



**T20**  
INDONESIA  
2022 THINK

Policy Brief

**OVERLAPPING, COMPETING OR  
COMPLEMENTARY. COMPARING  
INTERNATIONAL  
INFRASTRUCTURE PLANS TO  
FOSTER NATIONAL  
DEVELOPMENT AND  
INTERNATIONAL COOPERATION**

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*Task Force 8*

**Inclusive, Resilient and Greener  
Infrastructure Investment and Financing**



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# Abstract

Global cooperation regarding future infrastructure systems is key to building up and implementing a successful pandemic “exit strategy” that addresses short and longer-term sustainability and development priorities, globally and locally. It is necessary to enhance the contribution of long-term investors and the private sector in infrastructure investment, as underlined by the joint commitment of the D20 – Long-Term Investors Club (D20 – LTIC), Business 20 (B20) and Think 20 (T20) in 2021 and 2022. The Group of 20 infrastructure space has to adapt, both in terms of objectives and governance, to meet a challenging context.

Several international infrastructure plans have been promoted in the last decade, such as the G20 Seoul plan (2010) or the Chinese Belt and Road Initiative (BRI) in 2013, but the pandemic crisis has accelerated the global geopolitical infrastructure competition, an issue redoubled by the impacts of the war in Ukraine. The Group of Seven has initiated the Build Back Better for the World (B3W) process in 2021 and launched in 2022 a Global infrastructure partnership. The European Union has created its Global Gateway, and mandate to European Investment Bank (EIB) to create a new global branch to support it internationally. The United States has engaged into its own trillion-dollar infrastructure plan and other plans have emerged such as the Central Asia and South Asia connectivity.

Whereas the Italian G20 presidency stressed the importance of ensuring quality infrastructure that can help carbon neutrality targets, especially through partnerships between the public and the private sectors, growing geopolitical divides might weaken the potential of infrastructure investments to support environmental and social standards for a new sustainable economy.

Channelling investments to emerging and developing economies is a pressing global strategic issue, whereas many countries are confronted with high debt costs and inflation rates that hinder their capacity to invest in a just energy and net zero transition. Hence, a quality and enduring dialogue among regional and global infrastructure investment initiatives across the G20 Indonesia and the G20 India and the G7 Germany and G7 Japan, is necessary to meet enlarging infrastructure finance gaps and foster an effective and inclusive system change.

# Challenges

The infrastructure space organisation within the G20 still largely dates back to the 2014 Australian presidency, out of the 2010 Seoul development consensus. This policy brief seeks to strengthen early-stage policy dialogue and coordination on infrastructure at multilateral and regional levels in the new context created by the COVID-19 pandemic and ensuing multiple and overlapping crises. Assessing whether cooperation is possible among international infrastructure plans is relevant to addressing some of the main tasks of the policy areas selected by the Indonesian G20 presidency, such as “Establishing equitable risk allocation in infrastructure”, “Improving governance in major infrastructure projects” and “Managing and financing local and social infrastructure development”.

The importance of ensuring quality infrastructure has been widely recognised in international fora, from the G7 in Japan in 2016, to the Italy’s G20 presidency in 2021. Despite a growing awareness that investing in reducing the infrastructure gap between economies at the global level can promote a virtuous circle towards interlinked development goals, promoting this effort in the absence of effective global coordination could result in a less efficient use of resources and lower local spillover effects, in a context of rising environmental challenges and social inequalities.

The pandemic has laid bare systemic underinvestment in social infrastructure following the 2008 global financial crisis. The absence of global cooperation in the development of future infrastructure investments could result in digitalisation – which was itself accelerated by the pandemic – widening social capital gaps across the globe. Similarly, the consensus on the need to channel resources from advanced economies towards creating a sustainable growth mechanism for middle- and lower-income economies has to be strengthened; otherwise, the current debt crisis could hinder emerging and developing economies’ investment capacities. The G20 infrastructure governance started to evolve in 2021 to address multiple pre-and post-crisis macroeconomic and geopolitical challenges, but change needs to be pushed forward. After the pandemic, the war in Ukraine highlights the fragility of global interdependence. A geopolitical shock in a region can affect not only the surrounding areas, yield far reaching global impacts such as on energy and food markets, or supply chains. Food chains, both local and regional, are in fact extremely sensitive to shocks and often rely on poor-quality infrastructure in rural areas. Investing in food production and storage infrastructure, as well as energy and the cold chain, could significantly increase the resilience of countries vis-à-vis food supply shocks, while also fighting hunger and food poverty (Hallegatte et al., 2019).

In order to limit the negative impact of potential shocks – pandemic, economic, environmental or geopolitical – resilient and efficient infrastructure is essential, and standards play a crucial role in this endeavour (OECD, 2021). However, a new approach to infrastructure standard should emerge to overcome the gridlock caused by the systemic lack of ‘bankable’ projects, especially in emerging and developing countries.

The G20 has a long history of promoting multilateral infrastructure investment plans, with initial commitments dating back to the Seoul Summit in 2010, where the G20 came together to deliver sustainable growth after the global financial crisis that followed the global financial crisis (G20, 2010). Given the high growth potential of infrastructure investment and the role played by the infrastructure endowment in long-term growth, the G20 as we know it has sought to facilitate coordination and the sharing of best practices. Hence a Global Infrastructure Hub (GIHUB), was created in 2014 and intended as a knowledge sharing and implementing tool for the development agenda. Its role has largely been an advisory one, with limited impacts on key decisions. It has mostly provided governments with compiled data from international financial institutions and advocated for more private sector investors engagement along existing ESG standards. What has been lacking from G20 members such as within the ministerial Infrastructure Working Group (IWG) has been a common and comprehensive approach towards infrastructural plans, articulated with a wider vision of sustainable finance, especially for emerging and developing countries.

Most of the initiatives put forward in the last decade have been initiated by individual countries or by small groups, each with its own set of standards and priorities. The most notable examples are the BRI, launched in 2013 along with the creation of the Asian Infrastructure Investment Bank (AIIB), Japan’s Partnership for Quality Infrastructure (2016, 2019) and the US International Development Finance Corporation, founded in 2019 with the aim of including private investors in US development missions abroad. More recently, the QUAD framework – involving four G20 members: the US, Australia, India and Japan – has launched an infrastructure cooperation group to support high-quality projects, primarily in the Asia-Pacific region. Finally, yet another G20 member, the EU, has devised its own initiative, the Global Gateway. The EU project focuses on sustainability and decarbonisation but also on social responsibility and transparent governance. This European framework intends to leverage 300 billion euros (\$306.37 billion) to support connectivity projects, especially in the Indo-Pacific region and in Africa (EU Commission, 2021).

Only a limited number of initiatives have instead been characterised by an approach based on a larger framework, bringing together different G20 members and other economies. The Asia-Pacific Economic Cooperation (APEC) Multi-Year Plan on Infrastructure Development and Investment (MYPIDI), launched initially for the 2013-2016 period, sought to enhance the infrastructural environment of the Pacific region by identifying guidelines for a common approach by member states. Another global initiative has been the Global Infrastructure Facility

(GIF), established in 2014 by the G20 with the support of the World Bank to boost the participation of private investment in sustainable and quality infrastructure, especially in developing countries. So far, it has helped channel over \$76 billion in infrastructural investments around the world, of which \$52 billion coming from private investors. Its sectoral focus has been primarily on transportation (41 percent of total investments) and energy (40 percent), while regionally almost a third of its projects (29 percent) have been in Africa. Despite its role remaining mainly an advisory one, it has had impacts on the entire pipeline, from the planning phase to the financing one. Its numbers, however, not only fall short of the actual investment needs but also pale in comparison with the resources leveraged by the initiatives involving single states or smaller groups mentioned above. The BRI alone has provided since its inception more than \$800 billion to support infrastructural projects abroad, while in 2021 the European Investment Bank (EIB) alone financed 94.89 billion euros (EIB, 2022).

The sheer number of different infrastructure initiatives launched in recent years provides a fragmented and complex global picture. Institutional actors and private investors would have a hard time choosing which framework best matches their priorities and objectives. In addition, each infrastructure plan stems from the vision of the countries supporting it. While the EU Global Gateway is strongly related to European decarbonisation objectives and has a clear priority in supporting the energy transition, the BRI has only recently stopped financing coal projects. In a world that seems to be heading if not towards a deglobalisation, at least towards an increased regionalisation of production and value chains, cooperation and interdependence between regional partners becomes critical to achieve global climate, environmental and development goals. In such a scenario, quality infrastructure with compatible standards between members would be essential to exploit the full potential of regional economic integration. A re-shoring process, with shortened supply chains, can also represent an opportunity for partners and local communities that had been overlooked by investors in the past, opening new growth paths in less advanced areas. Yet, to take the most advantage of such an opportunity, infrastructural investments would need to be based on clear quality principles and on effective sustainability standards, helping countries meet their targets of lower emissions and net-zero pledges. This is exemplified for instance by the launch of the Just Energy Transition Mechanism (JETM) and promotion of the related Country Platforms by the G20 presidency of Indonesia. Meanwhile, the G7 Germany presidency has endorsed the proposal of a global climate club gathering public and private partners in the form of a 'coalition of willing' to address the most pressing global warming needs.

# Proposals for G20

In 2021, the Italian G20 presidency stressed the importance of delivering sustainable and inclusive growth and reaffirmed the G20's responsibility in this regard (G20, 2021). Since 2020 and the Covid-19 pandemic outbreak, public health systems, including unequal access to vaccines, combined with public support to investment, have represented the main factor behind an uneven recovery. In 2022, the level of exposure to the ongoing war in Ukraine and, most importantly, the limited fiscal/liquidity cushion to absorb the shock are the main drivers of diverging growth. In such a scenario, the G20 is an essential political arena to avoid food and debt crises, which would otherwise trigger instability, uncontrolled mass migrations and fuel geopolitical tensions.

Promoting effective quality infrastructure helps increase the resilience of countries vis-à-vis these crises and contributes to liberating the full growth potential of economies. The UN has estimated that around 1.2 billion people live in countries that have a significant or severe exposure to food, energy and financial risks (UN, 2022). Additionally, the share of government bonds over total bank assets in emerging markets has reached 17 percent, creating a dangerous environment should governments, especially in vulnerable regions, be unable to meet their obligations (IMF, 2022). Global growth has once again been revised down, to a mere 3.6 percent output increase for both 2022 and 2023. In such a scenario, the improvement of economic resilience is imperative and infrastructure investment plays a key role in this regard. However, investment trends remain far below needs, with an estimate total investment in 2022 of \$2.8 trillion, roughly 500 billion short of the necessary \$3.3 billion (GIHUB, 2022). The G20 could ensure the best possible use of these resources, in particular by agreeing on ways to avoid economic, social and environmental risks caused by ineffective investment dynamics, primarily fragmentation and overlap. In that context, we argue that public and private stakeholders engaged in the G20 infrastructure space should drive change and innovation in light of the lessons learned from the pandemic and at a time where more, high-quality dialogue among competing infrastructure plans is necessary to keep critical climate and development agendas afloat.

This policy brief is intended as a first step towards a new approach to the ongoing global infrastructure competition. First, by identifying overlaps and duplications. Second, by finding which forms of coordination are possible among the infrastructure plans launched by the major economies in recent years. The analysis will take selected regions in developing and emerging countries as case studies.

This process ought to be continued in 2023 to explore the establishment of new and improved coordination platforms and mechanisms at a global level to gather international organisations and donors, development agencies and the private sector. The aim is to select major infrastructure projects that may benefit from a coordinated effort of major international infrastructure plans and maximise the transformational benefits at the national and local levels. The ultimate goal lies in the reduction of the increasing infrastructure gaps worldwide, through quality infrastructure investments that help the energy and low carbon transition. In order to achieve this, decreasing perceived risks is key to spurring new flows of private infrastructure investments and inaugurating bolder public-private cooperation.

In light of mounting global warming risks, in-depth coordination is crucial to enhance the efficiency and profitability of infrastructure investments, reduce countries' carbon footprint and deploy new technologies. Particular attention will be paid to improving spillover for local communities and the benefits of a multilevel governance.

The current situation of competing infrastructural plans, based on different – and sometimes conflicting – standards and elaborated with distinct priorities and procedures bears multiple risks both for investors and the countries involved. This complex scenario does not provide an optimum, neither in terms of economic efficiency nor regarding development prospects for destination countries. Analysing the current pattern of initiatives, we have pinpointed two main dynamics that present serious risks to infrastructural development, fragmentation and overlapping. Tackling them would be essential to ensure the most effective use of the available resources: considering the widening investment gap and the huge financing needs, the G20 should strive to secure effective use of resources. This gap is likely to increase even further due to the various decarbonisation objectives that countries all around the globe are setting as their national priorities. Yet, while developed countries have relatively large fiscal margins to achieve them, developing and least-developed economies would struggle without G20 assistance.

Fragmentation in infrastructural plans can be defined as the coexistence of plans “belonging” to different infrastructural initiatives, each with its own set of standards and requirements. Fragmentation can be both regional and national.

While the dangers of national fragmentation, the presence of infrastructure financed and built under different conditions and rules, are rather intuitive – namely the low prospects for interoperability between incompatible or diverging standards – regional fragmentation deserves more attention. In light of the increasing regionalisation of trade and investments, effective connectivity between countries is imperative in order to fully develop a region's growth potential. Yet, if different countries follow different infrastructural standards due to being part of diverging – when not directly rival – infrastructural initiatives, economic development would remain hindered by limited integration. Reduction in tariffs are hardly sufficient to promote trade when incompatible standards would impair material procedures and force exporters and importers to



pay higher prices and adapt to different regimes. Parallel to this, fragmentation also risks widening the gap, both regionally and internationally. Countries being targeted by lower-quality initiatives, be in danger of finding themselves left behind if regional partners develop higher quality standards for infrastructures. In such a scenario, countries that investors consider more profitable and less risky would receive not only more resources but also connectivity endowments with higher standards, while the others would be left behind. This would increase the infrastructural gap of less developed economies both on a global and regional framework: areas lacking access to higher-quality infrastructure initiatives would be less involved in trade and economic cooperation, with their growth potential remaining largely untapped and their access to global markets significantly impaired.

An example of fragmentation and diverging standards that still affect Europe is represented by the different railway gauges in use within the EU. While most of the continent now uses the standard 1.435 millimeter gauge, several member states have different tracks: the Baltic countries still have the Russian one (1.520 mm) – Rail Baltica would only partially solve the issue, since national railways would retain the old standards – while Portugal and Spain largely use the Iberian gauge (1.668 mm). Gauges of different widths create significant interoperability challenges at a time when railways are increasingly important as a low-carbon transportation mode, and the TEN-T corridors are being completed within the EU. High-speed and main lines are being constructed on the common standard, but the high level of diversification within secondary lines would still represent an issue in the years to come, requiring different trains and limiting the potential of the common market. The same pattern is replayed in different areas of the world, especially in Asia, where rail gauges diverge significantly between bordering countries. This creates additional costs for operators and underlies the necessity for a common standard to be adopted, one that can allow for high interoperability and better connects countries, markets and people. Beyond gauges, operating, signalling and safety systems would also require compatible – if not identical – standards to operate effectively in cross-border freight and passenger lines (ERA, 2021).

On the opposite end of the spectrum is the risk of overlapping. This could happen when different infrastructural initiatives, lacking coordination and competing to implement the most significant projects in a country or a region, end up constructing more infrastructure than effectively needed. While this competition could appear benign – the more infrastructure, the better – it presents significant challenges. First, an uncoordinated and non-interoperable infrastructural development within a country would constitute an inefficient allocation of resources, a scenario that would not bring about the full potential of connectivity projects. Two similar port facilities constructed in the same area by different initiatives would not enhance a country's endowment as much as a single, larger-scale and better-developed one.

The scarcity of the available financing for infrastructural projects in the neediest parts of the world, often the same ones deemed less profitable by private investors and whose governments lack adequate fiscal space to support development, requires the G20 to ensure that they be employed in the most effective way, without useless duplication. Infrastructural financing would be best employed where it can make the greatest impact in terms of growth and the integration potential of a country in the global economy, not in similar projects that could end up underused because of their redundancy. Additionally, the functioning and maintenance, especially long-term, of excessive competing infrastructure would constitute a significant burden, in particular for the poorest countries, either preventing them from investing in other assets or forcing them to neglect infrastructural maintenance due to other spending needs.

The COVID-19 pandemic has significantly worsened the budgetary stance of middle- and lower-income countries, diminishing their fiscal margins and increasing their debt burden – as well as the servicing costs. It thus becomes imperative to provide them with the adequate infrastructural endowment necessary to catch up with the rest of the world and benefit from the global economic recovery. To do so, new financing frameworks should be constructed, providing both destination countries and investors with a clear picture of the available options. At the same time, a minimum level of convergence between G20 members should be reached in order to agree on a basic set of shared standards for all infrastructural initiatives targeting developing and least developed countries. In this regard, we welcome the G7 pledge, made at the Elmau Leaders' Summit in June 2022, to mobilize 600 billion dollars in both private and public funds to support infrastructural projects in developing countries. Nonetheless, it is necessary to point out that such a scheme should remain as open as possible to non-G7 countries' participation and it would be best be complementary rather than competing with other schemes, to avoid fragmentation and overlapping risks. Finally, it has to be considered that the pledged resources largely come from pre-existing initiatives and thus do not constitute new financing but are mostly a reorganization of already allocated funds.

The G20 remains the most relevant framework to build such a consensus. Last year in 2021, the Rome Leaders' Summit stressed once again the importance of sustainable infrastructure, as well as the need to exploit the grouping's full potential to ensure a complete global recovery. Building on the G20 Roadmap for Infrastructure as an Asset Class, the G20 Rome declaration supports the progress of the G20 Principles for Quality Infrastructure and extends the mandate of GIHUB. Following those guidelines, we propose a minimum agreed classification of quality and sustainable infrastructural investments to be shared by G20 members, and potentially open to any other country. This classification should function in a similar way to a taxonomy, listing what types of infrastructural investments would be considered sustainable and fully compatible with the G20 agenda.

While we acknowledge the different priorities and preferences within the G20, we nonetheless stress the importance of reaching a common position that would hopefully operationalise the 2019 Osaka Principles. In fact, these principles are not yet directly translatable in practice and would greatly benefit from a classification rendering them directly applicable to future projects. The GIHUB could contribute in the future to establish such a classification.

A common G20 infrastructural taxonomy would also help investors and countries to easily identify financing options. This would contribute to transforming the current scenarios of competing and overlapping initiatives into a clearer and simple picture, allowing stakeholders to quickly assess the available options and their requirements. However, common standards alone would not be enough: a common financing framework is needed to regroup the number of initiatives under the same umbrella. The best option would be a single common facility by G20 members functioning as a sort of international development institution financing infrastructural projects that fulfil a G20 common criteria and bring private investors to support development in middle- and lower-income countries. Effective involvement of private investors is crucial for mobilising an adequate amount of resources to effectively bridge the investment gap affecting developing and least developed economies. However, infrastructure investments have a long history of diffidence due to their higher risk, especially when concerning fragile or emerging countries. To overcome this diffidence, a common financing facility should be provided with derisking tools and mechanisms that would lower the perceived risks for private investors, ultimately boosting private investments in infrastructure. In order to do so, public contribution and guarantees by G20 member states would be essential.

An effective shared facility should provide the incentives to bring G20 members together to cooperate on the same projects, diminishing the attractiveness of competition and raising the appeal of cooperation. To do so, we have envisioned a premium mechanism that would benefit shared projects: in a co-financing scenario, where the resources provided by the facility are a share of the total – we envision a situation where the private sector would supply the bulk of the necessary financing – such a share should be increased depending on the number of G20 members cooperating in the same project. As an example: financing an infrastructure project backed by one single G20 country would receive only the base share of public financing by the shared facility, with the share increasing for each additional country participating. This would make common projects more appealing to private investors, since they not only would be cheaper but also faster in their pipeline because of the smaller quota of resources to be obtained from markets. Additionally, more participating states would increase the overall quota of public co-financing, significantly diminishing the risk related to an investment.

A significant step in this direction has been taken at the G7 Summit in June 2022, whereby the German Chancellor O. Scholz successfully introduced the concept of a “climate club” as a strategic direction for the future of the G7. Such a move could indeed yield greater cooperation

on sustainability within the G7, and beyond it, which is essential for the shared recognition and adoption of new development standards. This idea builds upon a previous 2021 document from the German Finance Ministry aiming at the establishment of a framework between countries with the most ambitious climate pledges, with climate neutrality pledges by 2050 at the latest (German Finance Ministry, 2021). The club is by no means a closed one, yet some G20 members have climate pledges going further in time and are potentially excluded from this initiative, which could create potential disruptions and hinder the achievement of shared infrastructural action. In this regard, the Indonesian presidency has taken concrete steps to scale-up ambition and cooperation in the field of sustainable finance, including infrastructure finance. We propose to continue and develop the proposals introduced by the present policy brief in the context of the G20/T20 India and of the G7/T7 Japan and to invite additional stakeholders from different regions to join in.



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## **Proposals to address the failure of public-private partnerships (PPPs) in infrastructure projects and the post-crisis fiscal challenge in Asia**

Recently, the world has witnessed several attempts to stimulate private sector financing for infrastructure investments. However, many of those public-private partnership (PPP) projects were not very effective. The regions that have experienced the greatest difficulties have been Latin America and some Asian countries. The main reasons behind those failures are primarily related to the revenue side of infrastructure investment. The revenue from infrastructure, such as railways, water supply or electricity, comes primarily from user charges or user fees. Considering users' preferences for lower fees and the private investors' desires for a high rate of return, there are internal conflicts between the two sides.

This proposal aims to address these conflicts between users and private investors by exploring another source of revenue deriving from infrastructure investment. I focused my attention on the spillover effects of infrastructure investment. Spillover tax revenues created by infrastructures will constitute a good source of revenue in addition to user charges. Good-quality infrastructure, in fact, creates a huge positive spillover effect within a region; for instance, clean water supply can bring new residential districts, shopping malls, restaurants, factories and businesses. As a result, the amount of tax collected from the property, corporate and individual income as well as sales will inevitably rise. If infrastructure companies only rely on user charges, then these must be increased to secure a high rate of return for investors in infrastructure, discouraging users. Sharing part of the spillover tax revenues collected by the government with the investors would represent a better option, allowing users to benefit from lower charges and investors to still obtain a high rate of return. A potential optimum would be a 50 percent share of investors' return coming directly from charge, with the remaining 50 percent coming from tax revenues increased by the infrastructure.

Asia already presents some interesting examples of spillovers. In the case of Uzbekistan's railway (Table 1), the economic growth in the non-affected region changed from 8.3 to 8.5 percent, which is only 0.2 percent growth. On the other hand, the region along the railway –the affected region – showed a 2.2 percent growth in gross domestic product (GDP) from 7.2 to 9.4 percent. The two regions showed a 2 percent difference in their economic growth. Therefore, the railway produced a 2 percent increase in GDP as a result of its spillover effects compared with other regions, which created huge tax revenues for the government. Detailed analysis can be seen in Yoshino and Abidhadjaev (2017). In the case of the highway in Manila city (Table 2), tax revenues in three cities along the highway received about three times as much tax revenue after the fourth year of operation (Yoshino and Pontines, 2015). This shows a significant increase in tax revenues after four years of operation (t+4).

Table 1. Numerical estimation of the difference-in-difference coefficient using regional data for Uzbekistan, 2005–2008 and 2009–2012

| Region group                | Outcome                     | Pre-railway period | Post-railway period | Difference |
|-----------------------------|-----------------------------|--------------------|---------------------|------------|
| Non affected group          | Average GDP growth rate (%) | 8.3                | 8.5                 | 0.2        |
| Affected group <sup>a</sup> | Average GDP growth rate (%) | 7.2                | 9.4                 | 2.2        |
| Difference                  |                             |                    |                     | 2.0        |

GDP = gross domestic product

<sup>a</sup> Affected group includes the regions of Samarkand, Surkandharya, Tashkent and the Republic of Karakalpakstan.

Source: Yoshino and Abidhadjaev (2017).

Table 2. Calculated increase in business tax revenues for the beneficiary group relative to non-beneficiary group 4 for the Manila Railway (million pesos)

| Construction Period<br>Region | T-2    | T-1    | T      | T+1    | T+2    | T+3    | T+4     |
|-------------------------------|--------|--------|--------|--------|--------|--------|---------|
| Lipa city                     | 134.36 | 173.50 | 249.70 | 184.47 | 191.81 | 257.35 | 371.93  |
| Ibaan                         | 5.84   | 7.04   | 7.97   | 6.80   | 5.46   | 10.05  | 12.94   |
| Batangas city                 | 490.90 | 622.65 | 652.83 | 637.83 | 599.49 | 742.28 | 1209.61 |

Source: Yoshino and Pontines (2015).

Therefore, a spillover tax revenue approach can be applied not only to hard infrastructure but also to soft projects such as the internet and mobile connectivity. This is important in order to address current fiscal challenges or budget deficits after the COVID-19 pandemic, where governments alone cannot provide enough infrastructure financing in the region. They have to attract private investors to top up the available public resources.

## **Financial education to promote the supply of funds for infrastructure investments**

The Organisation for Economic Co-operation and Development (OECD) started stressing the importance of financial education about 10 years ago. The Asian Development Bank Institute (ADBI) and the OECD worked together to spread awareness about financial education in various countries in Asia. In Asian countries, savings are primarily directed to bank deposits, and, even though a large share of the population is familiar with stock markets, other financial products like mutual funds or pension schemes are still relatively unknown. Even products like life insurance or casualty insurance – not to mention vehicle insurance – are often overlooked. Yet, investments in insurance by financial institutions could provide important support for infrastructure development by private actors. Long-term institutional investors such as insurance and pension funds can invest in infrastructure where a higher rate of return would be secured by receiving part of spillover tax revenues. Long-term domestic investments can also move within the country to promote infrastructure finance, a dynamic that will be able to achieve higher economic growth.