

36/2021

06/10/2021

Pedro Sánchez Herráez

Flow of resources on a global scale!... what if there is a blockage?

[Visit the WEBSITE](#)[Receive the E-NEWSLETTER](#)

Flow of resources on a global scale!... what if there is a blockage?

Abstract:

One of the consequences of globalization is the creation of long and complex value chains, in which, and according to strictly economic criteria, the different stages of the production process are carried out where the cost is lower, regardless of the distance existing between these points and the final consumers. And this implies a huge global flow of resources and goods, especially by sea.

Given that this fact contributes to the increase of global interdependence, it is seen, from certain perspectives, as a means that contributes to world security. But it also increases the vulnerability of nations, since these resource flows go through bottlenecks that make them tremendously vulnerable, and, if they are blocked, the consequences would be devastating for the nation's most dependent on these chains.

A brief analysis of the physical bottlenecks of global supply chains, some examples — past and present— of what the blocking of the usual flow of resources entails and a final reflection make up this analysis.

Keywords:

Globalization, maritime transport, choke points, land corridors, resources, reserves.

NOTE: The ideas contained in the **Analysis Papers** are the responsibility of their authors. They do not necessarily reflect the thinking of the IEEE or the Ministry of Defence.

¡Flujo de recursos a escala global!... ¿y si hay un bloqueo?

Resumen:

Una de las consecuencias de la globalización es la creación de largas y complejas cadenas de valor, en las cuales, y atendiendo a un criterio estrictamente económico, se realizan las diferentes etapas del proceso productivo allí donde el coste es menor, al margen de la distancia existente entre dichos puntos y los consumidores finales. Y ello implica un ingente flujo mundial de recursos y mercancías, especialmente por vía marítima.

Dado que este hecho contribuye al incremento de la interdependencia global, es visto, desde determinadas ópticas, como un medio que contribuye a la seguridad mundial. Pero también incrementa la vulnerabilidad de las naciones, pues esos flujos de recursos atraviesan cuellos de botella que los hacen tremendamente vulnerables, y, caso de un bloqueo de los mismos, las consecuencias serían demoledoras para las naciones más dependientes de dichas cadenas.

Un somero análisis de los cuellos de botella físicos de las cadenas de suministro globales, unos ejemplos —del pasado y del presente— de lo que supone el bloqueo del flujo habitual de recursos y una reflexión final conforman en presente análisis.

Palabras clave:

Globalización, transporte marítimo, *choke points*, corredores terrestres, recursos, reservas, cadenas de suministro (valor) globales, seguridad.

How to cite this document:

SÁNCHEZ HERRÁEZ, Pedro. *Flow of resources on a global scale!... what if there is a blockage?* IEEE Analysis Paper 36/2021.

https://www.ieee.es/Galerias/fichero/docs_analisis/2021/DIEEEA36_2021_PEDSAN_Flujo_EN_G.pdf and/or [bie³ link](#) (consulted day/month/year)

A global and interconnected world!

Growth of the phenomenon known as globalisation, the increased flow of people, goods and resources, ideas and information at increasing speed and across the globe, is a fact, a tangible reality. Products from all over the world can be found on the shelves of most shops, and manufactured goods are often made from materials from multiple sources.

Although it is not strictly speaking a new phenomenon, since the great empires have always materialised and maintained interconnections on a global scale, it was in the 20th century with the exponential development of communication technologies—which reduced the costs of this essential service to be able to act on a worldwide scale to a minimum that almost any entity could afford—and the use of the metallic container—a means that greatly reduced the costs of transporting, loading and unloading goods and materials¹—that globalisation took on the form we know today, thus increasing the intensity and speed of these flows.

These new capacities led to the generation of a ‘new wave of globalisation’² in the late 1980s; the lowering of costs, especially maritime traffic, as well as the ease of movement of capital and foreign investment led many industries to relocate to parts of the world where labour was much cheaper, causing many to set up in Asia-Pacific, and China thus became the ‘factory of the world’.

Consequently, not only is there a major loss of industrial fabric in countries which until then had been leading the way in manufacturing on a global scale, changing from being producers and exporters to mere buyers, but also the flow of raw materials (materials and energy products) to Asia and the return of processed products from that continent resulted in the creation of long and complex value chains on a global scale.

¹ LEVINSON, Marc. ‘The box: How the shipping container made the world smaller and the economy bigger’, *Princeton University Press*, New Jersey, 2006 (there is a second edition with a new chapter published in 2016)

² Different analysts do not always point to exact milestones and moments in these different ‘waves of globalisation’, in which, sharing the growing interconnection on a global scale, differences are marked between, for example, goods and services that do so as a matter of priority. See LEVINSON, Marc. ‘Outside the box. How globalization changed from moving stuff to spreading ideas’, *Princeton University Press*, New Jersey, 2020

Long global value chains?!

As a result, the manufacture of any product is divided into different independent stages, carried out exclusively on the basis of economic criteria, stages which are carried out wherever the cost is lowest regardless of the geographical distance between the centres where they take place. And despite the circumstances—the economic crisis of 2008, the narrowing of the wage gap between Asia and Europe, etc.—today, 50% of world trade is directly related to large value chains, and it is extremely difficult to find industrial products made entirely in the same territory³.

This situation generates powerful dependence, in a very wide range of products, on Asia-Pacific and on the ‘factory of the world’, as well as on the indispensability of keeping the planet’s major transport routes open, facts that on occasions have led to the emergence of certain voices dissonant with this situation and to the request for a certain rethinking of these long value chains, especially for strategic goods and resources (those which, due to their imperative need and high value or as they are difficult to substitute, are almost irreplaceable), although the system certainly functions with efficiency under normal conditions.

However, there have been several recent moments in which this model has been strained, perhaps giving warnings in this respect: from the outbreak of the trade war between the United States and China in 2018, which generated tensions, rising prices and occasional shortages of certain items to, and above all, during the first moments of the COVID pandemic, brutally revealing how a large part of the planet is dependent on the manufacture of basic necessities in remote places. In some cases, these items are simple to manufacture but their production had been ‘outsourced’ or ‘delocalised’ based solely on economic criteria, making them unavailable in many countries of the planet despite their imperative need.

Thus, during a real crisis, faced with a situation in which certain goods were required—as in the case of this pandemic—highlighted the shortage of certain supplies, lack of stock of essential materials, lack of production capacity for quasi-critical resources. Therefore, items such as paracetamol and face masks, mainly manufactured in Asia, were sought after and, in many cases, the subject of such a degree of dispute that the term ‘mask

³ GANDOY, Rosario. ‘Cadenas globales de valor y COVID-19’ [Global Value Chains and COVID-19], *Asociación Libre de Economía*, 10 July 2020. Available at: <https://alde.es/blog/cadenas-globales-de-valor-y-covid-19/> NOTE: All web links in this paper are active as of 22 September 2021.

diplomacy' was coined⁴; and only some nations, such as Finland, which had stocks accumulated since the Cold War⁵, had no problems with certain items during those initial moments.

In view of these facts, the need to pay greater attention to safety and not only to cost savings, to the need to have larger inventories (reserves)⁶ of resources and materials that are of vital importance... and even the need to move from 'globalisation' to a certain 'regionalisation' which, among other aspects, would allow value chains to be shorter and, therefore, production to be 'closer to home', is beginning to be mentioned. And while some fields are starting to point out that China is using value chains as a weapon⁷, the idea is gradually growing that the high level of dependence on these long chains must be reduced, which would also contribute, in the case of the European Union, to the longed-for 'strategic autonomy'⁸.

In any case, global flows continue, and the space through which most resources and goods are transported, all those elements that make these long chains possible is—given, among other aspects, their greater economic efficiency—the sea.

The world's motorway... full of bottlenecks!

The sea, the ocean, the waters that cover most of the planet, are configured as a space capable of linking (coastal) points all over the world. Some 80% of global trade flows

⁴ 'China lanza la "diplomacia de las mascarillas" para mejorar su imagen' [China launches "mask diplomacy" to improve its image], *ABC*, 1 April 2020. Available at: https://www.abc.es/internacional/abc-china-lanza-diplomacia-mascarillas-para-mejorar-imagen-202003290353_noticia.html

⁵ 'Coronavirus: los almacenes secretos de la Guerra Fría por los que Finlandia no tiene escasez de mascarillas' [Coronavirus: the secret stores from the Cold War meaning that Finland has no shortage of face masks], *BBC.com*, 16 April 2020. Available at: <https://www.bbc.com/mundo/noticias-internacional-52283271>

⁶ Following the negative experiences of the United States with regard to the shortage of certain materials, Washington issued the Strategic Materials Act as early as 1939 (available at: http://everything.explained.today/Strategic_and_Critical_Materials_Stock_Piling_Act_of_1939/), to create oil reserves; and established the Strategic Petroleum Reserve in 1975, with the capacity to store a year's worth of the country's consumption. And China has been increasing its reserves of certain resources and materials for some time (as a mere example, consult the following information: <https://economictimes.indiatimes.com/strategic-commodity-reserves/articleshow/4311964.cms?from=mdr> and <https://finance.yahoo.com/news/china-stockpiles-chips-chip-making-210000407.html>)

⁷ O'DEA, Christopher R. 'How China weaponized the global supply chain', *The National Review*, 20 June 2019. Available at: <https://www.nationalreview.com/magazine/2019/07/08/how-china-weaponized-the-global-supply-chain/>

⁸ 'Why European strategic autonomy matters', *External Action Service*, EUROPEAN UNION, 3 December 2020. Available at: https://eeas.europa.eu/headquarters/headquarters-homepage_es/90260/

through the sea, so without maritime trade, the economy would collapse on a planetary scale⁹.

But despite its immensity, despite the sensation of infinite waters, the ocean has some obligatory points of passage, some bottlenecks commonly known as 'choke points', which are areas of great vulnerability and easement for maritime traffic and, therefore, for world trade and security. While there are different listings and classifications, they typically include the Panama and Suez canals, the Straits of Malacca, Hormuz, the Straits of Bab el-Mandeb and Gibraltar, the Turkish Straits and the Cape of Good Hope, among others. As an example, the Pacific Ocean, which occupies a third of the planet's surface, is only connected to the Atlantic Ocean at three points: via the northern route (considering that the Arctic is, or was, frozen for most of the year), via the Suez Canal (an artificial construction owned by a country) and via the southern tip of the American continent, through the Magellan or Drake Passage, where the climate is often adverse.

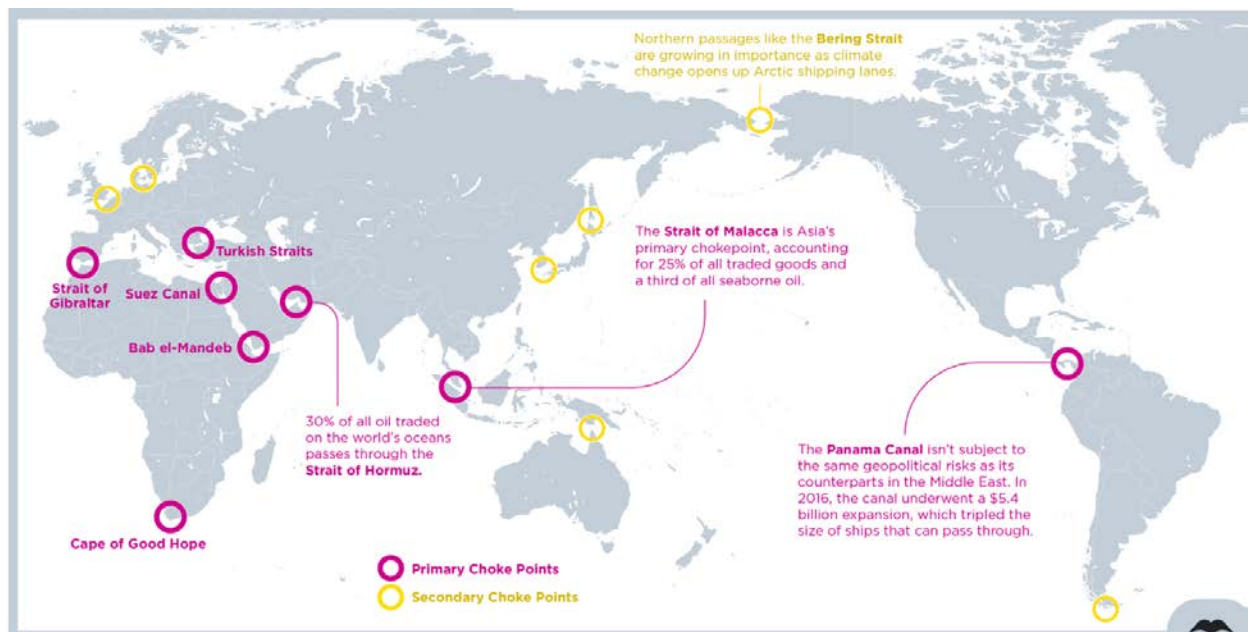


Figure 1. Maritime choke points. Source. GIS. Available at: <https://thegeopolity.com/wp-content/uploads/2021/03/maritime-choke-points.png>

As can be seen in the image, these bottlenecks are a powerful easement that can become a serious threat as they are easily used to physically block, or even eliminate—due to the

⁹ BRAW, Elisabeth. 'Without shipping, the global economy sinks', *Foreign Policy*, 31 March 2021. Available at: <https://foreignpolicy.com/2021/03/31/suez-canal-ever-given-shipping-global-economy-sinks/>

increased costs of using alternative routes that require longer journeys—the viability of these long value chains.

And that high risk is caused by multiple circumstances; despite advances in navigation, weather is still a factor to be taken into account, especially at the southernmost points and, obviously, on the Arctic route, the Northern Route. However, in addition to these intrinsic circumstances, the existence of forced crossing points, which are often very narrow, not only exponentiates the possibility of accidents, but from a safety point of view they are also true ‘black holes’ due to the relative ease with which they can be forced to close. And, since there are no simple or cheap alternatives, these choke points have become the hubs of the planet. Their very name, choke point, perfectly highlights this reality.

For this reason, and throughout history, there has been a desire to build canals that would make it possible to significantly shorten maritime routes and thus shorten navigation times and costs, in addition to creating alternatives to existing choke points.

Thus, centuries ago, the former Spanish Empire already had the idea of linking the Atlantic and the Pacific via Central America by means of an artificial waterway; after several projects, the construction of the Panama Canal was finally completed in 1914. And in relation to the global impact of this work, in addition to the fact that nearly 6% of the world's maritime traffic passes through its waters, that there is a type of vessel specifically designed to be able to make the most of the space in the lock chambers (the so-called Panamax series), and that the expansion of the canal's capacity—completed in 2016—has led to the design and construction of a new series of vessels called Neopanamax or Postpanamax¹⁰ in order to make the most of the size of the new, larger locks, speaks very clearly of this global importance.

Elsewhere on the planet, the Suez Canal offers passage through Egypt from the Mediterranean to the Red Sea and from there to the Indian Ocean, avoiding the entire African continent. Since its opening in 1869, it has been the object of desire of different empires and powers¹¹; we need only recall the central role it played throughout the Cold

¹⁰ For reference, panamax series vessels could carry a maximum of 4,400 containers, while the new postpanamax series can carry up to 12,000. JASSAL, Rajeev. ‘What is panamax vessel?’, *My Sea Time*. Available at: <https://www.myseatetime.com/discussion/what-is-panamax-vessel>

¹¹ A review of events relating to the canal can be found in *HISTORY*, ‘9 fascinating facts about the Suez Canal’, 15 April 2019. Available at: <https://www.history.com/news/9-fascinating-facts-about-the-suez-canal>

War on the southern flank of Europe¹², as the axis through which most hydrocarbons reached the European continent, or to consider that, at present, more than 8 billion euros a day in goods circulate in both directions through its channels and locks¹³.

But canals are not the only key points for trade and global value chains—that is precisely why they were built—, other choke points are also key points to a greater or lesser extent. Without aiming to review them all, it is simply worth pointing out that, in a world in which the planet's centre of gravity is shifting towards Asia-Pacific, the Strait of Malacca¹⁴, located between Indonesia and Malaysia and a crossing point from the Pacific to the Indian Ocean, is one of the most sensitive points in the world. Some 90,000 ships a year sail its waters, which at some points are no more than 2.8 km wide and 25 m deep, both tankers supplying the growing energy needs of China and Asia and ships carrying the remaining raw materials to keep the 'factory of the world' in production; and, in the opposite direction, like an equally endless torrent, manufacturing flows for the rest of the planet.

As a reminder of how the dynamics of the planet impact human activities, climate change is causing the Arctic to melt; in addition to a range of associated effects (severe in most cases) one is the increasing possibility of navigating the Arctic without excessive recourse to icebreakers and other measures that made commercial use of the Northern Route prohibitive.

The melting of the Arctic ice and the associated increase in the navigability of its waters opens up a new potential shipping lane, which largely explains—along with the area's wealth of minerals, hydrocarbons and fishing—the growing dispute over the Arctic Sea. And with the Arctic melting, Russia (which has the world's largest fleet of icebreakers) expects the route to become a 'mini Suez Canal', which would give it a powerful degree of control over world trade because, despite disputes and claims, for the time being the

¹² SÁNCHEZ HERRÁEZ, Pedro. 'Rusia en el Mediterráneo!: ¿Guerra Fría 2.0?' [Russia in the Mediterranean! Cold War 2.0?], Analysis Paper 31/2019, Spanish Institute for Strategic Studies, 20 November 2019. Available at: https://www.ieeee.es/Galerias/fichero/docs_analisis/2019/DIEEEA31_2019PEDSAN_Rusia.pdf

¹³ 'Suez Blockage is holding up \$9.6 bn of goods a day', *BBC News*, 28 March 2021. Available at: <https://www.bbc.com/news/business-56533250>

¹⁴ As an initial reference, facts and curiosities about this strait can be found in *Asiadonde*, 'Estrecho de Malaca y su importancia estratégica' [Strait of Malacca and its strategic importance], 12 August 2020. Available at: <https://asiadonde.com/estrecho-de-malaca/>

routes essentially run through its waters, and the necessary infrastructure and support facilities are on its soil.

The first container ship without special supports to sail through the Arctic route did so in August 2018¹⁵, although other types of ships had sailed the route before, including vessels of the Chinese company COSCO¹⁶. This route reduces the sailing time between China and Europe by one third, which, if sea conditions are suitable, leads to significant cost savings and avoids passage through the Strait of Malacca and the Suez Canal.

The sea, therefore, is the planet's high-capacity transport route, despite existing difficulties and bottlenecks; but, given that not all the planet is water... are there other possibilities for transporting goods?

The paths of the Earth... and any alternative?

The land corridors, the sand roads of the world are what they are, because although in this third millennium in which technology and even the virtual world occupies a growing space, the tyranny that on many occasions geography, orography and even climate and atmospheric phenomena impose, although they seem to be something from the past and alien to the current reality, is not so. And that is why the roads of the world are what they are.

For this reason, and for millennia, people and goods, cultures and wars, have used the same land corridors; we need only reflect briefly on the Iberian Peninsula or the Balkans as crossing points between continents and the struggles for their domination, to recall the impact the ancient Silk Road had on the development of large parts of the Eurasian continent, or the struggles of multiple empires in an attempt to control Afghanistan to be aware that, despite the vastness of the land mass emerging from the ocean, roads are relatively limited. This is without even considering the essential need for transport infrastructures¹⁷, human works that articulate and mesh the territory and allow materials

¹⁵ 'Maersk sends first container ship through Arctic route', *Business Insurance*, 24 August 2018. Available at: <https://www.businessinsurance.com/article/20180824/NEWS06/912323560/Maersk-sends-first-container-ship-through-Arctic-route>

¹⁶ It is no coincidence that, despite the fact that no part of its territory is in the area, China declared itself an Arctic power, or that it has issued a document at the highest level on its Arctic policy. THE STATE COUNCIL. THE PEOPLE'S REPUBLIC OF CHINA, White paper, 'China's Arctic Policy', 26 January 2018. Available at: http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm

¹⁷ In that sense, German Friedrich List (1789-1846) and his claim to create a network of railways that would make Germany a fortress in the heart of Europe, or Halford John Mackinder (1861-1947) from Britain and

and resources to flow through it, as well as connecting with maritime ports; even if resources arrive by sea, but they cannot be delivered to the end consumer, inland in many cases, they are of little or no use.

Given this reality, and despite the fact that transport capacities are smaller and more costly than by sea, it is sometimes the only feasible means of transport. In a world in global conflict, disputes are once again intensifying over the roads of the Earth, and especially over the Rimland¹⁸, the great arc that encircles the outer part of the island continent, the great central land mass of the Eurasian continent, as one of the key geopolitical spaces on the planet.

Consequently and for some years now, both to seek a certain alternative to maritime transport—given that the US Navy is still, for the time being, the most powerful on the planet—and, it is sometimes said, to be able to control the infrastructures that run along these land corridors—potential control exercised through the ‘debt trap’¹⁹—in a new project within the framework of the Belt and Road Initiative, China is seeking to increase its connectivity through Central Asia to unite and link the countries of Central and South Asia that do not have access to the sea (landlocked countries), thus going from being ‘landlocked nations to land-connected nations’²⁰. These Central Asian countries, the ‘Tans’, remote and enclaved and seemingly unimportant, thus become ‘the contested bridge between Asia and Europe’²¹.

The importance of the land corridors²² cannot therefore be neglected—again, on a different scale to maritime transport—and one need only look at the spate of recent news

his proposal to control the railways of the European continent in order to prevent the continental powers from standing up to Great Britain.

¹⁸ SÁNCHEZ HERRÁEZ, Pedro. ‘Siglo XXI: ¿el retorno a la lucha por el RIMLAND?’ [21st century: return of the fight for the RIMLAND?] Analysis Paper 12/202, Spanish Institute for Strategic Studies, 17 March 2021. Available at:

http://www.ieeee.es/Galerias/fichero/docs_analisis/2021/DIEEEA12_2021_PEDSAN_Rimland.pdf

¹⁹ FRANKLIN, Lawrence A., ‘China’s “Debt-trap” diplomacy with third-world nations’, *Gatestone Institute*, 28 August 2020. Available at: <https://www.gatestoneinstitute.org/16396/china-debt-trap-diplomacy>

²⁰ ‘China está lista para forjar más estrecha asociación de conectividad con Asia Central y Meridional, dice canciller Wang’ [China ready to forge closer partnership on Central, South Asian connectivity: FM], *Xinhuanet español*, 17 July 2021. Available at http://spanish.xinhuanet.com/2021-07/17/c_1310066786.htm

²¹ SÁNCHEZ HERRÁEZ, Pedro, ‘Asia central, el disputado puente entre Europa y Asia’ [Central Asia, the contested bridge between Asia and Europe], Spanish Institute for Strategic Studies, *Panorama Geopolítico de los conflictos 2016*, pp. 313-350. Available at: http://www.ieeee.es/Galerias/fichero/panoramas/Panorama_Geopolitico_Conflictos_2016.pdf

²² See CASTRO TORRES, José Ignacio. ‘La importancia de los corredores terrestres: el caso de Afganistán’ [The importance of land corridors: the case of Afghanistan]. Analysis Paper 29/2018, Spanish Institute for Strategic Studies, 1 August 2018. Available at:

reports on the importance of Afghanistan as one of the crossing points of this ancient Silk Road, and how, following US withdrawal from Afghanistan, it has become the object of China's desire to continue its Belt and Road Initiative through Afghan territory, a strategy that continues to generate profound differences of opinion²³ regarding Beijing's ultimate aims.

And, if the ocean is ruled out, alternatives to land communication are scarce and costly; in addition to the always interesting communication by navigable waterways, waterways that share many characteristics with maritime transport but are also subject to the dictatorship of navigating a waterway, since the early 20th century there has been the possibility of using the air, of transporting goods and resources using aircraft and other air means.

Aviation, which has grown exponentially in recent decades, is sometimes the only means of supplying small isolated or remote settlements, and its possibilities and capabilities are ever increasing, as well as having the associated advantage of flexibility and relative independence from the terrain for its movements. But it is still a communication channel that requires highly specialised means and personnel, that is affected to a very high degree by existing meteorological circumstances and that is expensive, very expensive, so that it is only profitable for transporting people and products with high added value and low weight. Otherwise, even if the cost per tonne transported is gradually optimised, it remains very high, making air transport seemingly prohibitive for certain resources.

Delving deeper into this issue, since the Soviet Union put a satellite in orbit (Sputnik, on 4 October 1957) and the so-called 'space race' was unleashed, which led the United States to send a human to the moon on 20 July 1969, the use of space has grown intensely—the United Nations structure even includes an Office for Outer Space Affairs—²⁴the cosmos has become dotted with satellites and elements in orbit, fostering a wide range of capacities (from communications to meteorological studies) and

http://www.ieeee.es/Galerias/fichero/docs_analisis/2018/DIEEEA29-2018_Lineas_Terrestres_Comunicaciones_Afganistan_JICT.pdf;

CASTRO TORRES, José Ignacio. 'La importancia de los corredores terrestres (II): la carrera de Irán hacia el mar Mediterráneo' [The importance of land corridors (II): Iran's race to the Mediterranean Sea]. Analysis Paper 26/2021, Spanish Institute for Strategic Studies, 16 June 2021. Available at:

http://www.ieeee.es/Galerias/fichero/docs_analisis/2021/DIEEEA26_2021_JOSCAS_Iran.pdf

²³ As succinctly expressed in SIEREN, Frank. 'La Nueva Ruta de la Seda china: ¿oportunidad o amenaza?' [China's New Silk Road: opportunity or threat?], *DW*, 21 September 2019. Available at: <https://www.dw.com/es/la-nueva-ruta-de-la-seda-china-oportunidad-o-amenaza/a-50527079>

²⁴ Official website available at: <https://www.unov.org/unov/es/unoosa.html>

possibilities, such that countries not only fight for the use of outer space, obtaining benefits, but an increasing number of major companies and corporations are joining in the attempt to make space flights profitable.

Thus, names such as Space X, Blue Origin or Virgin Galactic have gone from being complete unknowns to being part of general heritage, with their attempts—with varying degrees of success—to exploit space, to such an extent that people are beginning to talk about the ‘Amazonisation’ of space²⁵. And although it will not happen immediately, as there is still a long way to go, the fact is that the use of space as a means of transport, although for the moment associated with space tourism and somewhat exotic matters, could gradually become competitive under certain circumstances and for certain resources, as the price of each tonne put into orbit falls.

In any case... what if, despite the costs, despite the difficulties, despite everything, there was no alternative?

A show of will: Berlin, 1948-1949.

After World War II (1939-1945) and in the early stages of what would later become known as the Cold War, Germany was physically divided between the victorious powers and Berlin, the capital, which was located in the Soviet-dominated part of Germany, was divided into four sectors: American, English and French in the western part of the city, and Soviet in the east. The West Berlin sectors (referred to as West Berlin) were connected to the rest of Germany controlled by these nations by a road, a railway, a waterway and three (narrow) air corridors, transport routes that crossed Soviet-controlled Germany for several hundred kilometres.

In an environment of growing global dispute, tensions between Moscow and the former allies were rising sharply; and the US intention to revive the German economy, which, among other measures, envisaged the introduction of a new currency—the German mark—to replace the devalued imperial mark was not to Moscow's liking, as it sought to prevent the economic take-off of what would later be called ‘satellite countries’, in order

²⁵ ““Amazonización” del cosmos: la nueva carrera espacial será entre empresas, no entre naciones” [“Amazonisation” of the cosmos: the new space race will be between companies, not nations], *El Mundo*, 11 September 2021. Available at: <https://www.elmundo.es/internacional/2021/09/11/613cb579fdddff2f988b46a4.html>

to be able to maintain its hegemony much more easily. On 24 June 1948, as a culmination of a series of disagreements, the Soviets, citing 'technical issues', blocked the railway, the road and the canal that allowed the Allies to supply West Berlin with resources. They denied vehicles, trains and ships passage through the territory occupied by their forces, thus completely isolating the Western-controlled sectors of Berlin.

At the time, West Berlin had a population of just over 2 million people. It was a city devastated by the war, and it was essential to provide most of the resources needed not only for reconstruction, but also for its population to survive.

Faced with this complex situation, the Allies were faced with the need to decide what to do to resolve this situation, which they were well aware not only concerned Berlin, but also had implications for the balance of power that was emerging in the aftermath of World War II.

Several options were considered, ranging from the possibility of using military force to break the blockade—and assuming that such action could trigger a war with the Soviet Union—to accepting Moscow's offer to take over supplies to the western sector, which would have meant *de facto* annexation of the sector, one of the Soviet objectives. The options seemed few, all highly complex and with potentially grave consequences, as time was running out for the Western Allies and West Berlin. However, in the analysis of the alternatives, one that seemed a little far-fetched was to take advantage of the only possibility of communication between West Berlin and Allied territory: the three air corridors. It seemed an impossible mission to maintain, for an apparently indefinite period of time and to a city of more than 2 million people, which required almost everything to be supplied from the outside, and only by air.

It was a difficult decision, for it was not only West Berlin that was at stake, but indirectly more, much more; almost always, in global struggles and using a simile, a large part of the forest is at stake, even if the dispute appears to be over only one tree. And if it was clear to the leaders, it was also clear to their societies, despite the years of war, that strong wills usually lead to victory. The decision was to create a 'bridge over the sky'²⁶, activating the largest airlift operation in history.

²⁶ COLLIER, Richard. *Bridge across the sky: the Berlin blockade and airlift, 1948-1949*, McGraw-Hill Companies, 1978.

On 26 June 1948, just hours before the start of the Soviet blockade, the first of hundreds of thousands of Allied aircraft landed on the runways of West Berlin. After a start with ups and downs, despite all the difficulties involved, despite the enormous quantities of resources to be transported, despite the number of aircraft and personnel required, and despite the economic scale of the operation—just think of the cost of transporting coal by air—the flow of resources reached such a level that it ended up far outstripping what had previously been transported by land and river.

Therefore, and despite all these difficulties of which there were many: from the weather, when winter arrived, to the technical difficulties in transporting coal, which led to ingenious solutions to prevent the dust it gave off from blocking the pilots' vision inside the cockpit; and despite the economic costs and the cost in lives (around 80 people died, most in aircraft accidents) the will not to give in to the Soviets prevailed. This eventually resulted in a plane landing at West Berlin every 3 minutes—although at peak efficiency in the spring of 1949, a plane was landing at Tempelhof airport every 45 seconds²⁷—, in more than a quarter of a million flights, in several thousand tonnes of resources transported every day, in more than two million tonnes transported in the course of the whole operation, quite a feat, quite a display of determination and will.

The Soviets, who had not believed that such a feat was possible, were astonished to see how, despite the blockade, the population was even better supplied in the Allied zone (West) than in their own sector, East Berlin, which was obviously not subject to any kind of blockade; this fact, together with other issues of various kinds, began to motivate part of the population of the Soviet sector to march towards the Western sector²⁸. Not only had Moscow failed to achieve its goals, but the world was watching its defeat.

On 12 May 1949, almost a year after it began, the Soviet Union decided to lift the blockade, assessing that it had only served to lose prestige, leverage and credibility, and so the road, rail and canal were freed for transit from Germany with Western forces present, from what on 23 May 1949 (a few days after the lifting of the blockade) would become known as the Federal Republic of Germany. But the airlift continued until September despite the fact that these avenues were already open, both in anticipation of

²⁷ 'The Berlin Airlift, 1948-1949', *United States Government*, Office of the Historian. Available at: <https://history.state.gov/milestones/1945-1952/berlin-airlift>

²⁸ This flow of people would gradually increase over the years, a fact which, together with increasingly strained relations between the Soviet Union and its former allies, would lead Moscow to raise the so-called Berlin Wall, which would start on the night of 12-13 August 1961.

a surprise Soviet manoeuvre and, above all, as a show of will, despite the enormous costs of the operation. Security considerations, in a broad sense, took precedence at all times over strictly economic arguments.

The strong will of the leaders who have to make the tough decisions that are sometimes necessary in the circumstances they face, the resilience of the populations who have to bear and support the cost and effort associated with those decisions, and the material capacity to execute those decisions—possessing a large fleet of transport aircraft and the technical know-how to organise such a large operation—made the airlift possible. Will, power and knowledge, the pillars of the art of war²⁹, and of the art of life, were present at that time on the Allied side, which made possible a victory (or prevented a defeat) that undoubtedly helped to underpin and sustain the way of life not only of West Berlin, but by extension, of the Federal Republic of Germany and the Western world.

But... is it, or will it, always be like this?

A wake-up call? Suez, 2021

On 23 March 2021, a container ship, the Ever Given, became stuck in the Suez Canal, blocking passage and closing one of the choke points through which 13% of world trade passes³⁰, apparently as a result of a sandstorm that swept the vessel far enough to leave it stranded between the two banks of the canal.

While attempts are made to free the ship and reopen the canal, maritime traffic is piling up in the Mediterranean and the Red Sea; and it must be considered that each day of delay not only means that goods do not reach their destination and their end consumers, but that many industries that depend on this agile flow of products are affected in turn, producing a cascade effect of loss of economic activity and, therefore, of wealth that is difficult to assess and quantify. In any case, the associated increase in freight costs and

²⁹ 'The fundamental principles of military art, applicable in all types of operations are: the will to win, freedom of action and the capacity to execute', MINISTRY OF DEFENCE, PDC-01(A) 'Doctrina para el empleo de las Fuerzas Armadas' [Doctrine for the employment of the Armed Forces], Madrid, 2018, p. 74 paragraph 262.

³⁰ 'The Suez Canal ship is not the only thing clogging global trade', *Allianz*, 26 March 2021. Available at: https://www.allianz.com/en/economic_research/publications/specials_fmo/2021_03_26_SupplyChainDisruption.html

disruption of supply chains puts many small and medium-sized businesses in difficulty, and puts economic recovery at risk³¹.

As the days went by and work to open the canal did not bear fruit, shipping lines began to consider alternative routes³²; some ships began to take the path around Africa³³, the long and unique maritime route existing before the opening of the canal, just as expectations grew—and were encouraged by Russia—regarding the use of the Arctic route³⁴. And Turkey postulates and claims as a land alternative the so-called central corridor³⁵ running, in addition to over Turkish soil, through the Caucasus, the Caspian Sea and Central Asia to China, precisely through the aforementioned Rimland and in the middle of a dispute, while almost 400 ships are waiting for the passage to be resumed.

During the complex work and attempts to refloat the ship blocking the canal, headlines can be seen as suggestive—and which, beyond the media impact, should lead to reflection—as ‘world trade is in the hands of four bulldozers’³⁶, while the days go by and many industries around the world (the automotive industry was among the first to notice the impact³⁷) begin to assess their losses, and the first fingers point out that the blockage of the Suez Canal questions the global trade model³⁸.

³¹ BAKER, James. ‘Shipping costs threaten survival of small businesses’, *Lloyd's List*, 2 September 2021. Available at: <https://lloydslist.maritimeintelligence.informa.com/LL1138068/Shipping-costs-threaten-survival-of-small-businesses>

³² ‘Estas son las rutas alternativas al Canal de Suez que barajan las compañías navieras’ [These are the alternative routes to the Suez Canal considered by shipping companies], *ABC*, 27 March 2021. Available at: https://www.abc.es/internacional/abci-estas-rutas-alternativas-canal-suez-barajan-companias-navieras-202103261904_noticia.html

³³ ‘El bloqueo de Suez comienza a desviar barcos a la ruta de hace 150 años’ [The blockage of Suez starts to divert ships to the route of 150 years ago], *La Vanguardia*, 27 March 2021. Available at: <https://www.lavanguardia.com/internacional/20210327/6611036/bloqueo-suez-desviar-barcos-ruta-150-anos-ever-given.html>

³⁴ ‘El bloqueo de Suez refuerza la esperanza de Rusia en la ruta Ártica’ [The blockage of Suez reinforces Russia’s hopes in the Arctic route], *La Vanguardia*, 29 March 2021. Available at: <https://www.lavanguardia.com/internacional/20210329/6613835/bloqueo-suez-refuerza-esperanza-rusia-ruta-artica.html>

³⁵ ‘La alternativa de ruta de transporte más adecuada para el Canal de Suez es el Corredor Central’ [The Best Alternative Transport Route to the Suez Canal Middle Corridor], *Rayhaber*, 29 March 2021. Available at: <https://es.rayhaber.com/2021/03/La-alternativa-de-ruta-de-transporte-más-adecuada-al-canal-Suveys-es-el-pasillo-central/>

³⁶ ‘Bloqueo histórico en el canal de Suez: el comercio mundial queda en manos de cuatro excavadoras’ [Historic blockage of the Suez Canal: world trade is in the hands of four bulldozers], *La Razón*, 27 March 2021. Available at: <https://www.larazon.es/internacional/20210327/vyarnjmajzc2flui5bwfl6ysy.html>

³⁷ ‘El bloqueo del canal de Suez, nueva amenaza para la automoción’ [The blockage of the Suez Canal, a new threat to the automotive industry], *Coheglobal*, 26 March 2021. Available at: https://www.coheglobal.com/mercado/bloqueo-canal-suez-nueva-amenaza-automocion_462976_102.html

³⁸ ‘El bloqueo del canal de Suez cuestiona el modelo comercial global’ [The blockage of the Suez Canal questions the global trade model], *La Vanguardia*, 28 March 2021. Available at:

Finally, on 29 March, the ship was refloated and the canal reopened. The blockage caused freight rates for ships to and from Asia to rise by up to 47%, global trade to lose between 5 and 9 billion dollars and global trade growth to fall by between 0.2 and 0.4 points, to which we must add, if the alternative route around Africa is used, the costs associated with 8 days plus³⁹ of sailing.

During those days, the world was watching this small corner of the planet and was again aware (at least at certain levels) of the extreme vulnerability of today's global flows. It was an accident but, would a similar, intentional action be very difficult to perform and in such a way that opening the canal would be even more complex?

Perhaps, to paraphrase a shocking headline, this blockage is a parable of excessive globalisation⁴⁰. But not all approaches to this issue are in agreement. Far from it.

Spheres of shared prosperity?!

In contrast to the final argument in the previous section, some point out that globalisation and these long value chains have generated options for incorporating spaces and human groups into the global economy that would otherwise remain on the outskirts, in a state of isolation that would prevent their development. And that, precisely with regard to security, these long value chains contribute directly to this issue given that, as a diversity of spaces and peoples benefit from the advantages of the global market, the level of global security is consequently increased.

The use of terms and expressions similar to the name of this heading are abundant and repeated, and not only in recent times; since the words of French politician Jean Jaurès (1859-1914): "In these international capital investments lay the greatest guarantee for the maintenance of world peace"⁴¹ to the term 'shared prosperity'⁴², coined almost a decade

<https://www.lavanguardia.com/internacional/20210328/6612495/ever-given-suez-barco-buque-contenedores-containers-egipto.html>

³⁹ 'The cost of the Suez Canal blockage', *BBC News*, 29 March 2021. Available at: <https://www.bbc.com/news/business-56559073>

⁴⁰ GOODMAN, Peter S. 'The Ship Stuck in the Suez Canal is a Parable of Excessive Globalisation', *The New York Times*, 26 March 2021. Available at: <https://www.nytimes.com/es/2021/03/26/espanol/canal-suez-evergiven.html>

⁴¹ JAURÈS, Jean. Cited in MARC, Ferro. 'La Gran Guerra 1914-1918' [The Great War 1914-1918], *Historia y Geografía*, Alianza Editorial, Madrid, 2000, page 81.

⁴² 'Shared Prosperity: A New Goal for a Changing World', *World Bank*, 8 May 2013. Available at: <https://www.bancomundial.org/es/news/feature/2013/05/08/shared-prosperity-goal-for-changing-world>

ago by the World Bank, via the so-called 'Greater East Asia Co-Prosperity Sphere'⁴³—referring to the area of dominance of an imperialist Japan in the run-up to World War II—, the vision of a world more balanced by these large, win-win value chains, and thus a guarantee of peace, has been repeated, in one way or another, throughout history. For example, Chinese President Xi Ping's keynote speech at the recent Davos Summit in 2021⁴⁴.

And all of this, it is argued, will undoubtedly contribute to a peaceful world and will remove the spectre of conflict, since all nations will have a degree of complementarity that will prevent them from turning against each other, as the following document points out:

'I must now ask you to recapitulate for a moment the fundamental propositions of this exposition, namely, that the relations of States to one another are rapidly changing in obedience to the rapidly changing conditions of circumstance, to the more active division of labour resulting from more rapid communications; that this more and more accentuated division of labour establishes a relation of inevitable reciprocal dependence between those who collaborate in the common enterprise; that this condition of reciprocal dependence implies, in turn, the decline of physical force as a factor or resource in their mutual relations; that this decline in the importance of physical force not only necessarily weakens the significance of political predominance, but, by virtue of the very complexity of the division of labour, tends to universal cooperation, bringing the various units together in an order independent of all division, in terms which political frontiers have ceased to demarcate or coincide with economic frontiers; and that—finally—by virtue of the cumulative effect of all these factors and as a direct consequence of the mechanisms inherent in their coordination, what we could call the telegraphic relationship of the bonds, a state of sensitivity that allows the agency to as a whole quickly realise any injury to its component parts. All of which can be summed up in the assertion that military force is increasingly failing to produce the effects for which it is intended and must finally reach—and I believe it has already reached—complete economic desuetude'.⁴⁵

⁴³ 'Greater East Asia Co-Prosperity Sphere', *Bill Gordon*, March 2000. Available at: <http://www.bill-gordon.net/papers/coprospr.htm>

⁴⁴ 'Xi Jinping's speech at the virtual Davos agenda event', *CGTN*, 26 January 2021. Available at: <https://news.cgtn.com/news/2021-01-25/Full-text-Xi-Jinping-s-speech-at-the-virtual-Davos-Agenda-event-XIn4hwjO2Q/index.html>

⁴⁵ ANGELL, Norman. *La Grande Illusion*, Nelson Spanish Collection, Thomas Nelson and Sons, Paris, 1911, pp. 230-231.

This story, which develops the narrative of the concept of the ‘sphere of shared prosperity’, was written in 1911, when the drums of war were starting to beat in a Europe that was then ruling the destinies of the world. And three years later, despite the proclamation of this beautiful plea—in words from a century ago—for globalisation and this ‘sphere of shared prosperity’, World War I broke out. And the ‘long’ (much shorter than today) value chains existing at the time—such as that of copra oil⁴⁶ from the Pacific, or nitrate from Chile, from Latin America—, essential at the time to manufacture, among other products, basic elements for the chemical industry—and the explosives industry—such as glycerine and nitric acid, were broken.

This loss of control of value chains, this blockage of value chains that led to a lack of essential products, resulted (along with other issues) in the defeat of one of the opposing sides.

In order to reflect

While it is essential not to live in a state of mind of permanent siege and conflict, it is no less important not to neglect certain issues that are vital to the future of people and societies, even if they are aspects that normally go somewhat unnoticed in everyday life, especially for the end users of goods and services, and sometimes even for the governmental structures of these societies.

In much of the developed world there is perhaps a growing and relative perception that, despite whatever difficulties there may be, everything will be resolved, and quickly, associated with the perception that, when faced with a need, an ‘order’ is placed, ‘a package will always arrive, and hopefully the next day’, and the need is over. This leads to the feeling, the quasi-certainty, that our comfort zone is shielded from almost any event. But this is far from true.

Not only can issues beyond human control—from major atmospheric phenomena to powerful telluric forces—weaken, break or block the bottlenecks through which the umbilical cords the resources that allow us to live as we do must pass, but also, and

⁴⁶ See CEREPK, Philip. ‘Coconut: catalyst of conflict’, *Edgeeffects*, 12 October 2019. Available at: <https://edgeeffects.net/coconuts-conflict/>

above all, intentional actions with a certain purpose, or mere accidents, could and can break the flow of resources for a shorter or longer long period of time, and then what?

Perhaps it is better to remember that 'prevention is better than a cure', that planning is always essential and that, as the adage goes, 'deployment is mounted on the most probably hypothesis; on the most dangerous, security'. Day-to-day life can be completely changed by these actions, whether natural or intentional, and then what?

The overall lack of reserves, the absence of stocks, the lack of 'just in case' means that could contribute, at least temporarily, to alleviate the lack of the normal flow of reserves, leads to an extreme dependence on maintaining 'normality', and possibly to the temptation of the rival to block these chains in the knowledge that the adversary is not sufficiently prepared to face it, much less to take it on. The less resilient a society is, the more it needs and is used to not having (or expecting) lack of (almost) anything, the faster and more intense the feeling of emptiness and collapse will be.

And that is what could be intended at any given moment. A society in such a state is easily dominated or at least manipulated. So society ceases to be the master of its destiny.

Is hoping that nothing ever happens enough, or is it important to prepare for the 'most dangerous scenario'? Is it enough to trust that long value chains will always be flowing—and at an affordable price—or is it necessary to adopt the required safeguards, even if they are expensive, in order to be able to move on in case of need, in case a bottleneck is blocked?

These are difficult decisions because, above all, they imply a long-term vision and a very significant, even intergenerational, solidarity with tomorrow.

And if we are focused on today...

The answer lies in each person, in human collectivities grouped in societies. History is full of examples of human groups, societies and nations that, for various reasons, failed to make the sometimes difficult and costly decisions that were needed.

That is why you have to look for them in the history books, because they are no longer there.

*Pedro Sánchez Herráez**

COL.ET.INF.DEM

PhD in Peace and International Security

IEEE Analyst