

# 8. The global logistic chain under siege in a post-Covid era

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**Abstract** Based on historical analogies, we emphasize a connection between financial crises and technological shifts that calls for a structural economic transformation. Political pressures related to this structural transformation pave the way for the return of a new form of mercantilism. The race for jobs in a period of technology shift, coupled with experimental efforts by central banks, will lead to the need for a post-Covid-19 reorganization of international companies' global logistics chain.

**Keywords** global logistic chain | post-Covid era | state aid | technology shift | job creation

#### 8.1 INTRODUCTION

In terms of economic and financial integration, the world seemed very bright in the period 1870–1914. You could order goods from all over the world, travel without a passport and invest your capital in companies on foreign continents without considerable obstacles. The lack of border barriers was very close to the image that John Lennon conveys in the masterpiece "Imagine", when he expresses his vision of all the benefits that would follow if there were no countries and thus no borders. The two world wars during the first half of the 20<sup>th</sup> century then resulted in the emergence of heavy border barriers and the rollback of integration. The integration changed direction again in the 1970s (Oxelheim, 2005), which meant that by the early 2000s we could once again benefit from an integrated world where goods, services, capital and people could travel relatively freely across national borders without uncertainty, costs or wasting of time. In this world, the basic preconditions were found for the business model, called the global value chain, global factory, global production chain or global logistics chain.

In the early 2020s, after the initial stock market hit in March 2020, the subsequent stock market rally sent the signal that the outlook of the global economy was

attractive, despite an ongoing pandemic. The common explanation was that the stock market is forward-looking (Goldin & Mariathasan, 2014) and takes into consideration the bright future expected to come after the effects of the ongoing pandemic have subsided. Nonetheless, there are alarming signals undermining economic cross-border integration. For example, the cross-border trade in medical devices and vaccines is being significantly hampered as protectionism takes hold (OECD, 2021a), and specific restrictions are being reintroduced that constrain international trade and investment (Witt, 2019). Another example of increased promotion of economic nationalism is central banks' extensive promotion of new monetary policies involving quantitative easing and record-low interest rates. Quantitative easing will typically target domestic investment classes such as bonds and commercial papers, and thus lower the cost of capital of domestic firms vis-àvis that of their foreign competitors. Furthermore, lower interest rates will push down the exchange rate of the country engaging in quantitative easing, thus creating a competitive disadvantage for foreign companies. We argue that these factors represent threats to continued globalization of product and financial markets and consequently add to the risk exposure of internationally oriented companies. This exposure is particularly problematic for companies based in small open economies such as the Scandinavian countries, where companies are heavily dependent on access to foreign product markets and international investment opportunities.

In this chapter, we claim, based on historical analogies, that the ongoing pandemic has accelerated and aggravated the underlying structural economic transformation that has been going on for more than a decade and that is linked to the ongoing technological shift. We argue that, while globalization can be viewed as primarily politically driven, digitalization is mostly company driven. We analyze below how political pressures related to this structural transformation pave the way for the return of mercantilism in a new form: new mercantilism or new protectionism. This time it is not a zero-sum game about gold and silver – as in the original vintage 350 years ago – but, post-2020, it is the competition for high-tech jobs that drives politicians to be more nationalistic. Our conclusion is that this race for jobs in a period of technology shift, coupled with experimental efforts by central banks, will lead to the need for a reorganization of international companies' global logistics chain. The Covid-19 pandemic will act as a catalyst to this very transformation.

## **8.2 THE TECHNOLOGY SHIFT**

From a historical perspective, financial crises and technological shifts turn out to go hand in hand (Schön, 2012). The common argument is that firms' hesitation and uncertainty about which new technology to apply makes them postpone their investments. At the individual level, you are, at the beginning of the 2020s, faced with a similar decision when buying a new car. Which technology will apply tomorrow? Petrol, diesel, biogas, electrical, etc.? The uncertainty encourages you to postpone your purchase in order to avoid the risk of new regulations (some cities have already put a ban on diesel vehicles) or a better technology arriving (e.g., the lithium battery used in all electrical cars being replaced with a much more efficient, solid-state battery).

According to the World Bank, real investments (gross fixed capital formation) have had restrained growth in the decades following the financial crisis of 2008 (World Bank, 2019), which supports our argument of the negative economic impact of technological shifts. The OECD shows that the investment growth of OECD countries, after an initial decline of 10.6 percent in 2009, was back at a tiny 1.6 percent in 2019 (OECD, 2021d). The pandemic then hit annual investment growth again; there was a decline of 6.6 percent in 2020. Forecasts from leading institutes show a very low annual investment rate after the Covid pandemic (EIB, 2019; OECD 2021d), further restraining economic growth. This is a serious issue, since past research shows the investment ratio to be the major and – in an extreme bounds analysis context - the only explanatory variable to have a systematic and significantly positive relation with economic growth (Levine & Renelt, 1992). Furthermore, productivity has not managed to recover in the years following the financial crisis of 2008. This also applies to so-called multifactor productivity. Thus, at the beginning of the 2020s, companies still seem to be waiting for the next generation of technology to crystallize, so that the willingness to invest will return and productivity increases take place. It is this wait-and-see attitude that has meant that the world, at the beginning of the 2020s, has not yet come to terms with the financial crisis of 2008.

Cross-border foreign direct investment (FDI) had slowed down even before the pandemic, but preliminary figures show an extra-sharp decline in investment flows in 2020 (OECD, 2021b). The most dramatic reduction in investment flows has occurred in relation to developing countries. However, at the beginning of the 2020s there are no clear signs of liquidation of previously made foreign direct investments; that would be a signal that a full rollback of globalization had begun (OECD, 2021c).

# 8.3 THE ACTIONS OF CENTRAL BANKS

The major central banks around the world are trying to solve the implications of the technology transformation by "helping" companies with more liquidity and lower interest rates. However, we argue that cheap money may create problems rather than solving them. The companies' wait-and-see attitude towards real investments has led to the "cheap money" instead being spent on firms repurchasing their own shares and excessive borrowing. At the beginning of the 2020s, there is record high indebtedness both in companies and among countries globally. American companies have indebtedness (measured against GDP) which is at an all-time high. In the early 1990s, almost 100 S&P 500 companies had a AAA credit rating compared to just two such companies by the end of the 2010s (Altman, 2018). Nevertheless, the US Federal Reserve continues to act as if more loans are the solution. The monetary policy of the early 2020s has led many market participants, especially pension funds, to engage in excessive risk-taking in order to live up to their commitments. This kind of behavior, according to President Barack Obama, triggered the 2008 financial crisis.

We argue that there is a high risk that the record indebtedness will accelerate the ongoing financial crisis of 2008, with strong repercussions for the global logistics chain. When Fed governor Alan Volcker conducted his monetary policy experiment in 1978 by changing the monetary policy target from the interest rate to the money supply, the result was that interest rates in the US, for prime borrowers, rose by almost 10 percentage points (!) without a significant increase in inflation (Oxelheim, 2018). In other words, the increase went out of the hands of the Fed at that time, and if this is repeated, albeit by only three to four percentage points, the world will witness a new financial meltdown.

The central banks' attempts to alleviate the pandemic, in 2020, led them to increase the money supply by a record rate. It increased for the twelve largest countries in the world (US, China, the eurozone, Japan and eight other developed economies) at an annual rate of 19 percent (USD 14,000 billion), which was the largest registered annual increase ever noted (Burgess, 2020). For the US, the corresponding figure was 25 percent, and more dollars were created than ever before. Since 2008, the world economy has grown by only 31 percent, while the amount of money has increased by 125 percent. When GDP does not grow to an extent that corresponds to the money supply growth, a foundation is laid for higher prices that will be accompanied by higher interest rates. An explosive "cocktail" has been mixed that will sooner or later force central banks to restore their balance sheets to pre-2008 levels. The Fed's efforts to restore the balance sheet in 2017 (the so-called

tapering tantrum) gave a clear idea of what we should expect from such an exercise. The fixed-income market shook worldwide.

The Covid-related rescue packages implemented in 2020 and 2021, of 750 billion euros in the EU (July 2020) and USD 1,900 billion in the US (March 2021), will – if they do not dramatically stimulate GDP – light the inflation fire and likely produce a scenario with significantly higher interest rates. In the US, "helicopter money" (Friedman, 1969) was put into use when USD 1,400 per person was distributed as part of a rescue package to US residents below a certain income ceiling. In Europe, "helicopter-like money" had also been tried a couple of years prior to that (Oxelheim, 2016). We argue that attempts to resolve the financial crisis of 2008 – and the extension of such attempts to 2020–21 aimed at alleviating the effects of the pandemic – represent a gigantic experiment that will, in the long run, lead to lower levels of trade and investment, i.e., to reduced globalization of firms and markets.

In this chapter, however, we see the biggest threat to the pre-Covid global business model in a massive increase of state aid to firms. The aid provided by politicians is based on the fact that they see no alternative in dealing with the economic effects of the pandemic. This opens up a dangerous competition between nations. The EU affirmed in its 2014 statutes the use of state aid to combat the financial crisis (EU, 2014). This was an important change of opinion since, when the president of France, Nicolas Sarkozy, proposed in 2008 that each country should be free to use state aid to mitigate the effects of the financial crisis of that very year, he was strongly opposed by other EU countries. He then tried to solve the unemployment problem at the time of the crisis by denying the guaranteeing of loans to the French car industry unless the companies in question moved their foreign production, and thus their jobs, back to France.

The rescue actions of central banks have another dimension in that some central banks, such as the Japanese and the Swiss, are listed on the stock exchange. Here, the bank sits, so to speak, on two chairs – it is responsible for monetary policy and market rules, while at the same time being a major investor in the market. The Swiss central bank, for example, is one of the largest owners of Apple. In the event of a sharp fall in the price of this share, it can parry the fall with the effect of the CHF/USD exchange rate. The ownership of central banks constitutes a new major governance problem that research has not yet addressed, but which may be important for the solution of the ongoing crisis.

# 8.4 JOBS, JOBS, JOBS...

Attempts to alleviate and resolve the financial and economic crisis with monetary policy will, in the long run, lead to higher interest rates, inflation and taxes, which individually or in combination will result in a lower demand for goods and services, and thus fewer jobs (Oxelheim, 2012a). A negative impact on the labor market would furthermore be unfortunate at a time when the number of jobs has temporarily decreased as a result of digitalization, robotics, artificial intelligence and competition from the sharing economy. Studies estimate that as many as 50 percent of industrial jobs in the US will disappear in the coming decade (Frey & Osborne, 2017). The pandemic has acted as a catalyst and accelerated the transition process. Many of those who have been temporarily laid off will, as a result of the technology shift, turn out to be redundant and find themselves permanently unemployed. Preliminary results indicate that this may include about every third job (Rockeman & Ward, 2020). The technology shift will create many new jobs, but it will take some time before they are sufficient to reduce unemployment to the levels that applied before the pandemic. Long-term employment will be a problem in the transition phase. We argue that we will see a post-pandemic world plagued by unemployment in the next decade, where the mantra for every politician will be "jobs, jobs, jobs!"

In this situation, every politician with the ambition to be re-elected will need to show their ability to "create" new jobs. Politicians need to show results in the short term, as the next election will on average take place in a year or two. There are basically three ways – with varying degrees of transparency – to attract companies from abroad and make them bring their production with them (see Oxelheim & Ghauri 2004, 2008).

The first way politicians can "create" jobs is to get foreign companies to produce in the respective politician's own country and to get home companies to stay home by convincing them that their country is the best production location. Succeeding with such a strategy boils down to the country achieving the best productivity by means of high-quality education, a superior innovation climate and the elimination of various bureaucratic obstacles. This solution takes time and requires a high degree of transparency and communication skills. However, this is likely more time than a politician can typically afford with the next election always within less than four years.

The next transparent alternative is to reduce corporate tax and, in this way, attract foreign companies and jobs. Many countries have tried or are considering trying to use this path since the financial crisis in 2008. We are seeing a race-to-the-bottom for corporate tax in the early 2020s. Although this alternative could

lead to faster results, previous studies show that corporate tax has little significance for the location decision, compared to the personal income tax that will apply to the immigrating CEO and to the quality of the school system that their children will experience (Braunerhjelm, 2004).

Given the limited years of tenure available to the politician, with re-elections typically every four years, the third and only viable way to attract companies from abroad, and to have home companies stay home, is to offer them tailor-made, firmspecific packages of economic stimuli, equivalent to anabolic steroids in the world of sport. However, such packages are in the gray zone of trade agreements or other economic agreements (such as the EU's common market), and they can be subject to all kinds of criticism related to the breaking of competition laws. Therefore, most deals are non-transparent and manage to "fly under the radar" of regulators and the public. However, due to the ongoing financial crisis and pandemic, this "stealing of jobs from the neighboring country" has become commonly accepted in the early 2020s. We can observe more relaxed regulatory systems and the use of state aid as an economic lubricant. For example, the presidents of the US - both outgoing and incoming - have, as part of the race for jobs, underpinned nationalism to attract companies. The same can be observed in China, where the motivation is to please the masses in order to reduce the threat of mass protests. The problem with this approach is that, in a non-transparent way, it challenges cohesion between the countries of the world by resorting to the violation of "fair competition". It also creates a new form of political risk which, in research as well as in practice, is overlooked (Oxelheim & Ghauri, 2008). Unlike the traditional political risk, which is about the volatility of the rules of the game set by politicians, and where the seriousness is determined by corporate exposure, the new political risk also gives different risk pictures for different companies and does so in a non-transparent way (Forssbaeck & Oxelheim, 2015). The risk emerges since there is no transparency in what beneficial terms are being given to your competitors.

#### 8.5 THE CROSS-BORDER COMPETITION FOR JOBS

Politicians get support from their central bank in boosting the economy to attract jobs. In order not to challenge other countries' governments and international organizations such as the International Monetary Fund (IMF) and the World Trade Organization (WTO), the fight in the early 2020s is being waged in newly packaged formats. Competitive devaluations have always had a negative connotation. Now they come in the form of a formidable currency war, with the excuse that they are means to "fight deflation". With this labeling, the central bank can ensure

that the value of its own currency is depreciated as part of creating higher inflation. The fight is pursued with the creation of new money, low policy rates and numerous currency interventions. In this way, the central bank provides help to its own export industry and helps to protect companies that can be called domestic but are in fact exposed to foreign competition at home. The increase in import prices is then reflected in lower demand for imported goods and services, which will be replaced by domestically produced goods/services. The fight against deflation thus helps to create the coveted jobs in the domestic market. The central bank's various activities aimed at making imports more expensive are thus nothing less than part of new mercantilism or new protectionism.

If all central banks are involved in a currency war, it will be virtually ineffective. The realization of this led politicians to take the next step – the tariff war. The war with tariffs and countermeasures took over at the end of the 2010s. The US, China and the EU built walls around their markets with the help of tariffs. The defense of these became increasingly convoluted, as when President Donald Trump defended the introduction of increased steel tariffs as a matter of military defense. However, this measure was mostly motivated by the need to show political support for a particular interest group, in other words, to win votes from the so-called rust belt. The awareness of the harmfulness of tariffs to the citizens of the countries in which they are introduced has led to this means of competition being strongly questioned.

Following on from the tariff war, we see the embryo of an Internet war (Oxelheim, 2019). This is about the possibility of politicians controlling the Internet. At the beginning of the 2020s, countries such as China, Russia, India and Iran took actions to control the network. Trump also started such a war by abolishing what his predecessors had created in terms of Net neutrality. With an increasing share of cross-border trade happening in the form of online trade, it is easy for those who control the network to also intervene in a non-transparent way to prevent unwanted cross-border transactions. As an example, a Chinese citizen who wishes to order goods from the US may find that their Internet connection does not work in this environment and, after repeated attempts, will give up and turn to a Chinese company. Production and jobs thus stay in China. In this context, all respect should be paid to the speed of Internet communication in the 2020s. The video game Pokémon Go, for example, managed to reach 50 million users in just 19 days, while the airline industry needed 68 years, and the phone industry 50 years, to reach the same number of users.

The use of state aid has also been packaged in other ways to hide its gray character, such as to promote a new production technology. This has been seen as an

acceptable excuse by both the WTO and the EU. When President Barack Obama saved General Motors (GM) with state aid, the excuse was that GM would focus on producing "green" cars when in fact, as shown in Oxelheim and Wihlborg (2012), the company was in such poor condition that it should have exited the market in line with Chapter 7 of the U.S. Bankruptcy Law. The Swedish Minister Maud Olofsson used a similar type of excuse to sign a guarantee for the car manufacturer Saab in 2005.

From a political point of view, there are several other types of general support that can aid job retention, such as the support that is concealed in "harmonization" efforts – where a line is drawn to exclude foreign competition – or in the choice of sanctions, in the fight against terrorism and in the choice of national or regional climate limits.

The national competition for jobs is being waged in a hierarchical chain, where national politicians attract primarily with the help of their "invest in agencies" policies. The competition can then continue at the regional level down to a competition between cities to host the investment. The fight can also be waged through cooperation between the levels, such as when Sweden offered SEK 140 million as a carrot and thereby managed to successfully convince Facebook to place one of its servers in the north of the country.

The competition for investment and jobs can basically be triggered in three ways. One is that bids are submitted on the initiative of national politicians. Assume there is an investor who, after an OLI analysis¹ (Dunning, 1980), considers investing in one of the countries A, B or C. With the help of a tailor-made package from politicians in country A, the investor is convinced to choose to invest in that very country. The choice of country is then made on the basis of its attractiveness as measured by the sum of the initial OLI conditions (the extent of the location's advantages in relation to the specific firm) in the country and the support coming from the tailor-made package of tax relief, dedicated infrastructure, investment support, training, etc. (Oxelheim, Randøy & Stonehill, 2001). China's targeted transition set out in its 12<sup>th</sup> five-year plan (further elaborated in the 13<sup>th</sup>) from being the world's factory floor to becoming the world's R&D center has motivated China to provide investment "packages" to attract investors with the desired competencies.

<sup>1</sup> The OLI analysis applies three sets of factors that need to be satisfied for firms to make an FDI: (1) the possession of firm-specific unique resources, (2) advantages related to locating the activity abroad, and (3) advantages of owning the foreign activity over alternative contractual arrangements (local agent, exports, local licensees).

The next alternative may come at the initiative of the investor, in the form of the announcement of an "auction". If the company has found that it wants to go to a certain region, and countries A, B and C are well suited for the investment, it asks the governments in each country to submit bids regarding the kinds of incentives they are willing to offer to obtain the investment and the jobs. The most attractive bid will then succeed. The big question – in addition to the ethical one – is whether and how a country should respond to an invitation to an auction of this kind. There is no unambiguous answer. It must be sought through a game theory approach.

The third option is that a company considering an investment announces a "beauty contest" between subsidiaries in different countries. This can be exemplified by GM, which in 2005 announced a competition between Saab in Trollhättan in Sweden and Opel in Rüsselsheim in Germany regarding which company was the most suitable to produce GM's third-generation medium-sized cars. This turned into a competition involving Sweden's Prime Minister Göran Persson and German Chancellor Gerhard Schröder (Oxelheim & Ghauri, 2008). Here, all sorts of incentives were offered to convince GM where to locate production. In Sweden, political bodies and authorities at all levels were involved. The government thus offered new infrastructure to facilitate transport to and from Trollhättan. The union offered to work longer for the same payment, and even competitor Volvo showed its support in terms of enhancing the national competitiveness of the industry, in accordance with Porter's (1990) diamond. In Germany, Chancellor Schröder invited a trade war when he promised on German TV that he would do "everything" to ensure production took place in Rüsselsheim and thereby save German jobs. To further show how much such jobs mean in a tight situation, it can be mentioned that Schröder's successor as chancellor - Angela Merkel - in an extension to this fight, opted for an alternative buyer that secured jobs in Germany, and not for the best bid in terms of money (Jolly & Dempsey, 2009).

In line with what has been described by Oxelheim and Ghauri (2008), the fight for jobs can take place via benign and malign means, respectively. The former category includes education, reduction of bureaucratic obstacles, and the marketing of special skills such as language skills. The latter category includes the provision of financial incentives of a targeted nature, social and environmental dumping, and the incitement of nationalism. History offers countless examples, and, at the beginning of the 2020s, clear nationalist slogans are being heard from politicians around the world. The fact that President Joe Biden, at an early stage after being installed, took over the slogans "America first" and "Buy American" from his predecessor clearly indicates that the US is paving the way for a neo-mercantilist era.

The financial incentives aimed at the potential investor can be sorted into five different categories, all of which can at best be said to be in a gray zone. These attempts to steal jobs from neighboring countries with the help of state aid have, in the past, led to conflicts with the governments of other countries. However, as previously mentioned, the pandemic seems to have led to a general acceptance of this use of tax money.

The first category of financial incentives consists of subsidies and direct grants to the investor. This may involve giving investment support or perhaps masking this by letting the investor buy a production facility at a discount. The latter alternative is more difficult to criticize if it becomes widely known, as the seller – in the form of the political establishment in the host country – can escape by simply expressing regret that they made a bad deal.

The second option is to offer tax exemptions. This can be done in the form of discounts of various sorts. The offer can take the form of a tax exemption for a specified number of years or, for example, the form of a lower tax rate. Ireland's decades of success in attracting FDI rested precisely on such a tax incentive that – when it emerged that it was being given to the big tech companies in the late 2010s – started an intense tax debate that created conflict between the EU and the US.

The third category of incentives consists of loans at non-market interest rates. For example, the investor may be offered a long-term loan with such a low fixed interest rate that it appears to be a gift that cannot be resisted.

As a fourth category, the political establishment in the host country can offer to inject share capital on non-market terms. The government can, for example, invest but accepts a waived dividend as well as no voting rights. A joint venture with minority ownership for the recipient country would make it particularly difficult for the magnitude of such an incentive to be traced and criticized.

The fifth category is where the host country issues a warranty. Such a warranty may mean that, if the investing company has not succeeded in making a profit after, for example, five years, it will be compensated for the loss.

# 8.6 THE CAR INDUSTRY AS A TRIGGER

The ticking time bomb for closed borders is the car industry, which in most countries belongs to the category of most important and highly visible employers. Governments can impose rules and regulations that attract or "force" jobs into their home country, for example, a requirement that a certain percentage of a product must be produced in the country in order for it to be sold in that market. Such a rule was introduced when the Japanese car industry became too successful in the

US and in response to a failed "voluntary restriction" by Japan on a certain car manufacturer's exports to the US. In order to avoid it being only the "last screw" of a car that is put in place in the US to escape the car being labeled as an export, the content restriction is now expressed as a fraction of value added.

Among the world's contemporary car manufacturers, there is a global overcapacity of about 50 percent. With this overcapacity, it becomes attractive for companies to collude with politicians. Making a deal with a major car manufacturer could be seen as a litmus test for a successful politician in some countries. The competition for jobs between the states of the US provides ample cases. In early 1990, for example, South Carolina managed to attract BMW to the state with a tailor-made package of incentives. The cost to the state of this package was approximately USD 7,500 per job, which at the time was considered high. Initially, the package created 1,500 jobs (Oxelheim & Ghauri, 2004). By the early 2020s, with subcontractors and other related jobs included, the BMW investment had provided 35,000 jobs. The BMW story appears to support the idea that it pays off for politicians to use incentives to enjoy the first-mover advantage.

# 8.7 THE LOSERS IN THE FIGHT FOR JOBS

When the outcomes of a cross-border competition for jobs begin to crystallize, politicians in the job-losing country will be tempted to act on the unemployment ratio, reducing job demand by closing borders for categories of people who do not match existing jobs and who will impair unemployment statistics, thus improving the chances of these politicians being re-elected. In this vein, voices were raised for a renegotiation of the Schengen agreement at an early stage of the 2008 financial crisis. The Covid-19 pandemic has made it clear to politicians how easy it is to close borders. Hence, the same could be true even as part of the fight for jobs. We do not know exactly where the reshaping of the world economy after the financial crisis of 2008 will end (Oxelheim, 2012b), but, if the pattern that has crystallized in the early 2020s takes hold and if globalization is rolled back completely, we will be in an entirely new situation. By the end of World War II, there were 74 nations. Now there are over 200. This means that managers and boards will face situations where they have to consider more than 200 governments, currencies, central banks, customs authorities and financial inspectors in their decision-making. All in all, this will lead to sharply increased search and transaction costs, as well as increased uncertainty, which in turn will lead to a weakening of the global logistics chain. This argument is also supported by the fact that, even in the pre-pandemic situation, the net yearly outflow of FDI had peaked around the year 2007 and by 2018 was back to the level of the early 1990s (World Bank, 2019). It is easy to imagine the problems the new economic scenario could create for a company such as Volvo Trucks, whose trucks can contain thousands of components from a hundred different countries. The new scenario calls for a change of business model that considers the set of problems associated with closed borders and a globalization that has been rolled back.

What, then, could prevent globalization from being rolled back? In the tough times ahead for free trade and multilateralism in the current geopolitical climate, someone must take the lead to prevent closed borders and protectionism from gaining a foothold. The only potential supernational counterforce at the present time would be the strengthening of the mandate of the WTO. However, the probability that a solid action to rescue the WTO will take place is small given the organization's two heaviest members – the US and China – are involved in a trade war with each other. President Trump let the US block the WTO. The key issue was and still is the dispute settlement mechanism. Since his accession, President Joe Biden has not expressed any direct support for the WTO but appears to be continuing with his predecessor's "America first"/"Buy American" policy. President Xi Jinping's willingness to live up to WTO rules also appears to be weak. That the EU, with its significant internal problems, will shoulder the leading role seems unlikely (Bakardjieva, Michalski & Oxelheim, 2021). It is itself facing a rollback in relation to Brexit.

At the firm level, multinational companies face increased regulations and skepticism about globalization and are engaging in countervailing strategies (Cuervo-Cazurra, Doz & Gaur, 2020). Specifically, the appropriate strategy implies reconfiguring the global logistic chain as well as active lobbying for the benefits the multinational company can get from host countries. Furthermore, technology, such as blockchain, could be applied to pave the way for a new wave of globalization that would be less location specific. The blockchain could, for example, be used to register the ownership of land of poor people in emerging markets in a way that allowed them to borrow on that very land, to invest, to trade, and later to trade globally and thereby trigger the next wave of globalization (De Soto, 2018).

# 8.8 ROLE MODELS OF THE GLOBAL LOGISTICS CHAIN AND GLOBAL VALUE CHAIN

The World Investment Report (UNCTAD, 2020) describes four development paths for the global value or logistic chains of the future. In their classification, the importance of the ongoing digitalization, the increased environmental require-

ments and the existing geopolitical fluctuations are taken into account. The four different development paths highlight how the combined effect of these three forces on global value chains can be labeled: (1) reshoring, (2) diversification, (3) regionalization and (4) replication.

In reshoring, it is assumed that the value chain could be shortened, with more concentrated value added closer to home. The element of offshoring and outsourcing would be assumed to be reduced. The technology shift, it is assumed, would be the driving force behind this model. This pattern, it is assumed, will be further reinforced by stronger demands for self-sufficiency as a result of the pandemic of 2020, and with an assumed trend towards more domestic production in strategic industries. The industries that can mainly be classified as belonging to this category are the most global-value-chain-intensive, technology-dependent companies.

The development path called diversification draws on the strengths of global value chains. Digitalization is assumed here to be going to provide opportunities for companies to diversify abroad and to create completely new chains with subcontractors. It is assumed that this development path would improve the resilience of a company's supply chain. Such development, it is expected, would build on platform-based digital management of the value chain, and it is seen as likely to be particularly relevant for service companies and similar industries with a strong dependence on global value chains.

The regionalization development path assumes that global value chains will become more regional and concentrated in regions or groups of countries. Two strategies would be assumed to be behind this development. The first is about multinational companies pulling back from certain parts of the world and concentrating their value chains in a specific region. The second strategy would be for international production to be divided so that each region has its own value chain, as also highlighted by Cuervo-Cazurra et al. (2020). Multinational companies would be assumed to choose to locate regional value chains close to markets in different parts of the world. Geopolitical changes, environmental and sustainability requirements, and technology are assumed likely to be the driving forces behind this development.

Replication, as the fourth and final development path, refers to companies that have their production capacity located geographically close to their consumer markets. For this development, 3D technology and other additive manufacturing are seen as likely to be a catalyst. Manufacturing platforms in different parts of the world would replicate the desired production. This development would imply shorter value chains that were less fragmented and that were also supported by

multinational firms' application of global innovation strategies (Cuervo-Cazurra et al., 2020). By allowing the multinational company to increase its control over the early stages of the value chains – such as R&D and design – and then to have the production stages outsourced close to their consumer markets, it is assumed that this development would create more trade in services, in particular related to intangible assets and data.

The different development paths are relevant for different industries. For transport, reshoring and regionalization may be the most relevant. For the knowledgeintensive service sectors, reshoring would not be the first option. Here, the greater opportunity would rather lie in more geographical diversification. The pharmaceutical industry may see increased opportunities to replicate products and, for example, find opportunities to produce exactly the same vaccine at different production facilities around the world. Significant for the development is also the possibility that telecommunications technology may radically reduce the costs of faceto-face meetings (Baldwin, 2018). Also important for the development of value chains is, according to Baldwin, the concept of virtual immigration: a situation in which, with the help of technology (telerobotics), it would be possible for workers in one country to complete tasks in a factory in another country via locally connected robots. Lund et al. (2019) pinpoint advanced economies with a well-educated workforce, developed service operations, strong eco- and innovation systems for the backing of entrepreneurs, and large prosperous consumer markets as the winners in the development of the next generation of global value and logistic chains.

# 8.9 THE MACROECONOMIC DEVELOPMENT POINTS TO THE NEED FOR A NEW BUSINESS MODEL

The global competition for jobs and the new mercantilist development in the political economy indicate that the old business model – with the global factory, the global logistics chain and the global value chain – will face challenges. With the globalization of markets under siege, this implies that businesses will encounter larger costs, for example, in terms of time losses in border crossings. Brexit provides a first indication of such struggles. This calls for a reorganization of the business configuration of the internationally oriented firm. Which model will then apply? Could we see a concentration of production in regions? For example, will the US market be served with goods made in the US and with inputs entirely from the US? The Chinese market with goods made in China with inputs from China?

Hence, will production roll back so far that the market in each individual country is covered by production in that very country and with inputs from there?

The need for new business models is accelerated by a climate policy that may require each company to bear the costs of its own negative climate impact in the form of, for example, carbon dioxide emissions related to transport. With such a policy, it will no longer be profitable to outsource production to a distant country for a tiny value-added gain, such as a Norwegian company sending shrimps to be peeled in China and then transporting the peeled shrimps back to be sold to Norwegian customers. The climate issue may also contribute to closed borders to the extent that the gloomy scenario of 500 million refugees on the move from their home countries for climate reasons, in a not-too-distant future, turns into reality.

Different industries may require different business models in line with the four models outlined above when forced to abandon the old global logistics chain that was based on a more or less friction-free passage across borders. The geopolitical situation will determine the choice of business model for the individual firm and the degree to which it must reorganize its production. However, the re-emergence of mercantilism will be accompanied by new or reinforced idiosyncratic risks that, for citizens in most countries, will mean a great leap backwards in terms of prosperity, and for firms headquartered in these countries higher risk management costs (Oxelheim & Wihlborg, 2008).

In this chapter, we have pinpointed a number of challenges faced by business leaders as a consequence of the re-emergence of mercantilism in the global economy of the 2020s. As stressed in the introduction, the rollback of globalization this precipitates is of particular importance for companies based in small open economies such as the Scandinavian countries, where companies are heavily dependent on access to foreign product markets and international investment opportunities. We specifically highlight how the combined effect of the financial crisis, the technology shift and the pandemic has led politicians to turn to the use of state aid in their fight for new jobs. In addition, central banks are using "helicopter money" in the spirit of enhanced economic nationalism in order to reduce the negative financial effects of the Covid-19 pandemic. Countervailing forces to the resulting rollback of the global logistic chain are represented by technology and innovation, as well as multinational firms' abilities to manage political exposure. The successful multinational firm will need to embrace all these challenges by reorganizing itself using a flexible global value chain and to act as a good local citizen by supporting host-country employment and development.

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