Dear Readers,

The outbreak of the COVID-19 pandemic two years ago and the current economic fallout of the Ukraine crisis are stark reminders that we live in an uncertain and shock-prone world. Increased global interdependence—while creating numerous opportunities—also implies that the ripple effects of shocks have intensified and proliferate around the world. These ripple effects, including soaring commodity prices, equitable access to basic goods and services, tightening financial conditions and reduced business confidence, impact vulnerable countries the most. We must therefore continue to undertake efforts to strengthen the global safety net and to help weak economies and societies against the ripple effects of global disruption.

Much of PRS’s work underpins the strengthening of the global safety net and the foundations of building a better future. This issue of the PRS newsletter focuses on different aspects of circular economy, which will undoubtedly play a crucial role in supporting recovery in the near and long-term, as well as on pathways towards economic diversification, capability development to foster competitiveness in GVCs, public sector capacity building for innovation and industrialization and science, technology and innovation as drivers to accelerate progress towards the SDGs. These are only some of the topics addressed and I invite you to continue reading to find out more about PRS’s valuable contributions.

I would furthermore like to take this opportunity to introduce a new tool UNIDO’s Industrial Analytics Platform (IAP) has introduced, namely the Export Competitiveness Tool. This novel tool—alongside the SDG-9 Industry Tracker (a tool for measuring countries’ progress in the implementation of SDG-9) and the Quarterly Industrial Production Tracker (where users will find the most up-to-date figures on industrial production)—presents the relative importance of a product in a country’s export basket compared to that product’s share in world trade. Another new feature of the IAP is its availability in Spanish.
I hope you enjoy reading our newsletter and find it useful.

Hiroshi Kuniyoshi

Deputy to the Director General and Director ad interim of the Department of Policy Research and Statistics, EPR/PRS

Our newsletter mailings are a convenient way to stay connected and keep readers up to date on PRS's latest news. Previous editions of the newsletter are available [here](#). We welcome any feedback, comments and suggestions for further improvements at prsnewsletter@unido.org.

**PUBLICATIONS**

**IAP Articles**

The *Industrial Analytics Platform* (IAP) has introduced a new articles series, starting with the series:

**Closing the loop: What is the circular economy and why it matters**

This series, which currently comprises four articles, reviews successful transitions to the circular economy. For this transition to be effective, coherent policies that cover manufacturing, innovation and trade are necessary. The ultimate challenge for sustainable development is the decoupling of economic growth from resource usage, which is expected to have a positive impact on the environment. By tackling structural inefficiencies across supply chains, the circular economy offers abundant value creation opportunities at the industry level. At the same time, policymaking in the sphere of the circular economy must be gender responsive and actively build strategies, measures and tools to ensure a just circular economy transition for all.

**One year of exporting COVID-19 vaccines: What does the evidence show?**

*By A. González*

Profound vaccine inequity continues to limit vaccine access in low-income countries (LICs), where at present, only 11.4 per cent of the population have received at least one shot. Trade has proven instrumental in the manufacturing and distribution of vaccines across the world. The global trading system, underpinned by World Trade Organization (WTO) rules, helped keep markets open and supplies moving during the pandemic crisis. Yet greater trade cooperation to tackle geographic concentration, supply chain bottlenecks and regulatory divergences can strengthen preparedness for future pandemics; trade cooperation is furthermore a critical component of the solution to end vaccine inequity and fast-track delivery. It may also be part of the answer by facilitating access to ancillary supplies, such as syringes, personal protective equipment, needles, etc. We must use the insights gained from this pandemic and feed them into our efforts to enhance international cooperation for better future pandemic preparedness.
**Why adopting a gender-inclusive approach towards circular economy matters**

*By M. Albaladejo (UNIDO), V. Arribas and P. Mirazo (UNIDO)*

Gender equality is a central pillar for achieving sustainable development. Public policies and programmes that fail to integrate a gender perspective and lack gender mainstreaming do not have the capacity to provide truly exhaustive solutions. The authors investigate whether the gender dimension is included in the circular economy strategies and roadmaps of the Latin America region and find a general disconnect between the productive sector and gender equality in policymaking. None of the plans refer to gender equality policies or strategies where the incorporation of a gender perspective would be necessary, while those that allude to the gender dimension seem to only do so at the rhetorical level. By failing to adopt a gender perspective in circularity-related public policies, we risk perpetuating—instead of challenging—current gender inequalities related to participation, leadership and access to the opportunities and benefits the circular economy can generate.

**Engaging the diaspora in internationalizing Colombia’s economy**

*By R. Hausmann, J. Hinz, L. Nedelkoska and A. Saxenian*

Diasporas can play an important role in their country of origin’s economic development. Hence, investments in Colombia’s diaspora today are likely to lead to significant opportunities in Colombia’s future. The key to leveraging the Colombian diaspora for economic diversification is to establish mechanisms that help nurture the relationships with Colombians who reside abroad, both by providing them services that will keep them closely connected to Colombia (e.g. recognition of foreign qualifications, double taxation treaties, agreements on pension and benefit transfers, etc.), and by offering channels for engagement that benefit Colombia’s economic development. One option for establishing such channels is the creation of an international business and technology network of Colombians. Members of this network could focus on building relationships, mentoring and helping connect local businesses and other actors with available resources among the diaspora and their foreign partners. This would benefit both diaspora businesses and individuals, providing them with better access to the Colombian economy and the opportunity to support their country’s economic development.

**Are quick wins a good bet for diversification?**

*By N. D. Coniglio, D. Vurchio, N. Cantore (UNIDO) and M. Clara (UNIDO)*

Economic diversification is not an end in itself but rather a strategy to achieve economic growth and human development. One key issue of discussion is whether countries perform better when diversification is more *path-dependent* (i.e. prevalence of short jumps) or *path-defying* (prevalence of long jumps or adding new unrelated products to the export basket). The authors use empirical data to estimate a growth model in which the share of path-dependent new entries in the export basket represents the main covariate. They find that path-dependent new entries in a country’s export basket are associated with lower growth performance, a relationship that is particularly striking in low-income countries. Hence, long jumps are more likely to be associated with high growth rates and are far more common than the academic debate suggests. The frequency of identified long jumps across the product space calls for a new approach to industrial and innovation policies and a return to the policy agenda of path-defying
Why do countries experience diverging job growth trajectories in global value chains?

By S. Pahl (UNIDO)

Whether increased participation in global value chains (GVCs) leads to higher job creation continues to be debated. One major concern is that the production technologies used in GVCs are biased against unskilled labour, i.e. that these technologies increase labour productivity but reduce demand for labour. Yet GVC jobs are more productive and countries that successfully increase their participation in GVCs, and thus their level of employment, do so by concomitantly improving their productivity and their share of value added in GVCs. Accordingly, GVC job growth seems to reflect an overall improvement in a country’s production capabilities. Capability development in upstream sectors, such as ancillary services, can be an important lever for fostering competitiveness in GVCs. This calls for targeting firm-level drivers of capability development and upgrading, including input and output markets as well as channels for learning. In more practical terms, one promising avenue could be to focus on matching local (upstream) firms with larger foreign ones that can provide the necessary type of training or specific organizational and managerial capabilities.

Other Publications

World Manufacturing Growth Quarter IV 2021

The most recent global manufacturing production data for the fourth quarter of 2021 confirm the effects of the ongoing economic crisis around the world on the manufacturing sector, albeit with seasonal, regional and sectoral differences. China bounced back quickly and has continued to exceed its pre-pandemic production level since the third quarter of 2020. Production in developing and emerging industrial economies also recorded a notable increase of 4.3 per cent, albeit with greater volatility over time, while industrialized economies have exceeded their pre-pandemic production level since the first quarter of 2021, reporting a stable year-over-year growth of 3.2 per cent. High-technology industries achieved better production performance and recovered faster than other industries. Medium-high- and low-technology industries achieved better production performance than medium-low technology industries, such as manufacturing of mineral products or basic metals. Many high-technology industries have already exceeded their pre-pandemic production levels, with the exception of motor vehicles.

The role of science, technology, and innovation policies in the industrialization of developing countries: Lessons from East Asian Countries

This publication was launched at the online event “Public sector capacity building for innovation and industrialization in developing countries” organized by UNIDO in collaboration with the Science and Technology Policy Institute (STEPI) and the Government of the Republic of Korea (see the Events section below). Policy implications for the design and implementation of science, technology and innovation (STI) policies...
based on three country case studies, namely the Republic of Korea, China and Thailand, were presented, which may be relevant for other developing countries in their pursuit of industrial development. The three key policy conclusions that can be drawn from the analysis of these three countries’ efforts to implement successful STI policies are that: (1) a demand-driven approach needs to be applied throughout the industrial development process; (2) a strong commitment to indigenous innovation efforts is necessary, beginning with the technology internalization stage; and (3) the government must have the ability to reflect on and adapt to changing environments.

**Approaches to participatory policymaking processes: Technical Report**

*By F. Santiago (UNIDO) and N. Komendanova*

This Technical Report investigates the conditions for effective multi-stakeholder participatory processes based on the notion that all relevant actors should be empowered to contribute to industrial policymaking to achieve optimal outcomes. It discusses different approaches to organizing participatory policymaking processes, and reviews the advantages and disadvantages associated with each individual approach; the report further identifies the types of institutional frameworks and capabilities for policymaking, design and implementation required for such strategies to be effective; illustrates how the selected approaches to participatory policymaking work based on real case examples (including from developing countries); and provides recommendations on how to develop a policy tool to assist those interested in designing and implementing a participatory policymaking process.

**RECENT EVENTS**

**Workshop on Science, Technology and Innovation for the SDGs - Meeting of the IATT and 10-Member group under the TFM in preparation of the Multi-Stakeholder Meeting on Science, Technology and Innovation for the SDGs 2022, 7–9 March 2022**

RPA coordinated UNIDO’s contribution to this two-day virtual workshop, which focused on how best to prepare the relevant sessions of the 7th Annual Multi-Stakeholder Forum on Science, Technology and Innovation for the SDGs (STI Forum) (see Future Events) by mobilizing STI stakeholders to make an effective contribution to the 2022 high-level political forum (HLPF), and more generally, to accelerate progress towards the SDGs. UNIDO’s response was coordinated through the STI Working Group and included participation from colleagues from DTA, ENE, CMO/GEW and NYO. Special Event 5: “Supporting national capacities and Partnership in Action for STI4SDG roadmaps” is part of RPA’s engagement in Inter-Agency Task Team Work Stream 6: UN capacity-building programme on technology facilitation for SDGs. PRS’s Fernando Santiago is also involved in the organization of the side event “Transforming education for a human-centred approach to STI and SDGs” in collaboration with the ILO (as the lead agency) and the IATT Work Stream 10 on analytical work on emerging technologies and the SDGs.
Public sector capacity building for innovation and industrialization in developing countries, 22 March 2022

This virtual event was organized by UNIDO in collaboration with the Science and Technology Policy Institute (STEP) and the Government of the Republic of Korea. The event comprised two parts. First, the report “The role of science, technology, and innovation policies in the industrialization of developing countries: Lessons from East Asian countries” (see Other Publications) was launched, which includes case studies of three East Asian countries that have leveraged on science, technology and innovation (STI) and industrial policies to achieve rapid industrialization. Building on the discussion of the report’s policy implications, the second part of the event served to discuss the necessary policy capacities to implement STI and industrial policies in a post-pandemic world. The case of the Republic of Korea was used to kick start the discussion. The Deputy to the Director General, Hiroshi Kuniyoshi, presented the keynote address. He emphasized that to actively engage in building a better post-COVID-19 future, the world urgently needs to strengthen its industrial and technological capacities. Moreover, countries will have to improve their policy capacities to design SDG-oriented industrial strategies, to back the revitalization of synergistic partnerships with the private sector, and to support long-term investments in public institutions. A summary of the event is also available here.

SME Policy Workshop: Defeating uncertainties in SME sector through policy engagements, 22–24 March 2022

PRS’s Nobuya Haraguchi and Anders Isaksson were invited to speak at this three-day online workshop organized by the University of Nottingham, Bank of England and the Confederation of British Industries. The conference organizers sought to identify areas for collaboration with UNIDO, particularly in research and industrial policy. The research consortium plans to expand its ongoing research work on creating an SME index for measuring risk and resilience by including developing countries. While the index is currently centered on COVID-19, it is not confined to this particular risk and could be adapted to cover some of the common risks SMEs in developing countries face. This objective squares well with RPA’s plans to conduct plant-level surveys across the globe and, as such, constitutes the event’s first potential outcome for UNIDO. The focus of industrial policy is on building policymaking capacity across all instances of the policy cycle, the related challenges, and how these can be overcome. A second potential outcome of the event is triangulation between UNIDO, the University of Nottingham and the Bombay Stock Exchange on industrial policy for SMEs in India, with a follow-up workshop to be held in Mumbai in June. Finally, efforts are underway to reinvigorate collaboration between UNIDO, the Asian Development Bank Institute and the University of Nottingham, focusing on productivity and innovation based on plant-level data.

Industrial policy and circular economy course for policymakers from Lebanon, Morocco and Tunisia, 25–28 March 2022

UNIDO conducted this four-day online course within the scope of the project Industrial policies for a circular economy (see Projects and Programmes), supported by the Italian Ministry of Foreign Affairs and International Cooperation. The course hosted policymakers from the ministries of industry, economy, or similar from Lebanon, Morocco and Tunisia. Day 1 introduced basic concepts and definitions of circular economy and examples of
technical cooperation interventions. On Day 2, PRS’s Nicola Cantore presented recent research findings showing that policies to introduce circular economy approaches and to reduce the emissions driving climate change can also generate positive impacts on value addition and employment. Business opportunities and market prospects of the circular economy as well as successful cases of circular economy innovations were discussed on Day 3. On the final day, PRS’s Franz Brugger summarized the course’s focal points, namely: a) the economic motivations that can trigger further action by policymakers; b) strategic synergies between economic and environmental objectives; and c) the array of instruments policymakers can deploy for future change.

**UN Commission on Science and Technology for Development (CSTD) – 25th Session, 28 March – 01 April 2022**

The CSTD Secretariat invited UNIDO to deliver a keynote address at the high-level panel on the Priority Topic: “Industry 4.0 for inclusive development” on 29 March. In his keynote address, the Deputy to the Director General, Hiroshi Kuniyoshi, pointed out that addressing inequalities induced by the digitalization of manufacturing requires coordinated multilateral industrial policy dialogue, knowledge sharing and enhanced international collaboration. Novel partnerships should involve multiple stakeholders, build on strategic thinking around industrialization, and generate new industrial policies. He also highlighted that international organizations and development agencies need to rethink and reorient their delivery of technical assistance and normative work to meet Member States’ evolving needs. Moreover, PRS’s Fernando Santiago, who made valuable contributions during the preparation phase of the Issues Paper on Industry 4.0 for Inclusive Development, was invited as a discussant in the Inter-sessional panel on Theme 1: Industry 4.0 and inequalities.


PRS’s Fernando Santiago was invited by the Economics Research Group at the Open University to participate in this online event as a discussant. He spoke about the process of putting together the Industrial Development Report 2022 and positioning the background cases included in the report. He also focused on the wider ambit of the report and its rethinking on policy engagement.

**FUTURE EVENTS**

**7th Annual Multi-Stakeholder Forum on Science, Technology and Innovation for the SDGs (STI Forum), 5–6 May 2022**

The theme of the 7th Annual Multi-Stakeholder Forum on Science, Technology and Innovation for the SDGs (STI Forum) will be “Science, technology and innovation for building back better from the coronavirus disease (COVID-19) while advancing the full implementation of the 2030 Agenda for Sustainable Development”. It is an opportunity for governments and multiple stakeholders to exchange new ideas, recommendations and priorities for the upcoming work of the ECOSOC and the UN high-level political forum on sustainable development (HLPF) with a focus on the role and contributions of science,
technology and innovation. RPA has been involved in organizing and contributing to several sessions and side events. Register to participate in the event here.

PROGRAMMES AND PROJECTS

**Industrial policies for a circular economy**

To continue the successful cooperation with Italian academic institutions, EPR/PRS/RPA was approached by the Italian Development Cooperation through the Permanent Mission to UNIDO in Vienna, to organize the next edition of a training programme on circular economy first piloted in Ferrara in 2019. The new edition also incorporates some elements developed with Roma Tre in a joint capacity development programme in 2017 and hence represents an innovative approach linking innovation policies with environmental issues. The course will take place both in Rome and Ferrara and targets mid-level policymakers from Lebanon, Morocco and Tunisia. PRS’s Nicola Cantore is leading the project, and the industrial policy and circular economy course for policymakers from Lebanon, Morocco and Tunisia, which took place from 25–28 March 2022 (see Events) was one of the outputs of this project.