

European issues

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# Which kind of *supply chain* for Europe?

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Ultimately, the world of raw materials is one with little media coverage. It enriches some, impoverishing others, leaving behind the shadow of a bane that is rooted in the history of international trade. It is because of this that an entire continent can develop, and it is also because of it that an entire continent becomes enslaved by the resources it contains. All periods of history have proven this to us. Thanks to commodities, we are constantly feeding the machine that creates new markets, fuelled by new products, if not new services, which are ever more demanding in terms of natural resources. The coronavirus is challenging this business model; due to disruptions in the production chain, we are already seeing, for example, the risks associated with the supply of drugs, 80% of which are manufactured in Asia. The lithium that is essential for mobile phones and computer batteries, the rare earth minerals that are an integral part of solar panels and wind turbines, as well as semiconductors, are also mainly manufactured in China.

It is now a viral risk in the epidemiological sense of the term, which is forcing us to rethink our supply chains and the quality of our supplies, as well as their quantity, possibly turning the spotlight back on European SMEs. Let us hope that they will now have the capacity to redefine, in the post-crisis period, the new production/consumption layout of our continent.

## THE BANE OF RAW MATERIALS

In ancient history and up to the Middle Ages, Christian Europe, for theological-cultural reasons, was to become attached to gold, whereas the secular world moved closer to silver. Gold from Ghana was exchanged for salt and slaves in Mali and was used to pay the Roman legions. The Greeks exploited the silver mines of Laurion to finance their cultural influence, and Golconda diamonds and precious stones were used to fuel the conquests of the globe for fifteen hundred years, before the discovery of South African mines at the end of the 19th century. In the Middle Ages, the mines of Latin America supplied Europe, and the silver mines of Iwani Ginzan, the Japanese shogunate, as well as gold deposits in Siberia and Iraqi cereals, financed Nicholas I until the Crimean War. Thus, for centuries, soldiers, explorers and merchants have been in constant search of precious metals and raw materials more generally, to finance armies, to make travel profitable and to pursue them, to develop trade and also to secure

their public/private supplies for territorial expansion or, quite simply, for the development of national economies. But this economic manna went hand in hand with barbarism and inequality, served by slavery of which the destitute were considered merely as an adjustment variable. Such is the bane of raw materials. "*Auri sacra fames!*" or the hunger for gold. In the 1960s, Fernand Braudel defined the notion of the world economy as an economically autonomous piece of the planet which, according to him, would be essentially self-sufficient and to which its connections and internal exchanges would confer a certain organic unity. At the end of the 1970s, against the backdrop of the oil crises (1973-79) that would herald the end of the Glorious Thirty for the Western world, the international economy was looking for a second wind to keep this Braudelian economic autonomy alive.

## THE CREATION OF NEW MARKETS

The division of production into several distinct stages has been enabled by advances in technology, transport and communication and, above all, by the opening up of world markets. In the 1980s, the three-D rule of French economist, [Henri Bourguinat](#) applied: *Financial deregulation, Global decompartmentalization* of companies, *Dismantling of the State*. As part of the implementation of a policy of economic liberalisation, financial deregulation would allow the market economy to produce more

money to finance the appetites of governments and businesses from financial platforms such as stock exchanges. The global decompartmentalization of firms would favour direct investment abroad, allowing financial transactions to be carried out between parent companies and subsidiaries. The gradual dismantling of the State would thus further favour the market and its invisible hand by relieving it of the weight of institutional and regulatory constraints. One of the collateral effects of this sudden, organised deregulation was the creation of financial mass and the decorrelation between its volume of paper and its physical form. Paper, i.e. an increase in paper transactions in raw materials, and the physical, represented by market counterparties and tangible constraints by the reality of the availability of resources afforded by the planet. This decorrelation led to an increase in the price of commodities and to the extraction of raw materials all over the world in a bid to re-establish equilibrium. This was the reign of liberal economists (Friedman, Hayek), from the Chicago school, a trend of American sociological thought that emerged at the beginning of the 20th century. The 1990s and 2000s witnessed the beginning of the reign of the GAFAM (Google and its search engine, Amazon and its online shopping mall, Facebook and its worldwide address book, Apple and its iPhone, Microsoft and its office environment) and their insatiable appetite for rare earths. The years 2010 would also see the birth of the NATU. (Netflix, AirBnB, Tesla, Uber), accelerating the race for strategic metals and raw materials more generally, which are essential to the proper functioning of all of these new technologies.

The world experienced a demographic, economic, technological and environmental revolution at the same time. In less than thirty years, and with four times as many people in one century, world trade has increased more than tenfold, both in volume (mass of products traded) and in value, from \$2 trillion (1970) to \$22 trillion (2014). World trade now accounts for nearly a quarter of total wealth, and the Gross World Product (GWP) is around \$80 trillion (2014), with half of this wealth production coming from less than 500 transnational, global and regional companies combined. With \$4 trillion in trade, East Asia is the

world's second largest trading hub after Europe (\$7 trillion) and ahead of North America (2,500), with China becoming the world's workshop from the 1990s onwards. The total capitalization of the world's stock exchanges is \$60 trillion (2014), the equivalent of four times the wealth of the United States. Speculation (including commodities) accounts for 15% of world capitalization (2014), plus \$10,000/12,000 billion in the hidden circuits of economic globalization - drugs, arms, prostitution, counterfeit goods, etc. - and other contested markets. Technically, this group is fed by multiple connections between stakeholders, and an Internet network that follows the path traced for five millennia by the successive inventions of writing and printing, thereby imposing itself as their growth relay.

#### **THE QUEST FOR A MORE SUSTAINABLE WORLD ECONOMIC MODEL**

In the era of the third energy crisis and the explosion of China and India with their combined population of 2.6 billion inhabitants, as well as consumers whose purchasing behaviour is changing, global economic governance and regulation is becoming increasingly essential. We will also have to take into account the demographic and economic explosions of certain African countries such as Nigeria. The economy, in fact and increasingly so, is becoming a means of identifying and managing rarities, economic growth and development by creating new ones, at the same time leaving us arbiters over the order of priorities. The Circle of Economists has identified three types of scarcity:

- those of the environment and natural energies (air, water);
- the older, often cyclical ones (oil, gas), which have a strong impact on the economy if they run out;
- those of medicines and other agri-food subsistence products (wheat, millet), which have become issues of equality in the world and therefore less and less acceptable to many people.

Over the last fifteen years or so, a cyclical issue has emerged or rather reappeared, that of securing raw material supplies, which is becoming a major concern for governments and companies wishing to assert

their production and consumption standards. New contingencies, which are upsetting the balance of power, are forcing both companies and governments to adapt. The latter, insufficiently protected from the uncertainties linked to strategic metals, agricultural products or other fishery resources, are increasingly exposed to geopolitical risks, which have once again become the focus of concern for entrepreneurs around the world.

### **IN THE SPIRIT OF A NEW APPROACH TO INTERNATIONAL RISK MANAGEMENT**

If a decade ago, geopolitical risk took the pole position in terms of future risks, it has just been dethroned in favour of the threat of the pandemic.

For several months now, with Covid-19, we have been witnessing an unprecedented economic, financial and social upheaval. For, even though the globalisation of trade is a milestone in history, never before have we reached this stage in the fragmentation and atomisation of corporate logistics and the extreme fragmentation of production processes. As a result, supply chain managers are constantly having to refine their calculations on all the items in the entire value chain, which means reducing costs but at the same time weakening increasingly complex multimodal networks. Cholera was the disease of uncontrolled urbanization. In the eyes of history, the great contagions might offer us a mirror of our society. But what does this new coronavirus conceal?

### **THE IMPACT OF THE HEALTH CRISIS ON RAW MATERIALS**

First of all, it was the stock exchanges that became unhinged: CAC40, DAX, IBEX or Borsa Italiana were immediately in the red. In stock market jargon, if it were the other way around, we would have called this overshooting. At present, it is rather more a matter of loss of investor confidence, the first index in the eyes of economists. Almost all commodities have been affected by this generalized loosening. Lithium, coltan and oil have been less in demand over the last two months, as upward forecasts have been revised and corrected. In March 2020, OPEC warned that global storage capacity, equivalent to one billion barrels, might be surpassed by the end of May 2020. By April

2020, more than 70% of the world's oil tanks had already been put to the test. History has rarely known a period in which those selling oil had to pay buyers to get rid of Light, Brent and even bituminous, because they could not find warehouses to store them.

### **REDESIGNING LOGISTICS**

From a logistics point of view, this transformation is likely to occur across all value chains, many of which could be relocated, diversified or even reinvented. Up until two months ago, supply chain projections assumed that these chains would no longer expand, but, with few exceptions, remain as they were without contracting. The Covid-19 pandemic has overturned even the most optimistic forecasts. A certain trend towards the relocation of certain activities or of [key investments](#), and even certain industries, or economies might even become the trend in logistics. Another, less radical approach might be to adopt measures to address the concentration of production in a small number of countries, seeking both geographical and company-level diversification. Thus, the whole strategic vision for the articulation of value chains must now be rethought. But this may come with pain and suffering, judging from the artificial respirators, amongst others, which comprise 500 different components. On the one hand, some raw materials may see their prices explode to satisfy new demand, such as curare, an essential drug for resuscitation. On the other hand, however, production is emerging as a one-off, or at least we can hope so without having to make too much progress, and no country has the capacity to produce such large volumes at competitive prices. It takes 18 months to re-qualify a factory. Such an exorbitant cost for such a small market would be economically unviable. Investment commensurate with the challenge is required, and nothing will be possible if governments do not reach out to businesses, with certain supportive measures such as, amongst others, the creation of a relocation tax credit.

Experts at the Boston Consulting Group have calculated that the total production costs of a standard Chinese

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factory are now almost equivalent to those of its Polish counterpart. Major groups are now thinking in terms of geographical zones, seeking *regional low cost* within each of these. Re-regionalization movements, therefore, the multiplication of customs disputes, increased transport costs linked to the consideration of the price of carbon and, above all, satisfying the desire of buyers to "consume locally" may force many companies to readjust their score. In IT services and call centres, awareness of over-dependence on India is also beginning to emerge. Repatriating part of their IT services to countries such as Romania could constitute semi-relocation. However, the notion of independence has one limit - that of access to raw materials. For

Covid-19 or not, China will remain the world's leading producer of rare earths, which are vital for the technologies of the future. These minerals have been used for decades now in our mobile phones, computers and other ultra-connected nomadic objects. During the Enlightenment, Adam Smith already explained the manoeuvre to best control costs and generate a better profit considering specializations per country. At the time, due to economic reasons, it was sometimes better to sell your wine to a country where it was scarce in order to make the most of the tandem of supply/demand, rather than to distribute it in your own country. Especially if the purchasing country consumed much more wine than the one producing it.

*Illustrations du poids de la Chine dans l'économie mondiale*



## **STRATEGIC RELOCATION: AUTOMOTIVE, HEALTH, AGRI-FOOD**

The aim would be to target essential sectors and then to identify the most relevant parts of the value chain for relocation (certain stages of production, which do not necessarily depend on specific sources of supply), without straining companies' competitiveness. The automotive industry, a sector considered essential by many governments, and then health, one that has recently been ravaged by tensions regarding the supply of medicines for patients in intensive care. A share of the production of active ingredients, 60 to 80% of which are currently manufactured outside European borders could be relocated - for there are probably products of unparalleled strategic health interest that should be relocated in part to the country or, failing that, the continent of origin. In Europe, Sanofi has already announced the creation of a European champion for active ingredients from its existing factories, whose production could increase by 5 to 10% a year to meet demand. In the agri-food industry, the third priority sector, the question concerns not so much relocation as securing the supply chain. But to ensure food security, we must first ensure producers' financial security. States, or even common markets, could finance storage solutions, to store milk powder when prices are too low, for example.

The increasingly accessible "cobots", collaborative robots, artificial intelligence, augmented reality and 3D printing can help certain segments of the industry become highly competitive again. This already means that we can be more reactive, with short production runs at reasonable costs. This is good news for relocation, but not so much so for employment.

## **GLOBALISATION 5.0**

As explained by historian Yuval Noah Harari in an [article](#) in *Time*, the antidote to the health crisis is not less but more globalization, so that we circulate information about the virus faster than the virus itself, and to pool research. Today this means the

organisation and distribution of the production of protective and care equipment, and tomorrow the production of vaccines and treatments, followed by the remaining supplies of all kinds, whose foundations need to be reconsidered.

The attack against globalization is [therefore absurd](#). A positive but often overlooked sign is that the rise of the countries of the South has tipped industry and jobs towards them, reducing the wealth gap with the developed nations by more than a third. However, we are now aware of the fragility of value and supply chains, which are overly dependent on Asian countries in general and China in particular. It will therefore be necessary to diversify, or even relocate or reindustrialise, including for security reasons: in the European Union, industry accounts for less than 25% of GDP. However, it is important to rethink industrial location in a coordinated manner, because none of the sectors could survive by limiting themselves to local markets alone. The security of strategic production, including health, should also be rethought. Finally, we must devise a new structure for international institutions and rules to revive trade, which has collapsed by 30%. China is exporting its model of total capitalism via the new silk routes, loans to States and central banks in emerging countries and via health diplomacy. But is it a model for stable globalisation? A regionalised form of globalisation could well be set in motion. Coordination will be the key to successful recovery, along with resilience. In this context, the European Union, which has been supporting a reform of the World Trade Organization (WTO) for some time now, may have a key role to play.

## **THE RETURN OF THE SME**

In this new landscape that is now taking shape, SMEs may have a new card to play. An arbitrary decision by the Chinese government could force a factory to close within a fortnight and thus disorganise, or even dismantle, an entire globalised supply chain. For quantitative reasons, sources often prefer to supply large accounts rather than European SMEs.

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COVID-19 could therefore push the most resilient ones to reshape their supply chain:

- by forcing them to tighten their value chains;
- by allowing them to relocate some of their activities, or/and certain stages of production;
- by offering more responsible "consumers", and above all those who are more aware of the new challenges, the opportunity to consume on a continental rather than transcontinental basis whenever possible, as some high-tech sectors will not always be able to do without Chinese semiconductors.

This is the eternal story of the new winners, which some European companies will become, as they return

as close as possible to their consumers and their new purchasing behaviour. European SMEs might also seek to develop the regionalisation or even relocation of their purchases, which would mean manufacturing or sourcing components in several places, even if this means paying a little more. It remains to be seen whether the European consumer is prepared to pay the price, that is, of course, to accept a loss of purchasing power.

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