PART I: THE IMPACT OF GLOBAL AND EUROPEAN VALUE CHAINS ON COMPANIES AND LOGISTICS: A PERSPECTIVE FROM BARCELONA

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Introduction

Long before the wave of protectionist activity led by President Donald Trump's trade wars, with their anti-multilateralist slant, globalisation faced criticism for its effects on inequality and debates raged over whether it was still growing or had fallen into decline. This protectionism has weakened the global value chains (GVCs) that are key to international trade. But then, perhaps the value chains contributed to bringing on that protectionism. It is hard to separate cause from effect.

Whatever the sequencing, the result is that the pandemic has disrupted global value chains. It matters little now if they were growing or shrinking before, the impact is causing profound change that is affecting the industrial sector, particularly transport and tourism services. Sectoral and regional displacement is underway.

Barcelona, a nerve centre for many industrial and services value chains, is at a turning point. The question is how changes in global value chains will affect the sectors involved in international trade and how geopolitical changes influence these GVCs. Should we talk more about *geoeconomics* than *geopolitics*?

1. Protectionism against globalisation

US protectionism does not begin or end with Donald Trump. The Barack Obama presidency was an exceptional period for the signing of multilateral agreements including the Paris Agreement on Climate Change in 2015. Fostered by US diplomats in the first decade of the 21st century, according to Sullivan (2018) these agreements emerged from formal, legal, top-down institutions taking more practical, functional, regional approaches to managing transnational issues, and what the author calls "coalitions of the willing". The Paris Agreement achieved broad participation because its substantive commitments are voluntary and states have the flexibility to decide how they fulfil them. In trade terms, the United States' blockage of the World Trade Organization by preventing

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the renewal of two Appellate Body judges is the heaviest institutional blow. But, in Sullivan's view, the rest of the world will be able to move on even if the United States withdraws. The new structures are designed to draw greater participation and contributions from more actors in a range of places, even as the leading power renounces its leadership role. It is an optimistic outlook, and a challenge for the European Union, the defender of multilateralism.

But with President Trump already fulfilling much of his unilateral programme, will such structures be able to survive? The United States has withdrawn from the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTTP or TPP-11), the Paris Agreement and the Iran Nuclear Deal (JCPOA). It has started a major trade war with China by raising tariffs and banning its technology. It has questioned NATO's principle of mutual defence. It has even forced Canada and Mexico to negotiate a new agreement, the T-MEC (UMSCA). It is the action against China that has accelerated responses. The signing of the Regional Comprehensive Economic Association (RCEP) treaty on November 15th 2020 should be seen in these terms. Led by China, it covers 28% of world trade, and includes 15 states, ten from the Association of Southeast Asian Nations (ASEAN), plus Australia, China, Korea, Japan and New Zealand.

Despite rampant protectionism, Anne O. Krueger (2020) highlights the spectacular trade failure of the United States, based on the "effectiveness of Trumpian bilateral browbeating". The overall US trade deficit grew from $750 billion in 2016 to $864 billion in 2019. While exports to China, the main target of trade policy, only grew 1.8% year-on-year to August 2020, Chinese exports to the US increased by 20%, thus widening the bilateral trade deficit. In addition, the tariffs have increased prices for consumers and displaced Chinese demand towards other competitors, increasing unemployment in the United States. Krueger writes that bilateralism and Trump's rejection of the WTO has hurt the entire international system and inflicted great damage on US businesses and households.

Another example of the paradox of this policy is that in August 2020 Mexico reached a historic surplus of $12.76 billion in its trade balance with the United States. This resulted from a collapse in Mexican purchases of US-origin products due to fragile domestic demand, with the Mexican economy expected to fall by around 10% in 2020, due to the effects of the COVID-19 pandemic.[1]

The fact is that today's trading system, based on value chains and fragmented production, could crumble if its foundations are undermined. Trust, investment, technology transfer and bilateral and multilateral agreements are all crucial, but above all it will be in jeopardy if the sea and air transport system for manufactured goods is unable to withstand the crisis.

It may be that the United States is unable to continue along the path of globalisation and is contemplating a strategic retreat in the hope of recomposing the old order in which it had leadership capacity. If so, the unilateralist attitude is essentially a withdrawal provoked by an inability to keep pace with rapid globalisation. Although it may also be because

1. *El Economista*, October 6th 2020. https://www.eleconomista.com.mx/empresas/Mexico-registro-superavit-comercial-record-con-Estados-Unidos-en-agosto-20201006-0059.html

globalisation based on transcontinental value chains is undergoing a shift prompted by technological transformation and the fight against climate change.

At the 2018 World Economic Forum, the event's Executive Chairman, Klaus Schwab, referred to *Globalization 4.0*, distinguishing *globalisation* (flows) from *globalism* (governance). *Globalisation* is a phenomenon driven by technology and the movement of ideas, people and goods, while *globalism* is an ideology that prioritises the neoliberal global order over national interests. His warning was clear: globalisation is not in dispute. The question is whether all policies should be "globalist" at a time when voters are calling for the control taken by global forces to be reclaimed. In democratic systems this is a key issue.

The study "Globalization in transition: The future of trade and value chains" (Lund et al., 2019) confirms that global trade has taken a backwards step in recent years, leaving more space for imports and exports that stay within in a defined regional area. International trade, which used to grow at twice the rate of global wealth, has seen the pace of that growth halve. And trade intensity – the proportion of goods sold abroad – is in decline. In 2007, 28% of the world's GDP travelled, so to speak. Today the figure is 22.5%.

The major debate at the turn of century surrounded offshoring. Companies were moving their production centres to countries with low labour costs and exported from there. But this phenomenon soon receded. Today, only 18% of trade fits this cheap production model, and this kind of outsourcing only affects 3% of the global workforce. Above all, China is no longer a competitor due to its cheap labour but due to its technology.

Emerging economies now consume more and more of what they manufacture. By 2030, their populations will account for half of global demand. With less need for goods to travel today, they are more likely to stay in the country or region. China is a perfect example, as its consumers have ever more purchasing power. In 2007, China sold 17% of what it produced abroad; ten years later, only 9%. Since the pandemic, its exports have recovered, although domestic consumption growth still lags despite policy targeting domestic consumption.

Since 2013, intra-regional trade as a share of global trade has risen by 2.7% (at the expense of trade operations between distant regions), and now accounts for almost half of the total. Increased trade has been particularly evident in homogeneous areas like the European Union, and in the Asia–Pacific region. Regionalisation is tangible in innovation value chains, where the closest suppliers must be integrated (Lund et al., 2019).

Technology is also a factor. Automation has made labour costs less important and the speed of business decisions more important. These decisions must be made where goods are produced, making companies rethink "offshoring". Automation may also reduce the global trade in goods by 10% by 2030 (Lund et al., 2019). The pandemic has also provided further evidence of the pharmaceutical industry's dependence on raw materials and active ingredients from China, and European industry is considering restarting production.

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Lund and Tyson (2018) warn that economic leadership is shifting east and south, as the United States draws in on itself and the EU and the United Kingdom divorce. The authors do not believe that globalisation is in retreat. What is happening is that trade based on global value chains that take advantage of cheap labour is slowing. Digitalisation plays a part, as more actors can now participate in cross-border transactions, from small businesses to multinational corporations. It is not deglobalisation we are heading towards, but a new, different phase.

So, in this new era, why is the United States turning towards its domestic market? And what is the effect of this strategic shift towards its immediate south if the South in general is likely to form part of this new economic leadership?

Lund and Tyson (2018) point out that the digitalisation of globalisation has tilted its centre of gravity. So, while in 2000 just 5% of the largest international companies were in the developing world, by 2025 the figure will be 45%, and China will have more companies with annual revenues over $1 billion than the United States and Europe put together.

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2. Global value chains realign

The globalisation based on trade in manufactures that began in the 1960s is being turned on its head. The introduction of the shipping container brought major growth and enabled intermodalism in transport logistics. In fact, the container better explains the growth of international trade than trade agreements. In a set of 22 industrialised countries, containerisation accounts for a 320% increase in bilateral trade in the first five years after its adoption, and 790% over 20 years. By comparison, a bilateral free trade agreement increased trade by 45% over 20 years, while GATT membership added 285% (Bernhofen et al., 2016).

GVCs linked to low labour costs and offshoring have lost their utility, although fragmented production will continue to the extent that advantages are generated by global economies of scale. Some supply and production chains will completely reverse: in electric car production, for example, stimulated by regulation and demands to reduce emissions. They are also being changed by the new major competitors for 5G network connections; in the case of China, they are even perceived as a strategic risk.

In fact, value chains began to shift as services acquired importance. In the last decade, global trade in services has grown 60% faster than trade in goods, and in some subsectors, including telecommunications and information technology, commercial services, and intellectual property fees it is two to three times faster (Lund et al., 2019).

These events are producing a geostrategic change that will force not only the United States to make a decision, but Europe and the rest of the world too. At a bilateral summit in June 2020 the EU, which considers China a "strategic rival", demanded the trade relationship be rebalanced in spite of the common ground on the multilateral agenda like WTO reform and the fight against climate change. Another

geopolitical change may occur as a result of the technological transformations that result from the Fourth Industrial Revolution and emissions reduction policies. The shift from using hydrocarbons controlled by a few suppliers, to the use in battery production of "critical minerals" (rare earths, lithium and cobalt) found in only a few places in the world, China among them (Kalantzakos, 2020), may dramatically transform today's supply chains.

Until today, GVC development has been associated with falling costs of maritime transport and their increasing efficiency. This is particularly true in the intercontinental transport of manufactured goods between Asia, Europe and America. Technological advances — especially in the information and communications field — have further reduced business and coordination costs. But foreign direct investment (FDI) has also been an important factor in the growth of GVCs. Between 30% and 60% of G20 exports consist of intermediate inputs traded within GVCs (OECD-WTO-UNCTAD, 2013).

But this state of affairs was halted at the beginning of 2020. The fall in international trade produced by the pandemic crisis may be one reason value chains fail. Depending on how long the pandemic lasts, the economy may pass from demand shock to supply shock. Company bankruptcies and the dismantling of production equipment cause supply shocks and break value chains. GVC links may be broken at one of their most critical points, maritime and air transport, which will be very difficult to rebuild in terms of equipment and short-term investments. This is what almost happened at the end of the Great Recession. In September 2016, the bankruptcy of the South Korean shipping company Hanjin caused a rapid rise in transport costs and tensions in the global supply chain.

Logistics networks, ports, airports and supply and distribution chains are all affected. The port of Barcelona, for example, saw container traffic (in TEU units) fall by an accumulated -20% in June and July 2020, compared to the same months of the previous year. It should be noted, however, that lower traffic was already detected in the last quarter of 2019 – before the pandemic – with a 3.2% fall in December.

Meijerink et al. (2020) believe international trade will recover faster from the pandemic crisis than it did from the Great Recession of 2008. The authors acknowledge, however, that their analysis applies only to the trade in goods, meaning any recovery in services (including international travel and tourism) is not included. This may be a highly significant factor in the results, as passengers and freight share much international air travel, and airlines failing to recover may affect supply chains. Given the uncertainty, the WTO is more cautious and expects a fall in the volume of global merchandise trade of 9.2% by 2020, followed by an increase of 7.2% in 2021.[2]

While the prospects for international trade remain good even amid the crisis caused by the pandemic, a report from the International Transport Forum (2020) confirms that the COVID-19 pandemic is having a major impact on air and maritime trade. Shipping companies risk bankruptcy if they cannot tackle their indebtedness, with container shipping companies particularly affected.

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2. WTO press release, October 6th 2020 (online) [Accessed on 22.01.2021]: https://www.wto.org/english/news_e/pres20_e/pr862_e.htm

Last but not least, value chains may also be disrupted by technological changes affecting both production and consumption. The Fourth Industrial and Technological Revolution, associated with "machine learning" and "deep learning", is shifting the system of global value chains towards more regional chains. Combined with greater sensitivity to tackling climate change, this shift will transform patterns of production and consumption. In the automotive sector, Tesla, which is located in California without offshoring production, provides an example of artificial intelligence applied to production and services. In some aspects, Tesla's strategic architecture resembles those of the Apple Store and digital marketing (Cooke, 2018).

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Conclusion

The evolution of the globalisation of trade means the pandemic's impact will depend on how long it lasts and the damage it causes to the productive structure and supply chains. But deglobalisation is not to be expected, quite the opposite. A change of phase will result in which trade in services becomes more important, while value chains simultaneously shift towards regional spheres, something that has already taken place in the Indo-Pacific. The great technological leap forward and measures to decarbonise the economy will determine the future of the global value chains the pandemic's disruption will have helped to accelerate.

Faced with this paradigm shift, the view from Barcelona should be strategic about technological, industrial and energy development, and emphasise education, training, innovation and health. Optimistic foresight should prevail over nostalgic hindsight.

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