ECONOMIC EFFECTS OF INFRASTRUCTURE INVESTMENT AND ITS FINANCING

Pursuing Quality of Infrastructure for Sustainable Growth

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Abstract

The developing world is facing an annual deficit of US$ 3.7 trillion in infrastructure investments, critical for its economic growth and sustainable development. Radical changes to the global infrastructure landscape are required to overcome this gap. In the absence of enhanced infrastructure support, emerging market economies will find their ability to grow severely undermined. This brief recognizes the opportunity possessed by the G20 countries at the 2019 Osaka summit in leading the international community on this topic. Moreover, it presents for their consideration eight key policy recommendations that will help accelerate quality infrastructure development.

Challenge

Infrastructure connectivity is critical for any country to achieve economic growth and sustainable development. The vitality of infrastructure in present-day economic functions can be seen in air traffic navigation, freight movement by rails, roads, and seas, high-speed internet connectivity and uninterrupted electricity supply that powers the global economy, and information and communication technologies that have permanently transformed modern commerce. Much of the developing world, however, is unable to modernize their economies fully due to insufficient investment in their infrastructure assets.

Over the past thirty years, the developing world has witnessed heightened levels of economic development. Economic reforms undertaken by many of the emerging markets created an enabling environment for private sector growth and private capital inflows, lifting more than 1.3 billion people out of poverty over the past three decades. For the first time in human history, more than half the world (nearly 4 billion people) are part of the “middle-class”. Meanwhile, wealth to the tune of US$ 61 trillion was added to the global economy between 1990 and 2015. But for the world to sustain and expand upon these growth levels, significant amounts of investments are needed in infrastructure assets around the world. Over 1.3 billion people lack access to regular electricity supply, more than 2.5 billion need water and basic sanitation facilities, while 4 billion continues to remain offline from the internet. Radical changes to the global infrastructure landscape are required in order to overcome these fundamental development challenges and unleash growth in emerging market economies.

Presently, the developing world is facing a US$ 3.7 trillion deficit in infrastructure investments. South and South East Asia alone require US$ 1.7 trillion each year to meet their demands. Meanwhile, the level of foreign assistance that was available in 2018 was limited to US$ 147 billion globally. These levels have been consistent with the trends of the past few years and are not expected to change significantly in the years to come. Therefore, the key to challenge of financing the infrastructure gap is to leverage the limited foreign aid money, resources and networks of the multilateral development banks (MDBs), and international forums like the G20 body, to unlock trillions of dollars in domestic and foreign private capital that can be realized through meaningful reforms institutions that govern infrastructure development.

Proposal

The 2019 G20 Summit in Osaka, Japan presents to the member countries of G20 **a real opportunity to remake the world.** As the developing world's population and economies continue to expand, there will be a renewed momentum in parts of Africa, Asia, and Latin America, to rapidly secure large-scale investments in order to double their infrastructure assets over the next thirty years. In the absence of enhanced infrastructure support, economies in many of the developing countries will find their ability to grow severely undermined.

Japan has played a critical role in leading this issue. Most crucially, it led the members of the G7 at the 2016 Ise-Shima Summit to adopt the five central principles for promoting quality infrastructure investment. In light of the sheer size and scale of the challenge of infrastructure development confronting the international community, it is only appropriate that Japan leads the world again at the Osaka G20 Summit and consider the following eight recommendations to enable quality infrastructure development:

Recommendation 1: Mobilizing Tax Revenue and Domestic Resources

According to a 2016 World Bank document, domestic tax revenues constitute the dominant share of infrastructure funding in developing countries since infrastructure is a public asset. In Africa, more than 40 percent of the infrastructure is financed through taxes and public funds, with national governments paying for more than 60 percent of infrastructure in certain sectors like transportation. Bilateral and multilateral aid agencies can use their resources strategically to help developing countries reform their tax collection practices, expand their tax net, and strengthen their overall state capacity. The Addis Tax Initiative is a quintessential example of global cooperation to increase domestic resource mobilization, and all efforts must be made to channel the gains of that initiative to finance the global infrastructure gap.

Recommendation 2: Investing in Local Capacity

Financial investments in infrastructure development will be insufficient if it is not matched with investments in local human capital. With local capacity building being a pivotal precondition to achieving quality infrastructure development, the lack of a human capital base that is capable of planning, procuring, implementing, and maintaining multitrillion dollar infrastructure project continue to be one of the main challenges for the emerging markets. Bilateral aid agencies of donor countries like the United States and Japan have a key role to play here in mapping the gaps in human capital needed for infrastructure development in emerging markets. Once the gaps are identified, aid agencies have both the mandate and platform to help governments of recipient countries build local capacity.

Recommendation 3: Reforming Procurement Practices

Procurement standards matter an inordinate amount in development, with an average of 15% of the gross domestic product (GDP) of developing countries going through the hands of procurement officials in the public sector, much of which goes towards infrastructure development. Historically, these officials have been encouraged to pick the lowest-bid project, in an effort to lower the overall costs associated with infrastructure development. Incapable of assessing the longer-term feasibility and sustainability of the project and lacking a scientific rationale, the practice of procuring cheap infrastructure has proven to be expensive in the long-run to many of the developing countries, with governments paying for the same infrastructure project for twice.

Many of the developing countries, however, lack adequate institutions and qualified bureaucracies that can facilitate their procurement officials to adopt more sophisticated infrastructure procurement practices, one that carries out “life-cycle cost analysis.” At the Osaka Summit, members of the G20 must adopt a commitment to train 100,000 public procurement officials – primarily from developing countries in Africa and Asia – in the best practices surrounding the planning and procurement of infrastructure projects. The commitment should seek to train at least 600,000 public officials in the next ten years, half of which must belong to governments in South and South East Asia.

Recommendation 4: Establishing Global and Universal Standards

To make real on the promise of achieving high-quality infrastructure development globally, there is a real need for the global community to adopt a set of universal standards that would provide a more seamless regulatory connectivity across countries. The absence of universal and standardized quality controls has often led to gridlocks in project negotiation, planning, or implementation. Moreover, disparities in the regulatory standards between two countries have also created a breeding ground for corrupt and rent-seeking practices to prevail.

The adaption of a more global and universal set of standards will directly and tangibly serve the interests of the stakeholders constituting the global infrastructure development community. The Osaka G20 Summit can be used as an opportunity to bring countries together and call for global accreditation of functions and services critical to the implementation of infrastructure projects, including air navigation and security, environmental and energy sustainability, engineering, and information and communication technologies (ICTs). By building consensus on the protocols and norms governing these functions, a comprehensive and universal accreditation process can be established that will significantly enhance the efforts to achieve transnational and transcontinental infrastructure connectivity.

Recommendation 5: Leveraging Multilateral Development Banks's expertise

The international community has access to a vast reservoir of information and deep pools of resources with the global network of multilateral development banks (MDBs). Regional MDBs and the World Bank have a diverse and sophisticated network organizational structure that is embedded itself deep into the functions of local and provincial governments in many of the developing countries that seek to close their infrastructure gap. MDBs, therefore, are centrally placed and can help scale up the efforts of bilateral aid agencies, provide strategic advice to governments of the developing countries, enforce the universal set of standards adopted by global community (*as referenced in Recommendation #4*), play appropriate roles in enabling access to private capital markets (both locally and internationally), and help support and scale-up the efforts of bilateral aid agencies in building local capacity (*as referenced in Recommendation #2*).

Furthermore, MDBs like the World Bank have at their disposal datasets and information on countries' capacity and capability to finance public-private partnerships (PPPs) in infrastructure development. By leveraging these datasets (and the analytics they offer) strategically, countries can create an enabling environment that facilitates a greater role for the private sector in infrastructure development. To that end, the G20 can call for an inter-bank meeting that could take place on the sidelines of the Osaka Summit. The meeting will give an opportunity for the MDBs to increase their inter-bank collaboration, reduce redundancy of efforts, adopt a burden-sharing mechanism for the various infrastructure development function that is tailored to each of the banks' strengths in the subject matter.

Recommendation 6: Bringing China as an inclusive and responsible player

It should come as no surprise that a single donor or entity will not be able to close the US$ 3 trillion global infrastructure gap on their own. China is playing its part in financing a substantial part of this demand through its aid agencies and the multilateral development bank that it leads. The international donor community must not only welcome China's role and its resources, but facilitate its adoption of long-standing institutions, norms, and practices that governs donor activity and safeguards both the interests of the donors (who expect their investments to yield returns) as well as the recipient countries (who seek investments that will grow their economies sustainably).

Recommendation 7: Future Proofing Infrastructure Assets

Artificial intelligence, big data analytics, 5G, autonomous vehicles, and other technologies of the fourth industrial revolution are slowly making their way into mainstream economic functions. At the same time, policy communities around the world are bracing themselves for the disruptions expected from these technologies to conventional models of growth and development and are seeking to re-work their innovation agenda. The G20 Summit can highlight both the challenge and opportunity presented by these technologies and call for the international community to rethink their conventional infrastructure designs such that they are adaptive and conducive to such changes while harnessing the disruptive potential for rapid economic growth and development. By allocating a share of the investments towards digital infrastructure such as optical fiber networks and wireless communication infrastructure, countries can insure their larger investments in physical (or hard) infrastructure from becoming obsolete. These investments will also open up the doors for developing countries to design and implement "smart-city" projects and create digital payment systems that can formalize and optimize their economic functions.

Recommendation 8: Combatting Corruption to ensure Quality Infrastructure

Efforts to fight corruption must not be mutually exclusive to achieving quality and sustainable infrastructure development initiatives. Across the G20 community, corruption in infrastructure procurement and implementation has received significant attention and deserves a solution that is holistic in its approach. Therefore, the Osaka Summit must emphasize upon the importance of ensuring quality and sustainability at various stages of infrastructure development – including standards enforcement, infrastructure investments, project preparation and procurement, and project implementation and maintenance through local capacity development – in encompassing comprehensive efforts to reduce and minimize corruption.

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