow companies to move further in the direction that the ranking rewards

The rankings and the ranking process itself also raise further issues. How stable are these rankings and the agencies that produce them? If they are in any way successful, this will probably provoke the production of other, alternative rankings, thus leading to a multiplication of rankings, which may end up by

leading to confusion rather than to the transparency that the rankings are said to be intended for. Or will the AtM Foundation be able to become a dominant “rule-making institution”⁸⁷ in global public health and set the standard for the pharmaceutical industry? And finally, how do rankings relate to other, more fundamental issues and challenges in improving global public health, such as the improvement of health care systems in developing countries? Is improving access to medicine an effective and efficient way of improving public health around the globe, or does it divert attention and resources away from more effective methods?

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