

Strategies to Promote the International Private Sector's Contribution to Global Health Beyond an “Established” Community

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Mitsubishi UFJ Research and Consulting (MURC) is a comprehensive think tank/consulting arm of the Mitsubishi UFJ Financial Group (the MUFG Group, a universal banking group that represents Japan) and based in the three major cities in Japan. MURC established the “Center on Global Health Architecture” in 2017 and organized a public private collaborative action-oriented research meeting on global health issues. We aim to promote relationships among stakeholders, “break down silos,” and take an interdisciplinary approach to create new and innovative projects.

Abstract

Our prioritized areas are i) re-mapping private companies that make a contribution to global health to create a new evaluation tool to promote investment from the private sector; ii) advocating the reform of UN procurement and public procurement mechanisms in emerging countries to Japanese and other private companies, and; iii) promoting regulatory harmonization on medical devices/equipment beyond borders and building capacity for regulators and policymakers in low- and middle-income countries (LMICs). Of these focus areas, we are commencing specific projects to explore the first two items. In this paper, we share our proposed solution to global health issues from the perspective of the effective promotion of Public Private Partnerships (PPPs).

Figure 1: The three ideas which underpin this paper and its proposed solutions. This article will focus mostly on the two highlighted in red.



Source: Author's own.

Re-map private companies which contribute to global health and create a new evaluation tool to promote investment from the private sector

Despite advances in global health, including improved access to medical technologies such as medicines, vaccines, medical devices and equipment, and AI-driven systems, the world is still facing anxiety and uncertainty over future pandemics and the threat of new infectious diseases¹. In recent years, new types of global health issues have emerged. For example, antimicrobial resistance (AMR) is attracting notable attention. Because of AMR, some standard treatments are becoming ineffective, which means that infections persist and may spread to those previously unaffected. The World Health Organization (WHO) estimates that antibiotic treatments add an average of 20 years to all of our lives, but in the 80 years since the discovery of penicillin, the overuse of antibiotics has put pressure on bacteria to evolve resistance. This has led to the emergence of untreatable superbugs that threaten the basis of modern medicine.

Malnutrition also remains a major issue and affects health in developing countries. Furthermore, we must now also confront the rampant increase in various non-communicable diseases (NCDs) such as diabetes and obesity. These NCDs are currently an issue in both developed and developing countries. In some nations where the population is aging, brain-related diseases such as Alzheimer's disease and dementia are becoming serious issues. All these afflictions are intertwined with each other in complex ways.

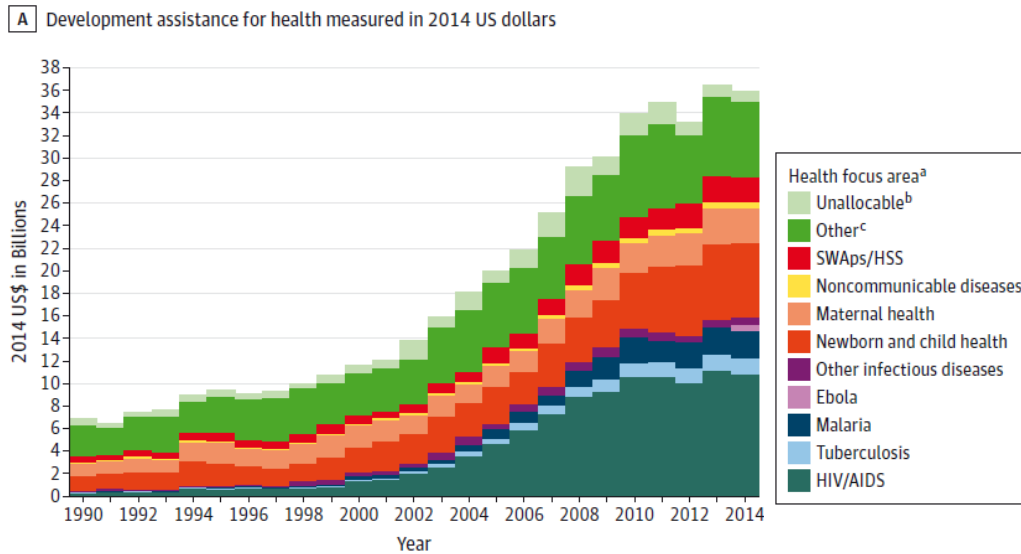
When looking at the amount of investment flowing into global health, can we say that it is sufficient? The purpose of this report is not to show accurately whether it is or is not. If we focus on how to secure a stable budget for international health, information can be gleaned from several global health metrics. One in-depth article collected budget data on the primary agencies and organizations that provided financial assistance to LMICs for global health issues from 1990 to 2014. During this period, 458 billion USD was distributed through major channels for health funding

¹ Bryan Walsh, "The World Is Not Ready for the Next Pandemic", TIME, May 15, 2017, <http://time.com/magazine/us/4766607/may-15th-2017-vol-189-no-18-u-s/>

from donor countries to LMICs. Annual disbursements increased substantially from \$6.9 billion in 1990 to \$35.9 billion in 2014².

Following the transition to a new administration in the United States, it is likely that public funding for global health will face new difficulties. However, the UN adopted its Sustainable Development Goals (SDGs) in 2015, and the new international framework for global development emphasizes the importance of the private sector in driving solutions, including for global health issues. Now is the time for us to think about how we can stabilize or increase global funding for global health by inducing greater commitment from the private sector.

Figure 2: Development assistance for global health (2014 US dollars)



Source: Joseph L. Dieleman et al., “Sources and Focus of Health Development Assistance, 1990-2014”, JAMA Vol.313, no. 23 (June 2015):2362

In terms of investment in the private sector, increasing attention is being paid worldwide to environmental, social, and governance (ESG) investment. ESG investment criteria are a set of standards for a company’s operations which socially conscious investors use to screen investments. The “E” in “ESG” is concerned with how a company performs as a steward of the natural environment; “S” examines how a company manages relationships with its employees, suppliers, customers, and communities; and “G” deals with a company’s leadership and the adequacy of its management and administration, including relationship-building with various stakeholders.

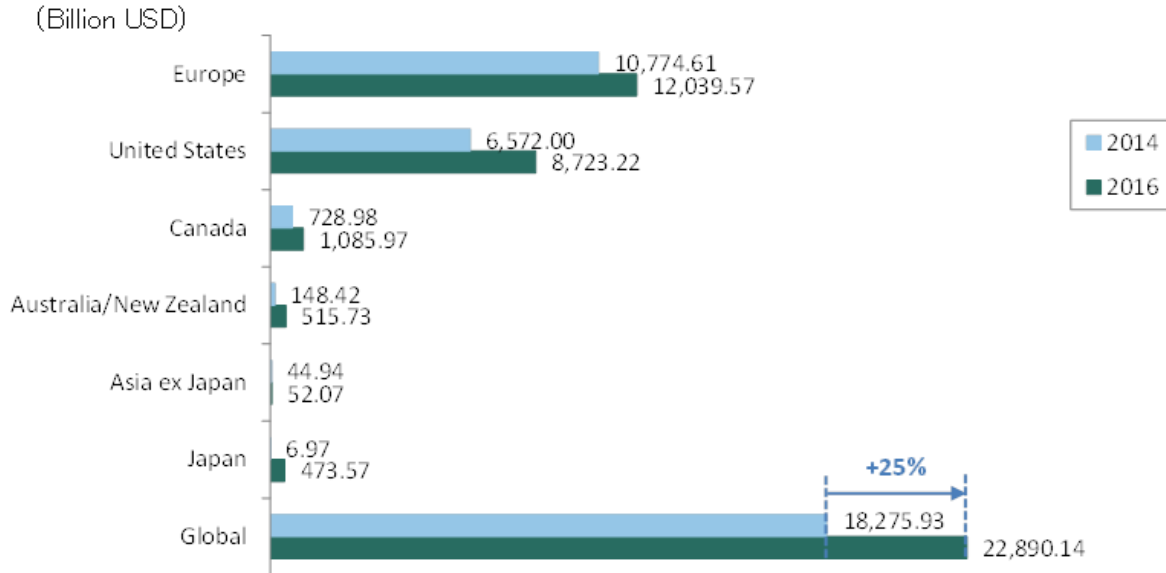
In 2016, \$22.89 trillion was invested based on perspectives of ESG, an increase of 25% compared to 2014. In 2016, global ESG investment accounted for 26% of all outstanding assets under management³. There are several possible reasons for the

² Joseph L. Dieleman et al., “Sources and Focus of Health Development Assistance, 1990-2014”, JAMA Vol.313, no. 23 (June 2015):2362

³ Global Sustainable Investment Alliance, “Global Sustainability Investment Review 2016”, 2016 Global Sustainable Investment Review, (2017):3, http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf

increase in ESG investment. First, the advent of Principles for Responsible Investment (PRI) in 2006 is having a meaningful impact on decision-making and is supported by an international network of investors who have pledged to incorporate ESG into their investment and ownership (asset management) decisions⁴. Second, ESG indices themselves have become diversified and more detailed. Therefore, it is becoming easier for investors to evaluate companies based on ESG or similar criteria. Third, research has confirmed the positive correlation between ESG and corporate financial performance⁵.

Figure 3: Growth of ESG Assets by Region 2014–2016



Source: Global Sustainable Investment Alliance, “Global Sustainability Investment Review 2016”, 2016 Global Sustainable Investment Review, (2017):27, http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf

The social aspect of the ESG framework (“S”) has a high “affinity” for global health issues and their associated businesses and activities, and it has the potential to induce investment from private companies. Some corporations might have anxiety about rising costs and being negatively evaluated under such a framework. However, we believe that ESG will generate opportunities for companies to enhance their value.

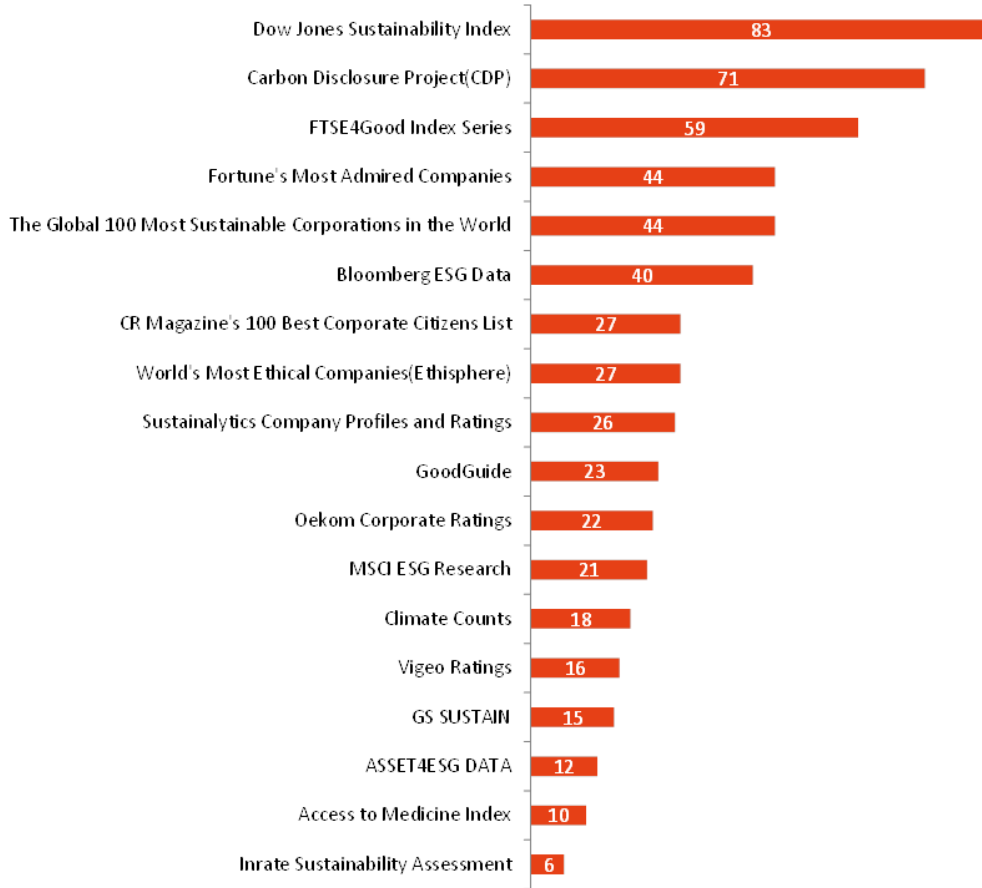
ESG rating agencies and their frameworks for private companies, such as the Dow Jones Sustainability Index and FTSE4Good, can be useful tools. For global health-related industries, the Access to Medicine Index is one of the most well-known ESG-related frameworks. It is managed by the Access to Medicine Foundation based in Amsterdam. Another example is the Access to Nutrition Index. These indices are

⁴ “PRI: Home,” The PRI, accessed March 19, 2018, <https://www.unpri.org/>

⁵ Gunnar Friede, Timo Busch and Alexander Bassen, “ESG and financial performance: aggregated evidence from more than 2000 empirical studies”, *Journal of Sustainable Finance & Investment*. Vol.5, no. 4 (2015):225

categorized as human rights-focused frameworks⁶. According to a survey by GlobeScan and SustainAbility, the Access to Medicine Index was ranked one of the most credible indices by respondents⁷.

Figure 4: Ranking of experts' familiarity with ESG-related indices



Source: GlobalScan and SustainAbility, “The 2013 Ratings Survey: Polling the Experts.”

The Access to Medicine Index is a framework mainly for the pharmaceutical industry, and the Access to Nutrition Index is generally used by the food and beverage industry. However, the manufacturers that make contributions to global health issues are diverse.

Most public-private collaborative communities for global health issues have been organized by the pharmaceutical industry and/or the food and beverage industry.

⁶ Casey O’Connor and Sarah Labowitz, “Putting the ‘S’ in ESG; Measuring Human Rights Performance for Investors”, PUTTING THE “S” IN ESG, (2017):11, <https://static1.squarespace.com/static/547df270e4b0ba184dfc490e/t/58cad912e58c6274180b58b6/1489688854754/Metrics-Report-final-1.pdf>

⁷ GlobalScan and SustainAbility, “The 2013 Ratings Survey: Polling the Experts”, A GlobeScan/SustainAbility Survey, (2013):8, https://globescan.com/wp-content/uploads/2017/07/Rate_the_Raters_2013-Polling_the_Experts-GlobeScan_SustainAbility-3.pdf

Their main purpose is generally to discuss innovative social mechanisms to promote the research and development of specific products geared particularly for LMICs, and to subsidize the purchase of such products.

However, we have come to recognize that it is necessary to include the participation of the diverse industries which have the potential to contribute to global health issues. In the last 5-10 years, more attention has been paid to the importance of diagnostic industries. Recently, startups related to supply chain management and cold chains with innovative digital technologies are beginning to work with international organizations in this field. Current indices, however, do not properly grasp a holistic view of who is actually working and what kind of products or technologies have potential in the field. Our proposal would “re-map” all those private companies which contribute to global health.

If we re-map the contributors working on global health issues and establish another index for related industries, estimates of global health investment also shift. For example, diagnostic devices are indispensable at the first stages of health interventions. To monitor and control diseases, important roles in global health are played by information and communication devices, the internet of things (ICT/IoT) and, more recently, artificial intelligence (AI). Personal protective equipment (PPE) has long been provided to promote patient safety as well as to protect medical workers.

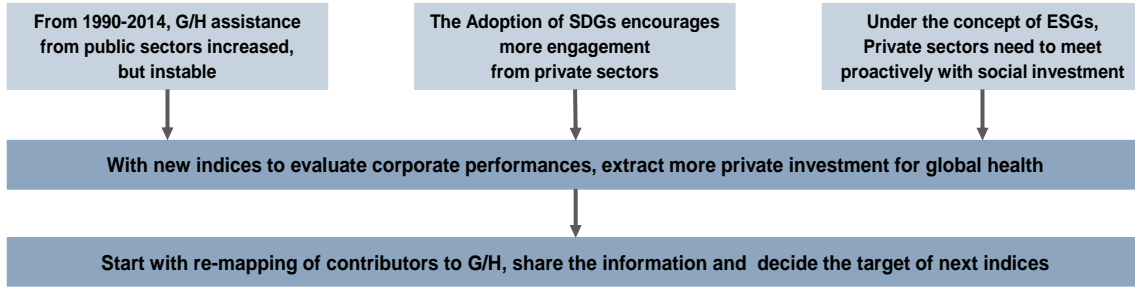
Currently, there is no direct framework for evaluating these varied industries according to ESG, especially from the perspective of “S”. As previously mentioned, we face a wide variety of issues in global health, ranging from infectious diseases to NCDs. These growing issues are matters of international concern. When we consider how to secure diverse investment to resolve or mitigate these complex problems, there is an urgent need to review and map all of the private sector industries and companies contributing to global health. We call this approach “corporate taxonomy.” Under this type of corporate taxonomy, multiple stakeholders who are willing to work for global health internationally should collaborate to establish several new indices for ESG. The purpose should not be just to measure it, but also to have the index disseminated to and utilized by stakeholders such as investors, asset managers, shareholders, NGOs, and companies themselves. Of course, this is not the only approach that could encourage more engagement from private sector on global health issues; however, a holistic new framework would encompass many new industries and introduce new interest in global health investment.

It is important to properly understand the advantages and disadvantages of a new index to promote more investment from private industries. Positive aspects include promoting constructive competition between manufacturers in the same industry to enhance the R&D investment and contributions to access and delivery issues. The manufacturers can compare their corporate performance more objectively in the industry, learn their positioning based on the framework, and utilize it to restructure their strategies for international contribution. This could also send a message to their stakeholders. There may be negative aspects, too. In some cases, the indicators of the index might mislead the industry. While the framework is more holistic, it cannot encompass every single indicator. For example, if the organizers of the index did decide not to focus on certain specific products or technologies and the indicators were affected by such a decision, that might encourage unmet needs in global health issues by ignoring some spaces of potential innovation.

Our proposal is to create a new, more holistic index which includes diverse

industries such as the diagnostics field and products like novel digital technologies.

Figure 5: Consciousness of problems on private engagement with global health and ESG index



< Examples of existing Indices >

Access to Medicine Index	<i>"for Pharma industries"</i>	Access to Nutrition Index	<i>"for Food/Beverage industries"</i>
<ul style="list-style-type: none"> ■ The Access to Medicine Index is a ranking system published biennially since 2008 by the Access to Medicine Foundation. ■ The foundation is funded by the Bill & Melinda Gates Foundation (BMGF), the UK Department for International Development (DFID) and the Dutch Ministry of Foreign Affairs. ■ It ranks the world's 20 largest pharma companies biennially ■ The evaluation framework is composed of the ability to make their pharmaceutical drugs more available, affordable, accessible and acceptable in LMICs. ■ The purpose is to stimulate pharma industry to improve access to health in developing countries by sharing the info of the peers, and to encourage the stakeholders to improve the situation. 		<ul style="list-style-type: none"> ■ The Access to Nutrition Index was founded in 2009. ■ The methodology was developed by GAIN (Global Alliance for Improved Nutrition), and is jointly funded by GAIN, BMGF and the Wellcome Trust. ■ The purpose of the index is to improve the access of consumers to more nutritious products, and make a contribution to address the serious global problems such as undernutrition and obesity. ■ That will allow food/beverage enterprises to benchmark their performance on nutrition by sharing the information of their peers. ■ It will also play a role as a platform to share the useful information and promote better decision making by the stakeholders. 	

Source: Author's own.

Figure 6: Mapping global health and its solutions: "corporate taxonomy"

- Corporate Taxonomy: The Center on Global Health Architecture, MURC analyzes the complexity of the global health issues as the following matrixes.
 - Regions and issues: categorized the global health issues and scored its seriousness in the regional level by the statistics from international institutions
 - Issues and solutions: mapped the issues analyzed above and possible solutions
- The Center is currently preparing the mapping of solutions and its providing enterprises

< Regions and issues >

Issues
Seriousness of the issue in regional level based on the statistics

< Issues and solutions >

Solutions
Mark whether the solution is effective for each issue

Source: Author's own.

Figure 7: Mapping of regions and issues

	Infectious Diseases			NCDs		Nutrition		Reproductive Health		Mental Health
	HIV/AIDS	TB	AMR	Heart diseases	Cancer	Under-nutrition	Anemia	Maternal death	Infant death	Depression
Africa	×	×	Under investigation	×	×	×	×	×	×	△
America	△	○		△	△	○	△	○	○	○
Southeast Asia	○	×		×	×	×	×	△	△	△
Europe	△	○		△	△	○	△	○	○	△
Eastern Mediterranean	○	△		×	×	×	×	△	×	○
West Pacific	○	△		△	△	○	△	○	○	○

Source: Author’s own.

Figure 8: Mapping of issues and solutions, and future development of new index

		Prevention			Diagnosis		Medical Treatment		Digital Tech.		Others
		Sanitation	Vaccine	Nutritious foods	Dx imaging	IVD	Antibiotic	Antiviral	Health system	Surveil. monitoring	Cold chain
I/Ds	HIV/AIDS	—	—	○	—	⊙	—	⊙	Access to Digital Tech Index		○
	TB	—	Access to Medicine Index	Access to Nutrition Index	Access to Dx Index	Access to Nutrition Index	Access to Digital Tech Index			○	○
	AMR	⊙						○ ¹	○ ¹	○	○
NCDs	Heart diseases	—						—	—	—	—
	Cancer	—	—	—	—	—	—	—	—	○	
Nutrition	Under-nutrition	—	—	—	—	—	—	—	—	—	—
	Anemia	—	—	—	—	—	—	—	—	—	—
Reproductive Health	Maternal death	○	—	—	—	—	—	—	—	—	—

Notes: 1. we categorized antibiotics and antivirals as an indirect solution in the sense of stopping overuse and misuse of them prevents the expansion of AMR

Source: Author’s own.

Finally, we would like to highlight three essential points so that the new index can be broadly recognized and used. First, the index framework should be established by several players, including specifically a human rights-focused agency and a corporate rating agency focused on financial performance alongside different types of organizations that would bring together their different skillsets to create the index. Secondly, the framework should be operated objectively, with the index itself managed

separately from the commercial base. Finally, these indices typically target large, multinational conglomerates which constantly seek external funding and large amounts of investment. However, it is more important for this proposed framework to focus on new technologies and businesses operated by small and medium-sized corporations all over the world. While there may be some negative impact from increasing the available number of indices, it is more important to pursue ways to improve global health by establishing new tools.

To encourage more engagement from private industries in global health, such an index for new industries created after re-mapping contributors would be indispensable. It is important to provide adequate supplies and to install relevant products and services into LMICs. While valuable, the index approach is not the only way to encourage private investment. There are other channels to consider. For example, if we can promote the harmonization of regulations regarding medical- and healthcare-related products and services among different countries, private corporations could enter more markets. Even during the R&D phase of new technologies, current international cooperation is insufficient for clinical trials. Encouraging public-private collaborative projects beyond borders could accelerate global health research by private corporations. Key to this challenge, the recent reform of UN procurement and public procurement mechanisms in emerging countries has huge potential to encourage private industries to invest in the global health field. After this reform, countries observe more and more private corporations joining its public tender as suppliers; Japanese companies are one example of this trend. Because of this contribution, the access and delivery of services and technologies is improving for some cancer patients in these countries. This kind of social system reform leads to behavioral change in private corporations and could also make headway regarding the “S” of the ESG framework, as discussed below.

Advocate for the reform of UN procurement and public procurement mechanisms in emerging countries

The World Bank Group (WB) introduced a new procurement framework and regulations called the “New Procurement Framework” in 2015⁸. Although implementation of the new scheme began in July 2016, a couple of years will be necessary before it covers the entire range of procurement-related programs of the WB.

The most significant change in the New Procurement Framework is the shift from seeking the “lowest evaluated compliant bid” to seeking the bid that “provides the best overall value for the money,” which allows the WB to balance quality, cost, and other factors when selecting suppliers.

By transitioning to the new framework, the WB is expected to play a more active role in contract management of procurements to pursue greater overall value,

⁸ “The World Bank: New Procurement Framework and Regulations for Projects After July 1, 2016”, The World Bank, accessed March 19, 2018, <http://www.worldbank.org/en/projects-operations/products-and-services/brief/procurement-new-framework#framework>

even though this strategy requires it to account for additional risk factors in order to ensure the best possible outcomes. However, focusing on greater value in procurements can allow the WB to make a better contribution towards its development goals.

The most important characteristic of the new system is its emphasis on value for money (VfM). This change will influence how global procurement throughout the WB is conducted. The attention to the VfM principle will also result in changes to standard bidding document forms, including the request for bid (RFB) and request for proposal (RFP) forms. The RFP form now allows greater flexibility when responding to the “specification” and “design” options.

Other significant changes have been made to the evaluation criteria. The WB is adopting a more comprehensive framework for evaluation that incorporates mid- and long-term maintenance costs, safety considerations, environmental and social considerations, and various qualitative factors. Although such evaluation criteria have commonly been used in national Private Financial Initiative programs, the new WB procurement framework also applies these concepts to the international development field. Thus, greater attention must be paid to balancing lifecycle impacts of programs and their multidimensional cost.

To give a direct comparison, under the previous RFB system, “cost-related” criteria accounted for 70% of the bid evaluation and “quality” criteria for the remaining 30%, whereas under the new scheme “quality” accounts for up to 50% of the evaluation. This change will apply to all types of procurements, from goods and services to consultancies. Given that the annual amount of the WB’s procurement is about 64 billion USD, the new scheme will have a huge impact on affected businesses and suppliers⁹.

The annual procurement volume of the United Nations (UN) and its funds, programs, specialized agencies, and other divisions totals about 20 billion USD, half of which is for the procurement of goods. In the coming years, the total UN budget is likely to decline. However, the volume of the UN-related procurement is still huge, existing as “a global marketplace.”

The WB and the UN, to a significant extent, have a shared agenda and have many collaborative projects. The WB has some influence on the UN’s agenda setting, policy making, and on-site implementation. When the two (or more) organizations implement a joint procurement, the procurement policy of one organization could be used by other collaborative partners in similar situations. Therefore, the new scheme of the WB could affect the procurement policies of other international agencies, especially as the Sustainable Development Goals (SDGs) become more widespread.

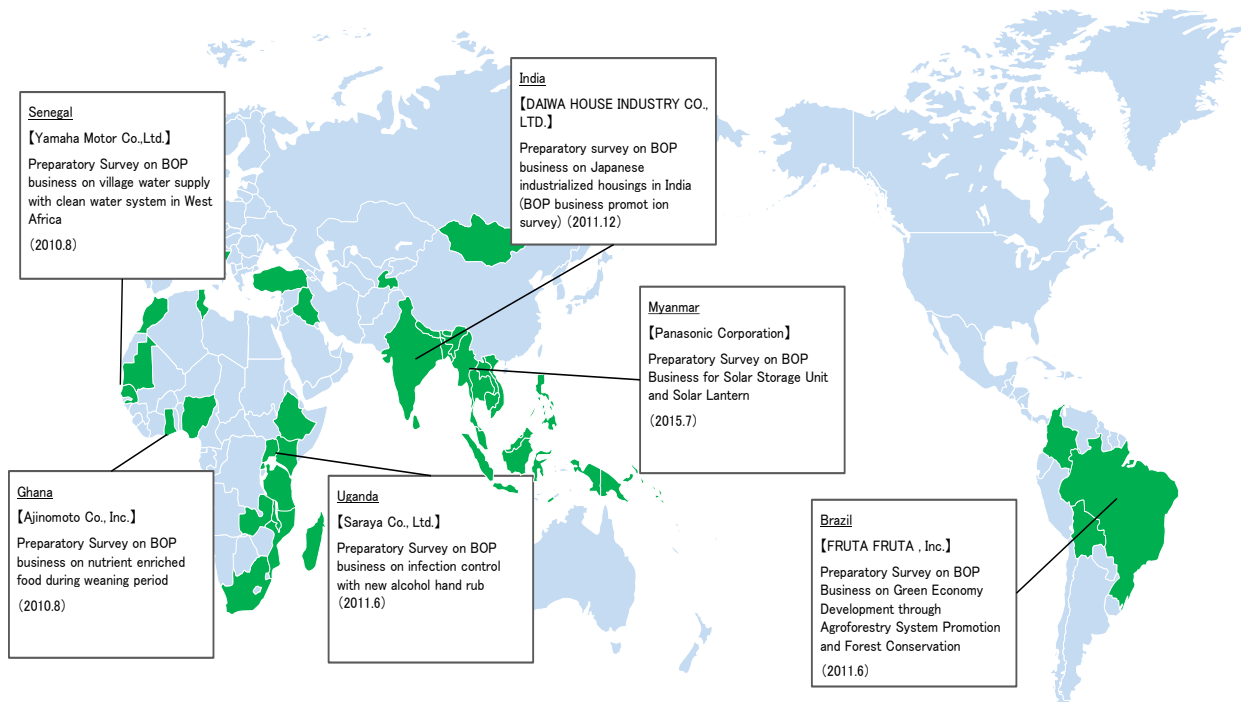
We expect that the new WB scheme will create a good opportunity to support international agencies, governmental policymakers, and multinational private corporations and to help reconsider the meaning of “sustainable development” and ways that “sustainable procurement” can be pursued as part of the SDGs. One

⁹ United Nations Office for Project Services, “Major purchase orders and contracts by UN organization,” *2015 Annual Statistical Report on United Nations Procurement*, 2016, https://www.unops.org/SiteCollectionDocuments/ASR/ASR_2015_Major_purchase_orders_and_contracts.pdf, accessed on July 31st, 2017

example of this is found in Japan.

Since 2009, the Government of Japan has renewed its strategy on public-private partnerships for international development and begun accepting proposals from private companies, organizations, and universities that plan to enter into the market in developing countries. These private entities intend to pursue not only profit, but also social objectives to contribute to international development and cooperation. The Ministry of Foreign Affairs, the Japan International Cooperation Agency (JICA) and the Ministry of Economy, Trade, and Industry are working collaboratively to implement and manage public-private partnerships. This new scheme was originally called the “Preparatory Survey for Base of Pyramid (BoP) Business Promotion” and was renamed the “Feasibility Survey for SDGs Business Promotion” in 2017. It has already adopted more than 100 proposals by private entities, ranging from infrastructure-related plans to projects with social objectives. Many intend to improve development problems and introduce innovative solutions in developing countries for issues such as the prevention of hospital-acquired infections, vector control, the improvement of malnutrition, and the introduction of renewable energy sources. This governmental program provides financial assistance for feasibility studies.

Figure 9: Preparatory survey for BoP business promotion: examples of adopted projects



Source: Japan International Cooperation Agency, “Preparatory Survey for BOP business promotion – List of Projects,” 2017, <https://www.jica.go.jp/english/news/press/2017/8/1>, accessed July 31st, 2017

Several private entities that have received support are providing their own products to contribute to solving and improving development issues in target countries. The sales models of these businesses show that one of their targets is public procurement, including by the UN and its concerned parties.

Japanese products tend to be “high quality but high cost,” and this has long

been a characteristic of goods “made in Japan.” Recently, some Japanese manufacturers have been trying to cooperate with local and foreign companies to create a new type of product that is “made with Japan.” However, they are just in the beginning stages of these efforts. It is important to note, as previously mentioned, that the approval of the new procurement framework by the WB will potentially increase the use of the VfM concept in the procurement systems of international agencies. These practices will spread to current emerging and developing countries. Because of this, more “high cost but high quality” goods and services will be purchased and will make an even greater contribution to “Sustainable Procurement for Sustainable Development” than ever before. Of course, businesses must continuously push to control costs without reducing quality.

A new initiative on “Open Contracting” in emerging countries is moving forward. “Open Contracting” is the reform of public procurement mechanisms to improve transparency and accountability for sustainable development. Public procurement system reform has been conducted in Ukraine for the last 3 years. Additionally, most of the countries in the Southern Common Market (MERCOSUR) are joining the initiative. Behind the discussion on “Open Contracting,” there is a motivation to encourage local authorities to be more accountable. This includes including clarifying their attitude towards anti-corruption and promoting e-procurement to achieve higher efficiency and to improve the effectiveness of their system.

In 2013, the price for anticancer drugs in Ukraine was 40% higher than market price. Only a few suppliers were operating. The Minister of Health made a fundamental reform on medicine supplies to assign UNDP, UNICEF, and Crown Agents as the procurement agencies for anti-HIV drugs, anti-TB drugs, and anticancer drugs to promote the reform in 2016. By sticking the knife into vested interests, 38% of the procurement cost were reduced from 2015. Furthermore, the number of suppliers increased from 2-3 to 29. They improved the quality of goods and held strict observance of delivery times. With this political reform, new foreign companies, including Japanese companies, are also joining the public tender in Ukraine. In 2017, due to the savings achieved, Ukraine was able to procure coronary stents for all patients for the first time ever. Before then, only 50% of the patients had received treatment. The Ukrainian Ministry of Health is internally considering a new division to manage a comprehensive system for public procurement, to be installed in 2020.

Figure 10: Editorial by the Lancet on Ukrainian Reform on Public Procurement

- “The health-care reforms, led by US-born Uluana Suprun, profiled in this week’s issue, include the introduction of an internal market structure, a shift of care from a hospital to a community-based service, and the elimination of corruption and bribery.”
- “Patients currently make up the 45.6% shortfall of the 7.6% of GDP spent on health with out-of-pocket and informal payments.”
- “Bed numbers and patients’ average length of hospital stay will be reduced. Western-backed support for the reforms comes from the UN Development Programme, UNICEF, and the UK procurement agency, Crown Agents, now responsible for purchasing 5.9 billion Ukrainian hryvnia (about US\$ 212 million) of medicines for the country.”
- “The service— developed from the Soviet Semashko system—is seen by many as inefficient and inequitable; nevertheless some politicians and doctors remain opposed to the changes.”
- “More generally, the World Bank has also endorsed Ukraine’s efforts to achieve lasting economic recovery.”

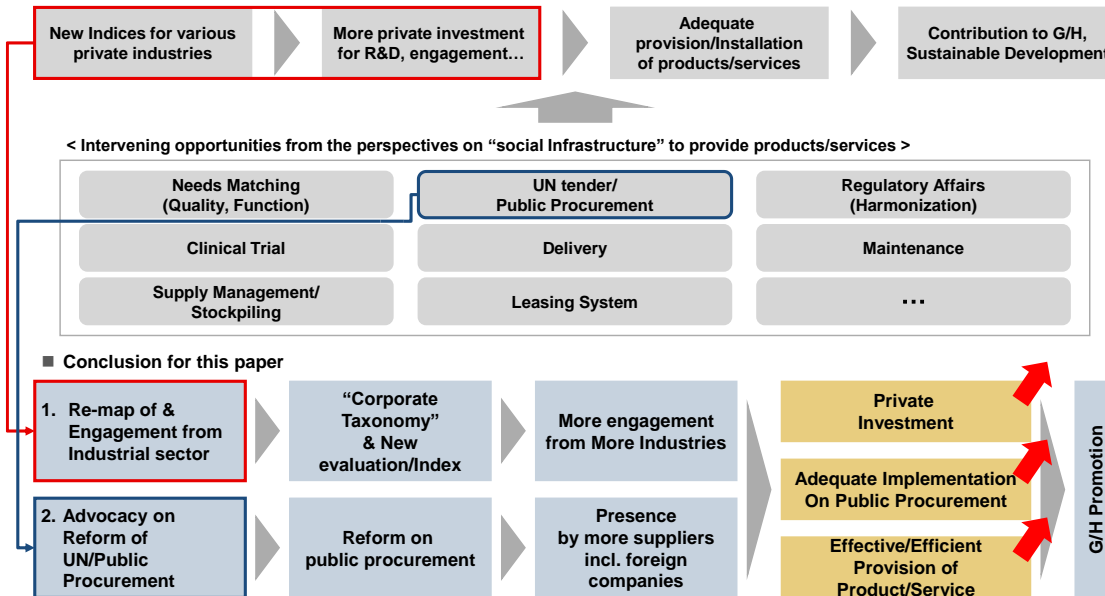
Source: “Measles, war, and health-care reforms in Ukraine”, *The Lancet* Vol. 392 (September 2018).

Conclusion

For years, the established communities for global health issues have been those organized by the pharmaceutical and the food and beverage industries. Their main objectives were to discuss innovative social mechanisms, promote R&D of products mainly for LMICs, and subsidize those purchases. We have, however, come to recognize that it is necessary to promote the participation of more diverse industries which have great potential to contribute to global health issues. In the last decade, diagnostic industries have had an increasing presence in the field. For the last few years, industries focusing on supply chain management and cold chains have especially been adopting novel digital technologies such as AI and machine learning. However, we must reflect on what more we can do to get different players involved with global health. It is one of the most complex issues internationally, and yet there is not a holistic and adequate understanding who is actually working and what kind of products and technologies have potential. Thus, we need to re-map the contributors to global health issues and solutions.

Based on this re-mapping, an index for new industries to evaluate and visualize the performance of corporations would be indispensable so that we can induce more engagement from private companies in global health. Such an index couples well with the recent trend of ESG investment to attract more interest from social investors, which can lead to more engagement from new industries. There is a particularly high expectation that creating a new index would make a huge impact for diagnostic industries and new digital technology-related industries. However, the index approach is not the only way to encourage more investment from private industries. It is also important to reform certain established social systems in the world. The reform of UN procurement and public procurement mechanisms in emerging countries could have a huge potential to encourage engagement by private industries on global health issues. That, too, could also contribute to the “S” of the ESG framework.

Figure 11: Basic framework for sustainable development in global health



Source: Author’s own.

Furthermore, there are other intervening opportunities based on social infrastructure to enhance the provision of products/services by encouraging commitments from private industries. Continuous R&D investment in innovative products is always really indispensable. To innovate and to drastically change the social situation surrounding global health issues, we must develop a new type of solution. For that, we need to promote R&D investment and support R&D within the private sector. IN some industries, several established Product Development Partnerships (PDPs) collaboratively work together with private companies to invent new products, especially medicines and diagnostic devices. These PDPs have great capacity to work in other industries, too. In some cases, an accelerator program to seek ideas for new technology-based products and to support the scaling-up of such new disruptive solutions is necessary. Clinical trial is also key. To support R&D, establishing networks with and collaborative environments in local institutions in emerging and developing countries for clinical trial is also indispensable. International NGOs and local NGOs could be additional strong partners for clinical trials. Thus, private companies should have a deeper understanding of their culture and way of thinking. A multiple stakeholder approach may be more effective to enhance collaboration based on better mutual understandings.

Similarly, regulatory harmonization has garnered more and more attention in recent years. Current regulatory affairs also pose a challenge to putting products and solutions into the field. Recently, the coordination of regulations among countries and regions is being implemented. To provide solutions more efficiently, regulatory harmonization is *sine qua non*. What ultimately matters is to take regulatory harmonization one step further by investing in capacity building for regulators and policymakers in LMICs at the same time.

Unfortunately, there is still a severe problem regarding product delivery. “Last-mile” interventions should be prioritized as well to reach underserved populations and to minimize negative factors affecting sustainability. Japanese players have been establishing distribution systems in ASEAN countries to some extent; however, there has not been enough done in African countries. In such areas, we need to work collaboratively with global cooperation. Alongside last-mile interventions, there are also challenges in supply chain management and even stockpiling, in some cases. Stockpiling strategies, such as supply division storage by UNICEF for development and emergency situations, and the international depot by The United Nations Humanitarian Response Depot (UNHRD) for emergency relief, enable prompt action when emergency demands need to be met. Although the Japan Disaster Relief Team uses UNHRD Depot for emergency cases, the Japanese private sector does not fully understand its existence and importance. For both developmental and emergency purposes, a more efficient and effective system for supply management based on a public-private collaborative approach will be required to increase efficiency and effectiveness.

Lastly, maintenance of installed products and the introduction of leasing contracts should be considered. As products and services become more high-tech, maintenance in developing countries becomes more important. To pursue sustainable development, we should not accept a culture in which products are disposable and thrown away while similar goods are repurchased. It is vital to determine how to provide maintenance through the private sector and how to foster the use of local agencies. It would be worth considering contracting to provide such

products. The use of leasing will become more common as we seek to reduce procurement costs and to promote adequate maintenance. For example, leasing systems for automobiles, agricultural machines, construction machines, and some back-office products such as photocopiers could be applied to the UN procurement system.

While a new, holistic valuation framework based on remapping of global health contributors and procurement reforms can encourage different companies to invest in complex international issues, there are still many other aspects that we should consider to inspire more and more private corporations to make a contribution to global health issues. Some of them would also lead to broader stake in SDGs. To materialize these concepts, we believe that we need to take action with the evidence and suggestions provided in this paper.