G20 INSIGHTS

Global Health and Covid-19

G20 2020

A sustainable urbanization and infrastructure response to the Covid-19 pandemic

Nicolas J.A. Buchoud (Grand Paris Alliance for Metropolitan Development (Cercle Grand Paris de l'Investissement Durable)),

Raja Al Marzoqi

Michael Cohen

Mitch Cook

Holger Kühle

Jörn Meyer

Susan Parnell

November 26, 2020 | Last updated: December 10, 2020 *Tags:* *Policy responses to Covid-19*

The COVID-19 pandemic is, at the surface, a health crisis, but it has rapidly escalated into a series of socioeconomic challenges in a world interconnected by cities. Fearing the collapse of public health systems due to the lack of preventative and curative strategies, the World Health Organization, supported by national governments, has urged people to adopt social distancing measures. However, international organizations and national governments have considered cities as implementation sites for solutions instead of partners for shared assessments and for defining inclusive rescue and recovery plans. Moreover, the disruption of supply chains and global trade due to COVID-19 has been well assessed, but not its impact on lower-income communities with poor levels of basic services. These have become clusters of contagion and illustrate social and physical infrastructure's centrality in COVID-19's contagion and mitigation patterns. Responses to the crisis and the road to poverty reduction and productivity run directly through infrastructure investments, but the window of opportunity to achieve the UN 2030 Agenda is narrowing in the context of degraded global macroeconomic indicators. For the G20 to be effective, it must deliver a recovery plan that changes the pre-COVID-19 crisis status quo, as over 60% of global GDP comes from fewer than 1,000 cities and metropolitan areas of +500,000 inhabitants. Further, the bulk of urbanization occurs in the Global South, where cities account for 70% of all infrastructure investment needs, and informality levels are high (OECD 2015; UNDESA 2018; UN-Habitat 2016). This policy brief outlines how a "G20 Urban Platform" could prioritize infrastructure investments that build more capable cities in more capable states, a much-needed turn in multilateralism to support peace and equitable growth. This can put the global development and environmental agendas back on track.

Challenge

Reevaluating the combined and cascading impacts of the COVID-19 pandemic

Over 20 million people across the globe are reported to have been affected by COVID-19, and more than 800,000 have died of it, as of late August, 2020, according to the World Health Organization (WHO). More than 3.5 billion people were confined in March/April 2020, as many governments believed that social distancing and lockdowns were sensible approaches to reducing the virus spread. However, the COVID-19 pandemic's consequences have not been uniform. Differences among nations have been redoubled by differences between cities, jurisdictions, and neighborhoods, reinforcing preexisting inequalities (OECD 2020). These differences have also changed from week to week: places that were effective at virus containment one week became objects of concern the next. Success stories were not long-lived.

Even cities that relied on smart technologies, for example, drone surveillance and smartphone apps, have found that these instruments did not deliver on their promise of broad impacts on the spread of COVID-19 or on changing social behavior. In addition, the availability of advanced technology has not prevented hospitals from being overwhelmed by COVID-19 cases. Furthermore, there is no clear understanding of to what extent big data availability has been utilized for successful on-the-ground mitigation measures. In contrast, prior experiences in building social capital, such as in participatory slum upgrading programs (Villa 20 in Buenos Aires) and community information campaigns (Hong Kong) have resulted in more social cohesion and fewer cases. The scarcity of medical and hospital service has nevertheless demonstrated that very few jurisdictions at any level have been adequately prepared for the surge in demand for more social infrastructure.

The combined assessments from across the spectrum of the T20 taskforces in June, 2020 illustrate a potentially dangerous combination of:

- a degraded multilateral order, as seen in questioned global trade rules and agreements;
- the acceleration of the digitalization and virtualization of professional and social life;
- the greater level of exposure to risks of numerous population segments, in particular youth entering labor markets; and
- prevailing phenomena such as high levels of informality in the urban economy and infrastructure provision in both large, emerging countries and lower-income country megacities, which have rapidly grown in the first half of 2020.

Past crises throughout the 20th century offer valuable lessons that help us understand how these mounting challenges are driving the world to a tipping point, a situation worsened by pre-crisis problems such as rising inequality levels (Guillaumont and Treyer 2018). The COVID-19 pandemic threatens the delivery of the UN 2030 Agenda and could reinforce global imbalances (Bhattacharya, Gallagher, et al. 2019). This calls for G20 action, especially as the process is accelerated by reduced growth and increasing inequalities within and among cities, with deprived households and neighborhoods hit the hardest. The current crisis dramatically illustrates the conclusions of the 2019 Global Sustainable Development Report (GSDR) (UN 2019), which underlines the trade-offs between the 17 Sustainable Development Goals (SDGs). The report provides substantial evidence for the ongoing systemic changes triggered by urban societies in the natural world, through the interlinked threats of rising inequalities, climate change, biodiversity losses, and growing amounts of waste, in the background of accelerated global flows of capital, information, goods, and people (GSDR 2019).

Including cities in the COVID-19 equation

Since the COVID-19 outbreak, many urban networks and philanthropic and international organizations have compiled best-case studies and analyzed short- and medium-term city responses. They have started to synthesize "lessons learned" on how cities emerged from lockdown, with a focus on density; mobility; and digitalization of life, work, and the economy. These monitoring efforts have raised global awareness of what has been tried in cities as diverse as Milan, Kolkata, Dakar, Lima, and Istanbul; however, they have not yet led to improved local responses

More than 200 million people are expected to lose their jobs due to the pandemic and its consequences (World Bank 2020). This requires extraordinary outlays of public expenditures, including the provision of food and water for millions of people dependent on informal economic activities. The 2018 ILO report that noted that 60% of global employment and 90% of Global South employment was informal proved to be prescient in alerting that the nature of employment has fundamentally changed. IMF (2020) and World Bank (2020) estimates of the drop in global GDP for 2020 indicate the worst recession since the Great Depression of 1929.[1]

Many cities, including wealthy cities, suffer from cascading challenges of higher expenditures, delayed investments, and plummeting revenues, with consequences for large industry segments such as the building and construction sector or tourism and culture. At the same time, national governments are planning the biggest economic stimulus packages to overcome economic depression and boost growth and productivity (Boston Consulting Group 2020). Yet, the risk remains of unwanted mobility of private capital that seeks other locations where rates of return may be higher; this results in an acceleration of capital flight, particularly from developing countries and emerging markets.[2]

In addition, most of the technical and capacity-building support brought to emerging and developing countries by multilateral development banks (MDBs) and other bilateral programs has been severely affected by the COVID-19 pandemic and global travel bans (ADBI 2020). While the G20 countries have provided fiscal support representing nearly 10% of the total 2019 G20 GDP, representing more than $6 trillion (Segal and Gerstel 2020),[3] it may be that "more is not enough." Rather, a combination of strategic policies and institutional innovations to reactivate economic growth and strengthen the social contract may be as critical as a vaccine.

COVID-19 is the first pandemic of the global urban era, and future pandemics will most likely also be predominantly urban. Unless cities become part of the global institutional and macroeconomic crisis response, fragmentation of decision-making and radicalization of large segments of society will become the new normal (Galarza-Sanchez et al. 2018; Katz and Nowak 2018). Unemployment, growing levels of intra-urban inequality of both income and wealth, and divergent public health and educational outcomes all suggest that "recovery" should not be considered as a short-term outcome. Rather, these structural problems require medium- and long-term strategies, policies, and actions to ensure that the public sector is not just reactive to the current cumulative crises but proactive in finding solutions that include civil society and the private sector.

The efficiency of the trillions invested in stimulus packages and monetary policies will depend on how much these financial flows will include those most in need, how they yield positive social multipliers and externalities, and how effective the coordination will be between global, regional, national, and local levels, which includes infrastructure investments.

Analysis of the stimulus packages of the 2008-2011 global financial crisis suggests that none of these three conditions were met back then. There are significant assumptions that large stimulus packages were poorly targeted, came late, and that, while they saved the banking system, they failed to bring the economy back to a path of shared growth, such as in the US (Tooze 2018). In the context of 2020, further fiscal contraction at the national and local levels would significantly threaten global prosperity and security, even though it is now incorporated into most national responses. Even in Europe, the recovery fund negotiated in July is estimated to amount to, at best, 1% of EU GDP, and will be followed by national budget cuts averaging 4% of GDP. The US, along with the UK because of Brexit, add additional global deflationary pressure across the board.

Meanwhile, massive public spending can be a game-changing moment to set infrastructure investments on more inclusive and climate-friendly tracks, for example by overcoming traditional reluctance of private investors to engage in subnational green development plans. Addressing the health crisis could create a window of opportunity to address pressing social and environmental challenges more effectively, provided the G20 would agree on resetting infrastructure investment priorities to change the status quo.

Proposal

Redirecting infrastructure priorities toward human capital

Three conditions account for today's crisis:

- the acceleration of global economic integration, supported by urbanization and integrated infrastructure systems, yet with too little pandemic preparedness, environmental awareness, and capacity for social inclusiveness and without efficient global governance mechanisms of urbanization,
- the acceleration of large-scale environmental and social transformations, and
- the questionable socioeconomic impacts of national and G20 responses to the 2008 financial crisis.

In the past decade, the G20 has grown stronger within the global arena as the preeminent platform for generating coordinated macroeconomic and national-level financial response. The COVID-19 crisis has demonstrated that this task has changed. Success in 2020 will not only depend on aggregate numbers and national performance but also whether assistance has galvanized new inclusive activities. As urban areas generate at least 75% of global GDP, any recovery plan must therefore work at the urban level and support investments in and by cities.

The situation calls for a dramatic improvement of the G20 response to the pandemic. Although we acknowledge the G20 Debt Service Suspension Initiative, the civil society has made many calls for the debt moratorium to be the first step in a more comprehensive and coordinated multilateral recovery plan, setting standards for transformational change.[4] Furthermore, the G20 Finance Track and the feedback from analysts have not taken into account the role of cities in contributing to the short- and longer-term responses.

Cities' economies are a seismograph of what is needed for transformation and a driver for innovations and solutions. While we need to learn to live with unprecedented levels of interdependency, the infrastructure response to COVID-19 should put people first to deliver a renewed urbanization and infrastructure rationale promoting peace, equitable growth, and the implementation of the global development and environmental agendas (G20 2018; G20 Working Group on Development 2019; Al Mogrin

2020, 2019). The future of sustainable development has to be reassessed by gaining a better understanding of global interconnections and by reconsidering the global architecture of infrastructure delivery—a cornerstone of globalization—along the following three dimensions.

Infrastructure and economic productivity

Infrastructure is a critical part of national and local economic production, but many studies recurrently highlight the "supply bias" in infrastructure investment programs. Such bias typically results in projects that are too big, overestimate the demand for their services, place unreasonable financial obligations on local implementing agencies, and pay insufficient attention to their environmental externalities (National Research Council 1993). At the same time, infrastructure in urbanizing countries needs to be designed for coming generations, taking into account the demographic trend of the next two decades and the expected continuation and acceleration of urbanization.

The role of the current stimulus and recovery packages is therefore key to allow the (re)building of public investment and intervention capacity. Public institutions remain where the necessary comprehensive integrated planning and preparation processes are managed. Project-level development and financing logic are detrimental to meet the requirements of future sustainable urban development. Rather, a superordinate, integrated planning and monitoring system is needed.

Adopting a G20 plan for heavy investment in infrastructure would not be the first time in modern history that massively coordinated efforts and investments addressing infrastructure and urban development had been successfully promoted as a socioeconomic recovery response following major crises and paradigm shifts. This was the case in Europe, where infrastructure and cities had to be completely rebuilt and renovated after WWII. Additionally, in the past three decades, China has undergone a massive construction of new cities and infrastructure. In 2020, the G20 recovery plan will have to pay special attention to the demand side in addition to the supply side, and it should be developed and implemented collaboratively with cities to maximize its impacts on community development. It should also include a focus on environment and sustainable infrastructure and, of course, on social infrastructure, starting with health.

Infrastructure, global warming, and biodiversity losses

Compared with Europe after 1945 or China after 1980, environmental and sustainability challenges are very acute in the post-COVID-19 era, as are the risks of durable destabilization if the post-COVID-19 urban equation is not addressed properly. Global warming has become much more visible in all regions, and biodiversity losses are also well documented (IPBES 2019). We echo the calls to create more sustainable and resilient infrastructure (Buchoud et al. 2020b; Kovarik et al. 2020; Head et al. 2020). Post-COVID-19 infrastructure choices should contribute to a better acknowledgment of cities' ability to deliver global agendas with and not against citizens. Additionally, they cannot ignore the preparation of the COP15 Biodiversity and COP26 on Climate in 2021.

Infrastructure and public health

In response to the 2008 global financial crisis, the IMF developed precise estimates of the multipliers of different kinds of infrastructure, but without including the millions of people who could benefit and survive public health crises (Cohen 2012). In 2020, the shortage of public health infrastructure is a fundamental factor in the response to the COVID-19 pandemic. We would then expect the WHO to provide public health recommendations and also help review the multiplier effects of health infrastructure. In particular, where levels of public health services are very low and only accessible to limited portions of the population. The rapid spread of COVID-19 in Brazil is a good example of how very scarce and under-equipped health infrastructure contributed to the lack of management of the virus despite the warnings of public health professionals.

Changing the pre-COVID-19 status quo, with urban welfare at the core of global growth

The lockdown of cities, which are the nodes of the global economy, has resulted in global disruptions and the collapse of supply and demand. Initial patterns of contagion occurred in higher-density areas, and the pandemic continues to unfold most actively in urban and metropolitan areas. Even if there are anomalies that suggest clusters of contagion can exist outside densely populated areas, higher densities of people are associated with higher contagion probabilities, which is reflected by the notion of social distancing to mitigate COVID-19 spread. While it is true that COVID-19 moved to secondary cities and even rural areas, this process frequently took place in concentrated clusters that included factories, nursing homes, and prisons. Health, social, and economic solutions to the pandemic and its consequences can thus only be found in cities.

To change the pre-COVID-19 status quo, the local level can no longer be ignored in global discussions.

Cities are where powerful interdependencies between human welfare and physical infrastructure should be (re)built (Buchoud et al. 2020a, 2020b). While the G20 has the potential leverage to coordinate global economic policy, it has underestimated the critical role played by subnational entities in infrastructure provision (Buchoud et al. 2019). Emphasis on trade financing and financial stability after the 2008 global financial crisis contributed to recovery, but other important mechanisms by which public and private finance could be channeled to strengthen the urban platform for economic productivity and social welfare were largely ignored. In part, past recovery strategies failed to recognize the trade-offs between short-term capital flows and long-term support for mainstreaming pandemic preparedness in urban development.

The COVID-19 pandemic makes it urgent for countries and cities to navigate the crisis together.

The post-WWII era has highlighted public investment's critical role in generating potent interdependencies between human welfare and physical infrastructure. It has shown the relevance of international financial institutions, especially international development banks, that absorb international funds, enforce national packages, and boost investment into public sector. In Western Europe, this was particularly the case for cities, which relied primarily on public investment for their reconstruction. They resorted to a mixed structure of economies through their municipal companies for the development of urban infrastructures. The situation depends on the specifics of each legal, economic, and political system and decentralization level. For example, in Berlin, which was destroyed during WWII, a public financial institution financed the city's infrastructure development, including loans for private companies, alongside the public water supply, electricity, public transport, and public housing companies.

In the 1980s debt crisis in Latin America, the Asian financial crisis of 1997, and later the global financial crisis of 2008-2011, the urban middle class suffered a big impact from a contracting economy. Many households fell into the category of low income and new poor (Minujin and Nandy 2012). The situation is even more serious in 2020, as the COVID-19 pandemic affects cities that have largely grown more unequal in the last decade and play a more significant role in the global economy.

Solutions for recoupling well-being and growth

We believe that the shared global experience of cities in rich and poor countries of responding to a novel pathogen and struggling for subsequent economic and social recovery provides a challenging but unique opportunity for a new turn in multilateral cooperation.

Nations and cities have devoted enormous efforts and resources to combat the worst effects of COVID-19 at great fiscal and economic costs. Many national budgets were facing austerity conditions before the COVID-19 crisis, but the current situation is worse. Governments have had no choice but to spend in response to urgent public health needs, unemployment, and other needs, but global policymakers should recognize that the current crisis' financial costs and true impact in cities have been underestimated. Quarantines and social distancing measures may have been largely successful in slowing the transmission rate, but they have also entailed significant financial costs and major sociopolitical challenges that are not easy to resolve in the short term (Lewnard and Lo 2020).

National governments do hold sovereign responsibility for national welfare: local governments face the daily difficulties and pain of massive health problems and death as well as the need to assure food and basic services for millions of people. When combined with the epidemiological characteristics of COVID-19, risks of prolonged global instability from the ground up are real. Understanding these local imperatives should be a reason to give cities a meaningful seat at the table in the national and multilateral system as a G20 recovery action plan is being formulated.

Fiscal devolution and democratic decentralization have long been on the agenda of international financial institutions (IFIs) and some bilateral and multilateral development agencies. Still, by most empirical measures, transformative commitments to localization in the multilateral system amount at best to rhetoric. With few exceptions, the allocation of large-scale technical and financial support to building institutional capacity at the local level has not been forthcoming.

This diagnosis therefore provides the basis for recommending a significant shift in global cooperation toward greater emphasis on urban health, employment, and income generation. More and better targeted infrastructure investment can help alleviate the public health crisis and generate jobs and incomes for growing urban populations while simultaneously reducing urban contributions to greenhouse gas emissions.

Creating a G20 Urban Platform for Recovery

The G20 member states and IFIs should focus on the enabling conditions for strengthening infrastructure investments (Secchi and Riela 2019) by creating a G20 Urban Platform for Recovery, along a fourfold rationale:

1. To articulate the argument for sustainable infrastructure investment (Berensmann et al. 2017; Bhattacharya, Nofal, et al. 2019; Global Solutions Initiative 2019) with the reinforcement of social welfare capacities locally, nationally, and globally;
2. To measure the well-being of societies beyond GDP as reflected by the "Recoupling Dashboard" project (Lima de Miranda and Snower 2020) and echoed by the T20 "Statement on Social Development Measurement;"
3. To revise the processes by which local priorities are incorporated into IFIs' development assistance programs—in particular infrastructure investment projects—ensuring that local sustainability criteria are part of determining projects' suitability;
4. To speed up and multiply the allocation of financial resources for these purposes, including building up of structures for mobilizing and transferring international resources toward the local level. Urban areas need more help, but they also need better help as well as legal and political recognition of their role, assuring more local ownership and decision-making authority in project design, implementation, and management.

We therefore invite the chair of the T20 to deliver on our recommendation to create the G20 Urban Platform as a component of the G20 Recovery Action Plan, in line with the T20 Saudi Arabia priorities (Almarzoqi et al. 2020; Alturki 2020).

We also invite the T20 to promote a continuity strategy to develop the G20 Urban Platform across 2021 and 2022. It is time the full macroeconomic force of the G20 is delivered locally through joint recovery infrastructure investments. If cities and communities are ignored again by markets and states (Rajan 2019), the multilateral system might collapse at the next global shock.

The Appendix presents the possible implementing instruments of a G20 Sustainable and Resilient Urbanization Investment Plan, as the first step of the G20 Urban Platform.

Acknowledgement

Special thanks for the inputs, support, and contributions of: Amal Fatani, S20 Sherpa; Henri de Grossouvre, head of think-tank relations at Suez; Lan-Phuong Phan, secretary general of the Grand Paris Alliance; and Dean Naoyuki Yoshino, co-chair, T20 TF3, member of the T20 advisory council and past chair of T20 Japan.

Disclaimer

This policy brief was developed and written by the authors and has undergone a peer review process. The views and opinions expressed in this policy brief are those of the authors and do not necessarily reflect the official policy or position of the authors' organizations or the T20 Secretariat.

References

Almarzoqi, Raja, Sachin Chaturvedi, Lori Kerr, and Carlo Secchi. 2020. "What can the G20 do to Foster Sustainable Infrastructure?" Panel Discussion, Infrastructure Investment and Financing Global Table of the 2020 Global Solutions Summit. Filmed April 2020. Video, 32:28. https://www.global-solutions-initiative.org/global-table/fostering-sustainable-infrastructure.

Al Mogrin, Haifa. 2019. Presentation of the Kingdom of Saudi Arabia Priority for G20 2020. High-Level Political Forum, New York, July 2019.

Al Mogrin, Haifa. 2020. "Opening Keynote for the Infrastructure Investment and Financing Global Table of the 2020 Global Solutions Summit." Filmed April 2020. Video, 9:06. https://www.global-solutions-initiative.org/global-table/fostering-sustainable-infrastructure.

Alturki, Fahad. 2020. "Opening Keynote, Summit Opening: Overarching Visions on Recoupling." Global Table of the 2020 Global Solutions Summit. Filmed April 2020. Video, 9:49. https://www.global-solutions-initiative.org/global-table/what-can-theg20-do-to-establish-new-measures-for-economic-success-wellbeing-and-businessperformance.

Asian Development Bank Institute (ADBI). 2020. Building the Future of Quality Infrastructure. http://cerclegrandparis.org/wa_files/adbi-building-future-quality-infrastructure.pdf.

Berensmann, Kathrin, Ulrich Volz, Isabella Alloisio, Celine Bak, Amar Bhattacharya, Gerd Leipold, Hannah Schindler, et al. 2017. Fostering Sustainable Global Growth through Green Finance – What Role for the G20? https://www.g20-insights.org/wp-content/uploads/2017/04/Climate_Green-Finance_V2.pdf.

Bhattacharya, Amar, Kevin P. Gallagher, Miquel Muñoz Cabré, Minji Jeong, and Xinyue Ma. 2019. Aligning G20 Infrastructure Investment with Climate Goals and the 2030 Agenda. Foundations Platform. https://www.foundations-20.org/wp-content/uploads/2019/06/F20-report-to-the-G20-2019_Infrastrucutre-Investment.pdf.

Bhattacharya, Amar, Beatriz Nofal, Linda Krueger, Minji Jeong, and Kevin Gallagher. 2019. Policy and Institutional Framework for Delivering on Sustainable Infrastructure. https://t20japan.org/wp-content/uploads/2019/05/t20-japan-tf4-10-policy-institutional-framework-delivering-sustainable-infrastructure.pdf.

Boston Consulting Group. 2020. Winning the Fight, Restarting the Economy. T20 webinar on COVID-19. April 23, 2020. https://t20saudiarabia.org.sa/en/events/Pages/Winning-the-fight-restarting-the-economy.aspx.

Brand, Kobie, Nicolas J. A. Buchoud, and Susan Parnell. 2020. "What can the G20 do? Sustainable and Smart Urbanization." Global Table of the 2020 Global Solutions Summit. Filmed April 2020. Video, 36:44. https://www.global-solutions-initiative.org/global-table/sustainable-and-smart-urbanization.

Buchoud, Nicolas J. A., Ross Douglas, Pascal Gastineau, Martin Koning, David Mangin, Philippe Poinsot, Jean Francois Silvain, et al. 2019. The Infrastructure Nexus: From the Future of Infrastructures to the Infrastructures of the Future. https://t20japan.org/wp-content/uploads/2019/03/t20-japan-tf4-2-infrastructure-nexus-from-the-future-of-infrastructures-to-the-infrastructures-of-the-future.pdf.

Buchoud, Nicolas J. A., Raja Almarzoqi, Hazem Galal, Aawatif Hayar, Nella Sri Hendryietty, Jean-Bernard Kovarik, Katharina Lima de Miranda, et al. 2020a. "Making the Case for G20 Action on Urbanization." Global Solutions Journal no. 5: 148–55.

Buchoud, Nicolas J. A., Edoardo Croci, Paramitta Dey, Nicolas Hautière, Arjan Hijdra, Irina Karapetyans, Lori Benita Kerr, et al. 2020b. Shaping the New Frontiers of Sustainable (Urban) Infrastructure. T20 Saudi Arabia Task Force on Infrastructure Investment and Financing Policy Brief. Forthcoming.

Cicci, Alessandra, Ji Yoon Han, Irina Popova, Andrey Shelepov, Andrey Sakharov, and Alexander Ignato. 2019. The 2018 G20 Buenos Aires Summit Final Compliance Report. G20 Research Group. http://www.g20.utoronto.ca/compliance/2018buenosaires-final.

Cohen, Michael. 2012. "The City in the Global Crisis: Understanding Impacts and Strengthening the Performance of Stimulus Packages." In The Global Crisis in Latin America: Impacts and Responses, edited by Michael A. Cohen, 137–55. London and New York: Routledge.

G20. 2018. Osaka Update on the G20 Action Plan on the 2030 Agenda for Sustainable Development. https://www.mofa.go.jp/mofaj/gaiko/g20/osaka19/pdf/documents/en/annex_11.pdf.

G20 Working Group on Development. 2019. Side Event of the G20 Development Working Group on Effective Triangular Cooperation for Achieving the 2030 Agenda, Tokyo, January 2019 https://www.mofa.go.jp/policy/economy/g20_summit/osaka19/en/events/detail09.

Galarza-Sanchez, Nicolas, Yang Liu, Shlomo Angel, Alejandro M. Blei, Achilles Kallergis, Patrick Lamson-Hall, Maria Mónica Salazar, et al. 2018. The 2010 Universe of Cities: A New Perspective on Global Urbanization. Working Paper WP18NG1. Cambridge: Lincoln Institute of Land Policy. https://www.lincolninst.edu/sites/default/files/pubfiles/galarza_sanchez_wp18ng1.pdf.

Global Solutions Initiative. 2019. The Solutions Lab. Scaling for Sustainable Infrastructure. http://www.cerclegrandparis.org/wa_files/GIZ_20GSS_20Infrastructure_20Solutions_20Lab.pdf.

Guillaumont, Patrick, and Sebastien Treyer. 2018. Tackling Inequalities and Vulnerabilities: Why and How G7 Development Policies Could Do Better. T7 Paper. https://www.ifri.org/sites/default/files/atoms/files/t7_2019_discussion_paper_2_development.pdf.

Head, Peter, Ryan Bartlett, Steven Crosskey, Anuj Malhotra, and Rowan Palmer. 2020. Policies and Implementation Guidelines for Data Driven, Integrated, Risk-based Planning of Sustainable Infrastructure. T20 Saudi Arabia Taskforce 3, 2020. Forthcoming.

ILO. 2018. Informality and Non-Standard Forms of Employment. Prepared for the G20 Employment Working Group Meeting, October 2, 2018. Geneva: ILO. https://www.ilo.org/global/about-the-ilo/how-the-ilo-works/multilateral-system/g20/reports/WCMS_646040/lang--en/index.htmWorld.

IMF. 2020. World Economic Outlook Update, June 2020: A Crisis like no other, an Uncertain Recovery. Last modified June 2020. https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020.

IPBES. 2019. Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Bonn: IPBES. https://ipbes.net/global-assessment.

Katz, Bruce, and Jeremy Nowak. 2018. The New Localism: How Cities Can Thrive in the Age of Populism. Brookings Institution Press.

Kovarik, Jean-Bernard, Anne Aguilera, Fabio Antonialli, Jean-Claude Choen, Philippe Gache, Eric Hsu, Katherine Kortum, et al. 2020. Evaluating Resilient Infrastructure Systems. T20 Saudi Arabia Taskforce 3, 2020. Forthcoming.

Lewnard, Joseph A., and Nathan C. Lo. 2020. "Scientific and Ethical Basis for Social-Distancing Interventions Against COVID-19." The Lancet Infectious Diseases 20, no. 6: 631–33. https://dx.doi.org/10.1016%2FS1473-3099(20)30190-0.

Lima de Miranda, Katharina, and Dennis J. Snower. 2020. Recoupling Economic and Social Progress. https://www.g20-insights.org/policy_briefs/recoupling-economic-and-social-progress.

Minujin, Alberto, and Shailen Nandy. 2012. Global Child Poverty and Well-Being: Measurements, Concepts, Policy and Action. Bristol: Policy Press.

National Resource Council. 1993. In Our Own Backyard: Principles for Effective Improvement of the Nation's Infrastructure. Washington, DC: The National Academies Press. https://doi.org/10.17226/2205.

OECD. 2015. The Metropolitan Century. Understanding Urbanisation and its Consequences. Paris: OECD Publishing. https://doi.org/10.1787/9789264228733-en.

OECD. 2020. OECD Policy Responses to Coronavirus (COVID-19): Cities Policy Responses. Last modified July 23, 2020. http://www.oecd.org/coronavirus/policy-responses/cities-policy-responses-fd1053ff.

Runde, Daniel F. 2019. Pursuing Quality of Infrastructure for Sustainable Growth. T20 Policy Brief. https://t20japan.org/policy-brief-pursuing-quality-of-infrastructure-for-sustainable-growth.

Rajan, Raghuram. 2019. The Third Pillar: How Markets and the State Leave the Community Behind. Penguin Press.

Secchi, Carlo, and Stefano Riela. 2019. Infrastructure for Growth: How to Finance, Develop, and Protect It. Italian Institute for International Political Studies. https://www.ispionline.it/sites/default/files/pubblicazioni/infrastructure_study_3.pdf.

Segal, Stephanie, and Dylan Gerstel. 2020. Breaking Down the G20 COVID-19 Fiscal Response: June 2020 Update. Center for Strategic & International Studies (CSIS). https://www.csis.org/analysis/breaking-down-g20-covid-19-fiscal-response-june-2020-update .

Tooze, Adam. 2018. Crashed: How a Decade of Financial Crises Changed the World. Viking.

UN. 2019. The Future is Now. Science for Achieving Sustainable Development. Global Sustainable Development Report. https://sustainabledevelopment.un.org/content/documents/24797GSDR_report_2019.pdf.

United Nations Department of Economic and Social Affairs (UNDESA). 2018. The World's Cities in 2018. Data Booklet. https://www.un.org/en/events/citiesday/assets/pdf/the_worlds_cities_in_2018_data_booklet.pdf.

UN-Habitat. 2016. World Cities Report 2016: Urbanization and Development – Emerging Futures. https://unhabitat.org/sites/default/files/download-manager-files/WCR-2016-WEB.pdf.

World Bank, 2020. Global Economic Prospects – Pandemic, Recession: The Global Economy in Crisis. Last modified June 2020. https://www.worldbank.org/en/publication/global-economic-prospects.

Appendix

[1] . See also the aggregated information by the T20 Saudi Arabia Web Conference of June 17, 2020. https://www.youtube.com/channel/UCbCpFnqFEV3SwiAT84FTUjg

[2] . In fewer than two months (March and April 2020), emerging countries experienced more than $55 billion worth of capital outflow, affecting infrastructure investment projects in particular, according to the IMF.

[3] . As of the end of April 2020, the G20 countries have provided $6.3 trillion in fiscal support, representing 9.3% of 2019 G20 GDP. Of the total, $3.2 trillion will support direct government spending (4.8% of 2019 G20 GDP), up from $2.1 trillion (3.1% of GDP). Credit enhancements contribute $2.3 trillion and tax relief another $0.8 trillion.

[4] . We are referring in particular to the G20 Ministers and Central Bank Governors Meetings as part of the G20 Finance Track, with the 4th meeting taking place on July 18, 2020 (https://www.banque-france.fr/sites/default/files/media/2020/07/20/final_g20_fmcbg_communique_-_july_2020.pdf).

Existing Initiatives & Analysis