Pandemics Fragilities: Halt in Hyper-specialized GVC and the Big-Dollar-Hunger

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In 2012, a survey from the World Economic Forum and Accenture (1), devoted to assess the risk of a disruption in the global supply chain, had included a "Pandemic" among the 18 categories of risk considered plausible. It assigned a probability of 11 percent to such a pandemic (against for instance a 19 percent assigned to global energy shortage or a 17 percent assigned to shortage of labour), making it not really that rare an event.

And here we are with a pandemic. The prevailing economic paradigm behind global value chains, generally a production network, suggests that firms should outsource to the countries with the lowest overall costs. Firms could potentially source particular intermediate inputs from only one country. Outsourcing, the fragmentation of production and lengthening of value chains has allowed for a finer division of labor and greater gains from specialization—hyper-specialization—across countries. Just-in-time management practices also dictate holding minimal inventories as to improve profits. Of course these outcomes are efficient assuming sourcing from a particular country involves zero risk. There is however a growing list of events that are overlooked by risk managers, ranging from natural disasters, to geopolitical, technological, contractual or demand factors.

A first warning emerging from the unprecedented economic shock caused by the pandemic is that a specialized GVC represents a "trade fragility" and that the paradigm behind the GVC shall be re-assessed. Production networks shall be more diversified, rather than clustered. Also the network should rely on trusted nodes. Third, there should be higher transparency through data sharing in order to better track the chain of sub-contractors.

The halt of the GVC resulted also in other unintended consequences and fragilities on the monetary side too. The appetite for dollar, which is already high after crises, is growing those days at unprecedented levels. During sustained interruptions of the GVC, like after the outbreak of the COVID19 in China, many firms servicing the network stopped receiving payments in dollars (or perceive that payments will be interrupted). This time also firms operating in the commodity markets saw their revenues shrinking. All those firms then struggle to meet obligations in (dollar) debt. As a result most of them turn to banks

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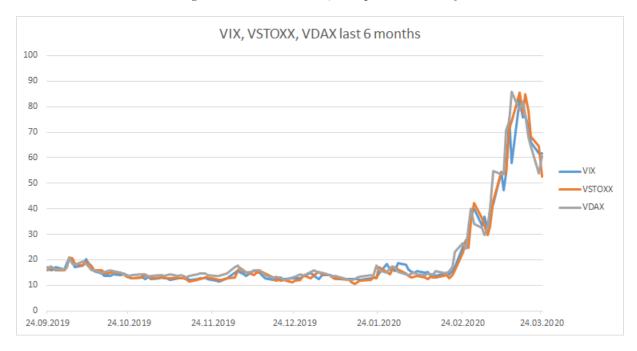
to obtain loans. The banks then turn to their Central Banks to obtain dollar funding. To satisfy this big demand the Fed had On March 19, the Federal Reserve announced the establishment of temporary U.S. dollar swap lines with an expanded list of central banks, including a handful of developed and emerging market economies (EMEs), Australia, Brzsil, Denmark, Korea, México, Norway, New Zealand, Singapore, and Sweden. Many of the countries newly admitted in the swap line are pivotal in the global supply chain, either for Advanced Manufacturing and Services (South Korea, Brazil, Mexico) or for Innovative Manufacturing Activities according to data from WEF (2012). Other countries contribute commodities. Many emerging market economies such as South Korea and Mexico are next to China in terms of importance in the global supply chain, also major corporations. After the announcement of the new Fed swap facility the two countries which immediately resorted on it were Japan and South Korea. As the swap lines were not sufficient the Fed had also activated a temporary facility for foreign and international monetary authorities, or FIMA, that allows foreign central banks and international organisations with accounts at the New York Fed to temporarily exchange their US Treasury securities held with the Federal Reserve for US dollars, which can then be made available to institutions in their jurisdictions. Such interventions are parts of the exorbitant duties that the Fed has due to the international role of the dollar and points out also at the role of monetary fragilities emerging in times of crises.

In closing we would like to note that this time the demand of dollars seems less related to the demand of safe and more to the shortage of dollars in the supply chain. First, the FIMA facility clearly show that some central banks are willing to sell US denominated Treasuries, a safe asset, i exchange of dollars. Second, according to all risk market indeces the US appear as fragile as European countries. Indeed VIX, VSTOXX for Europe and the VDAX for Germany seem at par (see Figure 1 below). As for the US Variance Risk Premium (VRP), an index for country uncertainty, its return started a massive and continuous decline starting on March 3.<sup>1</sup>.

The pandemic has therefore made more evident trade fragilities and the potential exacerbation of monetary fragilities. The occurrence of a number of events that were considered rare some times ago is growing. This implies that business managers, particularly so those of companies operating in the GVC, shall devote more efforts and resources to risk management practices. The full focus on the efficiency and cost minimization shall be accompanied by more attention toward a diversification of the GVC and also of the currencies used for transactions.

<sup>&</sup>lt;sup>1</sup>See https://www.etf.com/VRPoverview.

Figure 1. Risk indices US, Europe and Germany



World Economic Forum (2012). "Global Risks." Insight report.