The twin transition and the importance of the trade, investment and industry nexus for economic recovery

The importance of industrialization amidst the pandemic is indisputable. It was agreed that industrialization would, in the short term, contribute significantly to economic recovery from the crisis caused by the Covid-19 pandemic. Countries with relatively better industrial capabilities were able to manufacture health equipment and address the demand surged. Therefore, industrial capabilities may contribute to a country’s general economic recovery and future crisis resilience by allowing it to better adapt to sudden changes or shocks to demand.

Meanwhile, industrialization will also be an important driver behind the “twin transition” of digitalization and greener technology for economic and environmental sustainability in the long term. However, the industry would not operate independently but as part of a trade, investment, and industry nexus. In other words, regulating the industry to achieve economic recovery, digitalization, and a green transition will not be straightforward and may cause positive and negative consequences that spill over to neighboring countries and the global economy. Stronger coordination and cooperation will be required at the global level to ensure that the development of technologies, industries, and governmental policies related to them will proceed more smoothly. Therefore, industrialization is an important policy agenda for the G20 to discuss, having significant consequences and requiring coordinated actions.

Although the importance of industrialization was recognized, many thought that the whole process of transitioning towards new industries or technologies should happen gradually instead of radically. The reasoning was that the new technologies, especially digital ones, are likely to have broad applications, and since each sector has its challenges and opportunities, it is more feasible and effective for old production systems to be integrated into new systems and augmented with new technologies rather than having them replaced altogether. A few voices also noted that many countries, especially developing economies, have experienced premature transitions from manufacturing to service industries, a phenomenon responsible for destabilizing income growth and employment levels. Therefore, it is unlikely that the twin transition will occur swiftly, given the decline in the industry. The experience with premature transitions suggests that abandoning old industries for new ones and radically shifting capital investments may be destabilizing.

Finally, there remains a gap in industrialization, degree of digitalization, and access to technologies between countries and businesses. Indeed, it is not just micro, small and medium enterprises (MSMEs) that struggle with digitalization; very few businesses, only 1-3%, regardless of size have begun digitalization or experienced the Industrial Revolution 4.0 (IR
4.0). Thus, the twin transition will most likely occur gradually rather than radically, and countries are urged to focus on incremental progress that gives more actors access to the new technologies who will then have a chance to apply them to their circumstances. An example of this would be how e-commerce platforms with the steady spread of internet connectivity have enabled rural areas access to new market opportunities during the pandemic’s restrictions, allowing many MSMEs to access a broader market and adopt more digitalized technology.

The dynamic of the trade-investment-industry nexus in the twin transition calls for policymakers to recognize that the industry and industrial policy issues are always cross-cutting. First, not all digital technology is green, and not all green technology is digital; beneficial links between the two must be found and realized for an effective twin transition. Second, economic sectors also have the potential to become more integrated. For example, the IT sector has augmented automobiles production and final design. There are expectations of how the green technology sector could optimize manufacturing industries environmentally, economically, or both. When designing action policies, the connections between the trade in services and goods (in facilitating investments to the latter, for example) also need to be understood. Third, industrial policies must consider how industrialization, digitalization, and the green transition occur in different but overlapping contexts within countries, across regions, and throughout the globe. Finally, the industrial policy is necessarily augmented by the innovation process and its fruits. In other words, countries must adopt new technologies and improve or build on them. Therefore, R&D (alongside the systems that support it, such as funding and extension institutions) will be necessary for firms, especially MSMEs, to innovate and maintain competitiveness.

**Towards multilateralizing industrial policy and human-centric development**

Trade and multilateralism are essentials to support industry in the digital and green transition. In other words, the need to build a rules-based international order and trade regime that is open, fair, and inclusive. The multilateral trading system should allow MSMEs and business leaders of all backgrounds to access the global market and have their interests considered in the market’s governance. In addition, it must be able to address pressing issues such as digital trade and cyber security. Therefore, policymakers must identify how national interests and policies, e.g., sector-specific and fossil-fuel subsidies affect globally beneficial aims and find solutions to these gridlocks, whether specific actions or broader systems to resolve them. Policymakers, leaders, and decision-makers must be careful to emerge new forms of protectionism when pursuing digital industries, sustainability, resilience. Trading with only similar, like-minded countries will contribute neither to openness nor the spread of technologies where they are most needed. A revitalized international, multilateral trade regime will be vital in supporting the industry’s pursuit of digital and green technologies.

The global value chain (GVC) should also support the industry and its twin goals. In general, the industrialization process will require inputs from the global markets and the
opportunity to sell its outputs abroad as an intermediate or final product, i.e. a global value chain. However, the industrialization process will require a sustainable, socially responsible, and inclusive GVC if industrialization’s benefits are to be more widespread and accessible to various actors and businesses such as MSMEs. Infrastructure to give previously excluded economic actors the opportunity to trade digitally or physically was one concrete example of how GVCs can become more inclusive. New systems will also have to make GVCs more resilient to shocks or collapses to provide their participants stable opportunities to trade and develop with less uncertainty. Finding ways to govern GVCs will be important in supporting industry and the twin transition.

Lastly, the idea of human-centric development held hopes that the twin transition could be conducted holistically and mindfully, minimizes costs, and achieves win-win solutions. Digitalization can be conducted without creating unemployment, and those inevitably affected can be provided aid and means to take part in digitalization’s benefits. Industrialization can also transition towards greener, environmentally friendly technologies while simultaneously performing its traditional role of aiding economic development and supporting livelihoods. Indeed, the notion of human-centric development is strongly, if not entirely, aligned with the industrial policy agenda, i.e. the pursuit of the industry to obtain the benefits of digitalization and environmental sustainability.

**What are the possible policy actions for the G20 members?**

Given how it will require coordination, the G20 could create a road map providing concrete, step-by-step strategies for the G20 countries to industrialize. Industrial cooperation between countries in science and technology was also encouraged as an idea to discuss within the road map. Many of the road map’s contents will likely reflect past G20 resolutions or action plans. For example, the G20 New Industrial Revolution Action Plan from 2016 mentioned research collaboration, supporting MSMEs and the workforce, standards development, constructing industrial infrastructure, intellectual property rights (IPR) protection, and facilitating industrialization within developing countries. Establishing how these actions can be taken together in one long-term road map will help coordinate the efforts of the G20 members, which may, hopefully, and streamline the whole process amplify the result. The Link20 Platform is another policy idea taken from the past T2G20 process in 2021. The projects were proposed to solve the difficulties MSMEs face in trying to access GVCs and the global market. It provides information for MSMEs to help them link with industrial service providers and transnational corporations. Consolidating and continuing those initiatives will

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be well-suited to the agenda for greater participation of MSMEs in GVCs and promoting their roles in industrialization, the twin transition, economic development, and economic recovery.

Asides from coordination and MSMEs, policy recommendations should also include technological adoption, distribution, and innovation, focusing on creating mechanisms that make accessing IPR easier to ease and facilitate the adoption of technologies (especially digital and green technologies) and the improvement of said technologies. In addition, information gathering and distribution are important, especially regarding (1) best practices on digitalization and green transition and (2) scientific information, technology, and data on crisis detection and resilience. These ideas can either be implemented by countries jointly as a G20 initiative or individually within each country’s regulatory domain in tandem.

Finally, there is a need to implement a coherent and coordinated industrial policy. While many of the G20 countries have implemented institutional policies creating a background environment conducive to economic development, trade, and enterprise over the past decade, these policies are not enough on their own. They called for the return of more direct industrial policies and interventions. However, governments are discouraged from implementing policies promoting specific industrial sectors or activities (i.e. sector-specific policies) and, instead, promote the general adoption of certain technologies across multiple sectors (i.e. technology-specific policies), which is very much in line with the fact the emerging or envisioned digital and green technologies are technologies with broad applications and is likely to be more efficient in supporting the distribution of technologies and positive spillovers.

Another example raised was the need to include private sector investment instead of solely relying on the public sector. The crisis and the expansionary economic policies have introduced heavy fiscal burdens and increased inflationary pressure. The private sector investment participation will ease the burdens above and effectively support the normalization of private investment and spending needed for economic recovery. Overall, the return of industrialization to the agenda will mean the return of industrial policy and direct government intervention, but the policies themselves will be renewed for a new time and context.