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Editorial

In this issue of showCASE, we analyse the COVID-19-induced Global Value Chains (GVCs) disruptions and discuss related risks and opportunities. While the outbreak of the pandemic fueled debates on the relevance of vulnerabilities of the current GVCs, the available estimations and country examples suggest that benefits from globalised trade and production networks offset the potential risks.

At the same time, the growing global uncertainty provides a perfect context for a timely and much needed reconfiguration of the existent GVCs and related regulatory frameworks.

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CASE Analysis

Global Value Chains Reconfigured: Risks and Opportunities of the COVID-19 Networks Disruptions

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The recent decades of globalisation and ever-growing international trade resulted in unprecedented integration and interdependency of the local and global production networks. Specifically, with trade in intermediate goods and services accounting for about 70% of total international trade, Global Value Chains (GVCs) play a crucial role in global growth and 'catching-up' process of developing countries. Yet, while GVCs provide many opportunities for companies and small and medium-sized enterprises (SMEs), in particular, they remain highly concentrated and largely embedded within multinational enterprises which account for more than 30% of the global production. While beneficial at normal times, such a degree of interdependence creates risks of deep economic implications for companies operating within GVCs and, by cascade, for the economy as a whole. Indeed, the history of extreme weather events provides examples of rapid and profound economic disruptions of the supply chain linkages. Thus, while the 2010 flood in Pakistan has largely affected local cotton and textiles production, the effects of the 2011 flood in Thailand were felt well beyond the national borders, affecting tech companies in the United States and Japan.

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The outbreak of the COVID-19 has further boosted debates on the relevance and intrinsic vulnerability of the GVCs. Thus, some argue that GVCs' mechanisms contributed significantly to the transmission of economic shocks and proliferation of the crisis from local industrial production drop in a number of Chinese provinces first-hit by the pandemic to the vast majority of advanced and emerging economies worldwide. Further, the supply of essential goods (including food and medical supply) has been impaired by the high concentration of production in China and, largely, the rapid expansion of demand. In this light, prior reshoring of production would have provided insulation and allowed to cushion the negative effects of the global trade disruption.

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While the available estimates suggest that the economies worldwide would have experienced a much more severe contraction in the absence or reshoring of the GVCs, it is important to underline that the debate on the resilience and localisation of the production networks is not specific to the pandemic. The 2009 crisis, in particular, resulted in a persistent decline in length and production contribution of the international GVCs components. As a result, the expansion of GVCs has been stalling since 2009 resulting in a sizable slowdown in the international trade.

Against this background, an ever-growing global uncertainty provides a perfect context to analyse the relevance of the existent GVCs and evaluate the degree of risks and opportunities brought about by globalisation and international interdependency.

Supply-Side Disturbances

The reduction of economic activity, factories closures, and induced collapse of industrial outputs are certainly one the major and immediate consequences of the COVID-19 outbreak. Similarly, the introduction of national lockdowns has a profound impact on the supply side of the GVCs with the restrictions imposed on employees workplace presence and public transportation undermining domestic business environment and production capacities of the main economic sectors.

The indirect impacts further included a decline in the supply of intermediate goods which, as one of the key GVCs components, resulted in delayed negative effects on the companies relying on inputs produced in the countries the most-affected by the COVID-19. In line with it, disruption of international transport networks and imposed international travel bans have exacerbated the supply chain disturbances and increased sourcing as well as delivery costs.

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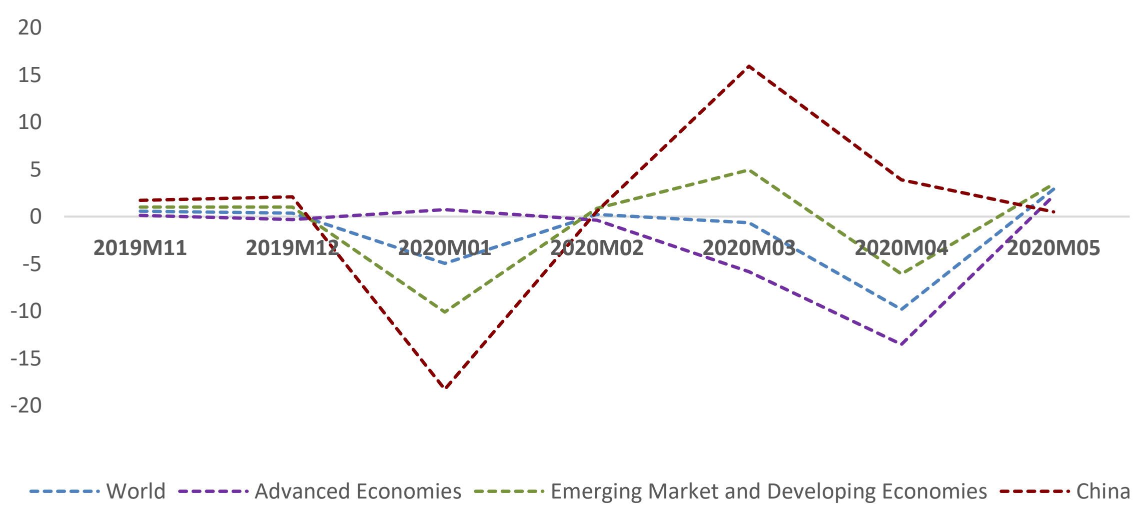
With China supplying about 20% of intermediate goods traded internationally, the initial drop in Chinese industrial outputs resulted in the tangible decline of trade and national production patterns worldwide. Specifically, the recent UNCTAD estimates suggest that the European Union could experience the highest loss in terms of exports value following a 2% reduction of Chinese exports in intermediate inputs - about USD 15,597 million, with machinery absorbing 25.6% of the

Figure 1. Delayed effects on the seasonally adjusted industrial production (m/m growth rate)



Source: The World Bank. Global Economic Monitor (GEM).

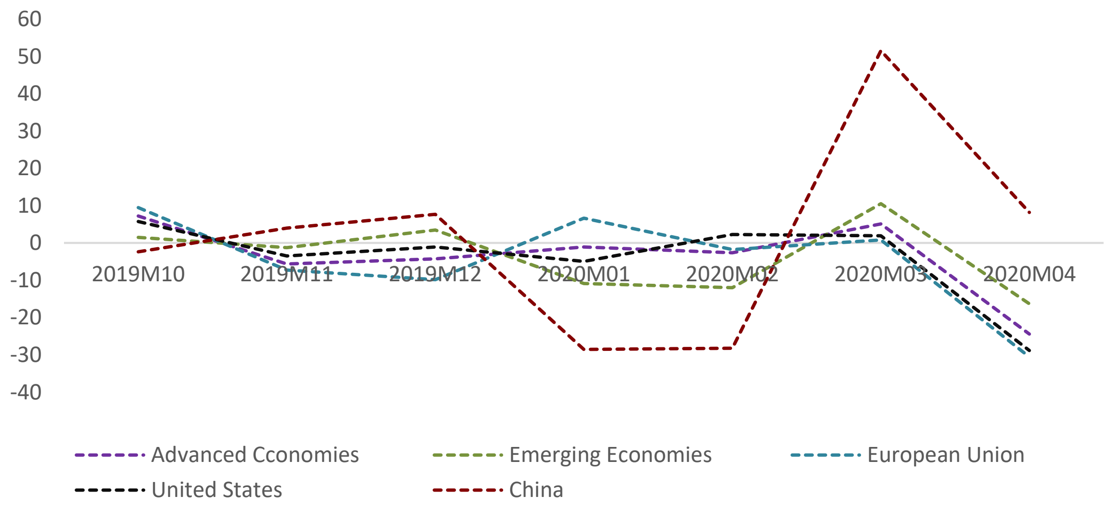
total decline. The industrial production in the United States and Japan were further estimated to contract by USD 5,779 million and USD 5,187 million, respectively. These figures underline profound global interconnectedness of the industries and the importance of China as the souring destination and important link for the majority of the GVCs.

While the estimates on the effects of lower supply from other intermediate goods providers are not available, the production and exports dynamics of the recent months suggest a persistent and sizable decline in exports originating from both advanced and emerging economies. It is important to notice, however, that China was able to quickly recover both its economic growth (3.2% y/y and 11.5% q/q) and trade figures by the second quarter of the year 2020. The recovery of the rest of the economies is yet to come as the combination of national lockdowns, delayed shocks absorption by the industries, and weaker state structures are likely to result in a more gradual production capacities recovery.

The supply of essential goods, including medication and medical devices, as well as food and agriculture products is also an essential component of the supply chains shocks. While the efforts have been made to maintain resilient supply networks, the growing uncertainty and protectionist measures resulted in the increase in tariffs and prices of certain crops. The risks are further exacerbated by the importance of transportation time in the supply of essential goods. Thus, small economies and remote regions (both domestically and internationally) faced higher risks of food security and availability of appropriate personal protective products and medical supplies.

As the previous experience of the supply-side GVCs disturbances (e.g. hazardous events) underlines the prevalence of the short-term effects, they often have significant indirect implications on the demand and purchasing patterns of both final and intermediate goods and services.

Figure 2. Exports m/m growth rate, by region



Source: : International Monetary Fund (IMF). Direction of Trade Statistics (DOTS).

Demand-Side Disturbances

The demand-related risks, as a rule, lead to more profound and long-term economic effects, which are further exacerbated by the circularity and reinforcement between demand and supply-side disturbances. The first months following the outbreak of the pandemic and ever-growing global uncertainty underlined the role of GVCs in the proliferation of shocks through demand channels. Indeed, the results of the recent companies survey suggest that the COVID-19 economic effects are largely demand-driven with 57% of businesses reporting a decrease in demand by at least 5% compared to the pre-pandemic times.

The global and indiscriminatory character of the COVID-19 pandemic reinforces demand shocks as it eliminates the possibility to offset the declining local demand by entering new markets and increasing the share of imports. Therefore, a quasi-simultaneous decline in global demand transmits the risks to the rest of the economies, where the demand for intermediate goods declines as a result of lower demand for final goods. The emerging and developing economies are particularly at risk as they largely rely on the production of parts, components, and raw materials. The projected 20% decline in remittances is likely to reinforce the demand shocks in the developing economies, where they account for up to 20% of the GDP.

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The demand disturbances carried the most profound and disproportional effects on the small and medium-sized enterprises (SME). Given intrinsic vulnerabilities and lower reserves, almost 55% of SMEs globally reported being strongly affected by the pandemic. Further national lockdowns and the 'social' component of consumption in decline (including expenditures on cultural events and restaurants) negatively affected 76% of SMEs in the service sector. Given the role of SMEs as the major employer and the backbone of economic growth (56% of the EU-27 value-added), the pandemic-induced shocks are likely to further proliferate through demand and supply chains and have, therefore, more sustained impact on the economic growth and recovery.

What's Next?

The experience of the COVID-19 underscored structural vulnerabilities and strengths of the existent GVCs. Despite an ever-growing debate on the relevance of nationalisation and protectionism of domestic production, both available estimates and country examples suggest strong benefits of the GVCs integration, which offset the risks of interdependency and help circumvent the abrupt crisis.

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While reshoring could be related to a number of benefits for both producers and consumers, it should be weighed against the underlying costs of development and maintenance of fully functional domestic value chains. The latter include, inter alia, greater exposure to domestic supply and demand disruptions (as the ones witnessed during national lockdowns), as well as intrinsic reliance of certain sectors on raw materials and other inputs unavailable locally. The availability of GVCs, in turn, allows companies to focus on their core competencies and reduce costs of adaptation and maintenance while allowing for greater flexibility and quality of sourced goods as a result of a broader competition between suppliers. In addition, it is important to consider that while the largest economies could have a potential to fully re-nationalise essential GVCs, smaller and emerging economies with lower available capital and technological capacities would be left behind in terms of both economic and social asymmetric shocks.

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According to the estimates, the presence of the GVCs made countries more resilient to the COVID-19 shock and cushioned the average long-term GDP contraction by about 0.6 pp with further significant growth contribution of the unilateral liftings of the lockdown measures. Further, the rapid development of the COVID-19 testing kits production and exports from South Korea is a perfect example of the GVCs benefits in the times of crisis. The absence of the GVCs, in this case, would lead to a significant fraction of unsatisfied demand for essential goods and growing pressure for domestic supply.

Yet, the vulnerabilities put forward by the COVID-19, provide a unique opportunity not only to rethink international cooperation prospects but also to reconfigure and strengthen available GVCs. In this light, both robustness and resilience of the GVCs could be improved. On the private side, the potential actions could focus on the diversification of the suppliers and insurance of long-term relations with thereof, improvement of the inventory and sourcing strategies (e.g. via 'just in time' production), as well as improved risks management strategies. On the public side, the government should focus on the establishment of comprehensive and flexible crisis management responses, improvement of the regulatory framework, and maintenance of the essential supply chains. The offset of the demand shocks would involve recovery investment packages (targeting primarily SMEs), social support programmes, and structural poverty and inequality reduction strategies.

Highlights

Trade, Innovation, and Productivity

On August 14th, The Polish Statistical Office published first flash estimates of the seasonally adjusted GDP figures for the second quarter of 2020. Specifically, the national economy contracted by 8.9% q/q and 7.9% y/y building upon the negative effects of the COVID-19 outbreak and lockdown measures imposed by the government. While it is still too early to know the supply- and demand-side decompositions of the GDP growth rate, the contributing factors include the significant decline in production of main industries with the January-July 2020 index of sold production in decrease by 5.2% y/y partially driven by the fall in external demand (exports fell by 5.3% y/y in June 2020). Moreover, the national lockdown and growing insecurities on the labour market contributed to a sharp drop in consumer confidence (20.4 pp y/y in August 2020). Moreover, the decline in imports by 9.4% in June 2020 is on one hand an indicator of falling domestic consumer and investment demand and is also linked to bottlenecks in intermediate goods supply chains.

More recent data shows some signs of recovery. For example, Statistics Poland business climate indicators currently show a sizable improvement compared to July 2020, albeit the indicators remain in the negative for the majority of the sectors. The accommodation and food services (3.7 pp), wholesale trade (3.6 pp), and manufacturing (3.1pp) sectors experienced the highest m/m growth in August 2020. At the same time, financial and insurance activities, as well as information and communications, made up for the only exception with positive business climate indicators at 2.7 and 5.4, respectively. However, the consumer confidence is not improving with August figures showing a further 2.9 pp m/m decline in consumer confidence compared to July 2020. Despite that, the July retail sales show some signs of recovery with 5.7% m/m increase.

Labour Market and Environment

Despite the fact that recent lockdowns around the world have led to a 5% drop in CO_2 emissions, (according to UNCTAD estimates), some measures undertaken to fight the pandemic have had a negative impact on the environment. An ever-growing need for plastic face masks, gloves, or hand sanitizer bottles not only leads to plastic pollution but also threatens Europe's war on plastic as used products are not fully recyclable. In fact, it is estimated that 75% of plastic personal protective equipment will end up in the landfills or the seas. The impacts this plastic waste will have on fisheries, tourism and maritime transport, among others, add up to an estimated USD 40 billion each year, according to the UN Environment Programme. What is more, social distancing has also led to a flood of home-delivered plastic as people opt for online shopping and food take-away services significantly contributing to plastic uptake.

Macro and Fiscal

As of July 1st, new VAT rates' matrix based on Combined Nomenclature codes was introduced in Poland to simplify the system and bring it into line with systems in the other EU Member States. Using our CASE CPI we analysed how changes in tax burden for specific goods, namely seafood (increase in rate from 5% up to 23%) and mustard (decrease in rate from 23% down to 8%), influenced final consumer prices. We found that after a month following the introduction of new rates average prices of seafood and mustard increased by 8% and fell by 5%, respectively. In both cases, the scale of the price adjustments suggests that less than 50% of the tax burden/tax burden decrease was passed onto consumers. The pass-through rate appeared to be higher for seafood than for mustard.

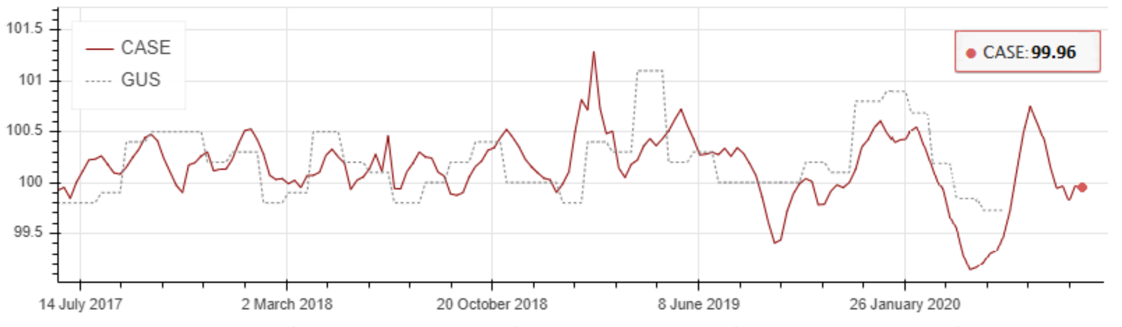
Other CASE Products

The Weekly Online CASE CPI

The online CASE CPI is an innovative measurement of price dynamics in the Polish economy, which is entirely based on online data. The index is constructed by averaging prices of commodities from the last four weeks and comparing them to average prices of the same commodities from four weeks prior. The index is updated weekly. For more information on our weekly online CASE CPI, please visit: http://case-research.eu/en/online-case-cpi.

The mid-August read-out of Online CASE CPI suggests that average consumer prices in the Polish economy have been stable for the past few weeks – the index shows an average drop by 0.04% since July. The trends for specific categories also showed a certain continuity from the last month – prices in the "Food" category fell by almost 1%, whereas those in the "Transportation" category went up by 1.8%. Other notable changes include "Health" and "Education" categories where average prices were about 1% higher and 1.7% lower in July, respectively.

Our Weekly Online CASE CPI



Monthly CASE Forecast for the Polish Economy

Every month, CASE experts estimate a range of variables for the Polish economy, including future growth, private consumption, investments, industrial production, growth of nominal wages, and the CPI.

CASE economic forecasts for the Polish economy
(average % change on previous calendar year, unless otherwise indicated)

	GDP	Private consumption	Gross fixed investment	Industrial production	Consumer prices	Nominal monthly wages
2020	-4.6	-4.8	-8.3	-5.0	3.0	3.2
2021	3.8	4.0	3.4	2.8	2.6	3.2

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