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## Reinventing Global Connectivity

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Ekaterina Kozyreva is president of IEC International. In this piece written for the cep Network, she describes the recent trends in infrastructure connectivity, details the alternative models developed in a context of increasing geopolitical tensions, provides clues about the way governments should proceed to promote a new kind regional and “friendshoring” connectivity, and finally details the impact of connectivity funding. Her key takeaways are as follows:

- (1) The previous decade – for the first time since the 1970s – has seen international trade growth rates lagging behind GDP rates.
- (2) With increasing geopolitical tensions, the new nature of trade links involves politically driven choice of partners and directions, which are already costly. **Two “engines” characterize this change in global transport flows:** (a) enclosing the commodity trade within geopolitical blocks of countries (**friendly shoring**, i.e., reshoring to allies), (b) **backshoring**, nearshoring and development of the new trade links within geographical blocks of countries.
- (3) **Resulting from these trends, 25% of export volumes has changed in terms of country of destination**, which is 10 per cent points higher than the past 15-year average. Due to sanctions on Russia and China-US tensions, this share is expected to rise to 30-35% in 2022 and to remain high for several years.
- (4) **In the new paradigm, certain countries will do better than others: connectors.** Their dual role is (a) to provide the best option for consolidation and transportation of goods from the whole geographical block to distant trade partners regardless of their geopolitical values, (b) to facilitate trade within geographical block including trade between countries with different geopolitical interests.
- (5) **Hence, global connectivity is still possible and necessary, but three features are completely different within the new paradigm:** (a) Uniform belts, which connect the world’s largest manufacturing centres by one optimal route, are no longer promising, (b) the corridors resulting from the new trends will always stay heterogeneous, (c) connectors will play a crucial role in merging geographical blocks.

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## 1 Introduction

**In the pre-pandemic years, global connectivity in terms of transport and logistics, trade and financial links was actively developing**, especially with respect to the Euro-Asian and Asia-African links that were boosted by One Belt One Road set of initiatives and infrastructural developments.

**Despite the high costs of infrastructures, these developments worked in favor of many European, Asian and partially African economies**, especially for developing, least developed and landlocked countries that could benefit from new available connections decreasing total costs of trades and enabling more exports and imports (the equilibrium of exports and imports and level of indebtedness are off topic here).

**Corridor-based approach was a basis for developing global connectivity in 2000-2019.**

**Production and supply chain breaks, artificial limitations and border closures combined with asynchrony of restrictions resulted in a connectivity crisis in 2020.** This crisis was later worsened by a 'lake' of black swans – as series of events that would probably not have any impact on global trade flows under other conditions but that led to a domino-effect. Since 2022, characterized by important geopolitical tensions, further economic hard landing and drastic changes in international trade flows, **a new paradigm in connectivity policies and consequently in financing of connectivity-related projects seems to be necessary.**

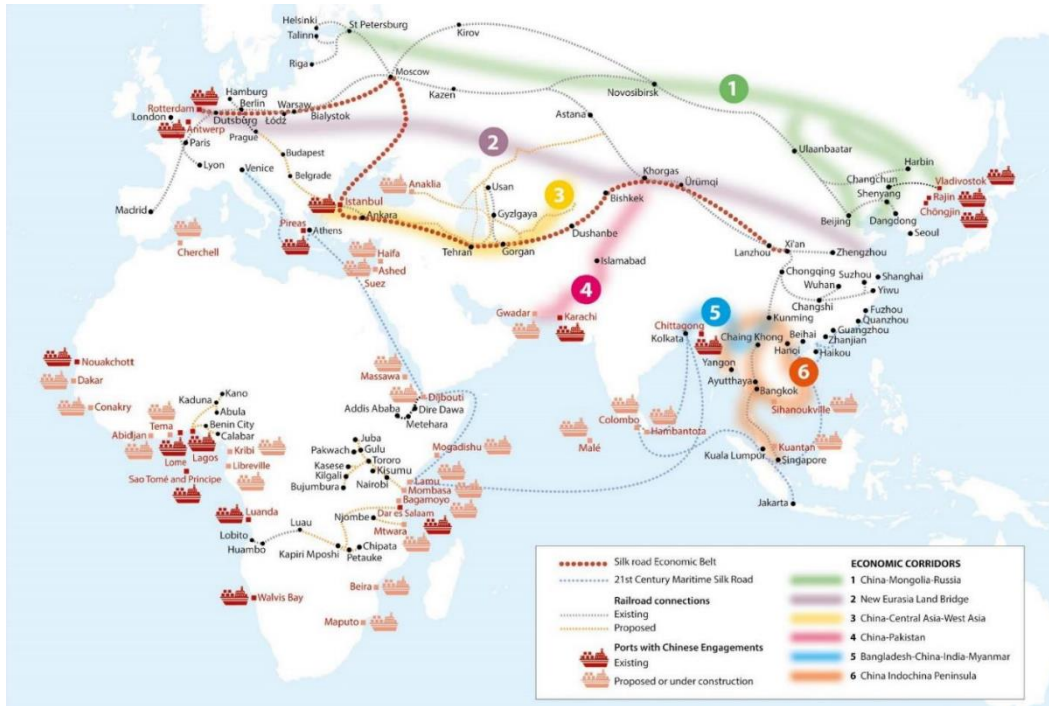
This position paper presents **a new format of connectivity – physical, economic, and financial – and suggests new infrastructure investment policies and priorities for national and international institutions.**

## 2 Restructuring or Destruction of Global Chains

### 2.1 Connected World

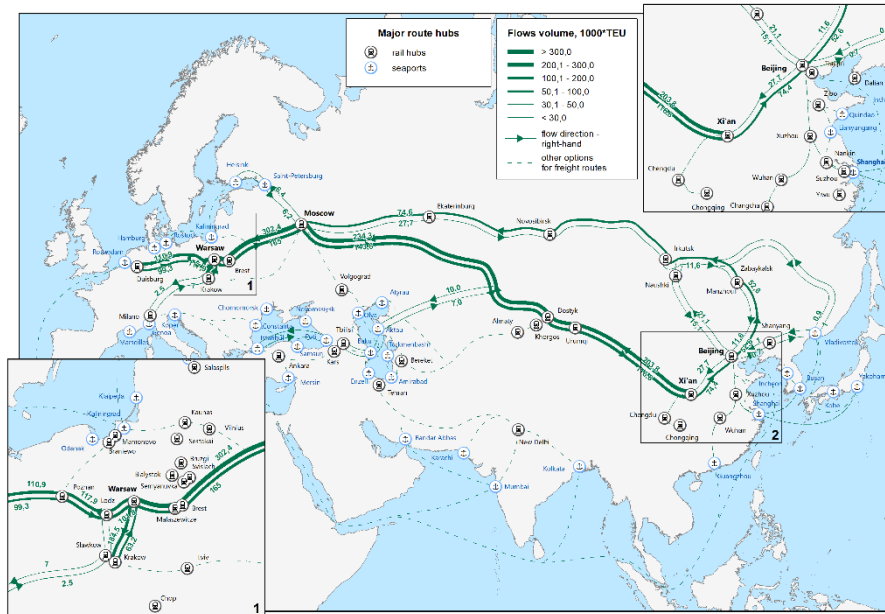
The dramatic change in the context has casted straight away a negative light on the significant achievements reached in the lively and innovative period of international policymaking from the fall of Donald Trump to the outbreak of the Ukrainian war.

Figure 1: Belt and Road Initiative Network



Source: China's Belt and Road Initiative in the Global Trade, Investment and Finance Landscape, OECD, 2018.

Figure 2: Key Trans-Eurasian Corridors and Their Performance in 2019



Source: CCTT's TSR Annual Digest, 2020.

Euro-Asian connectivity geographically evaluated in 2015-2019 with new links in active commercial exploitation gradually added.

**2015-2016: development of trunk lines**, key corridors with highest capacities and basic services previously available, such as the Trans-Siberian route from China to Russia entrance via Manzhouli / Zabaikalsk, via Mongolia and Kazakhstan (Dostyk – Alashankou border crossing).

**2017-2018: development of additional routes**, such as Southern routes via Kazakhstan with further continuation via South Caucasus and Turkey to Southern Europe.

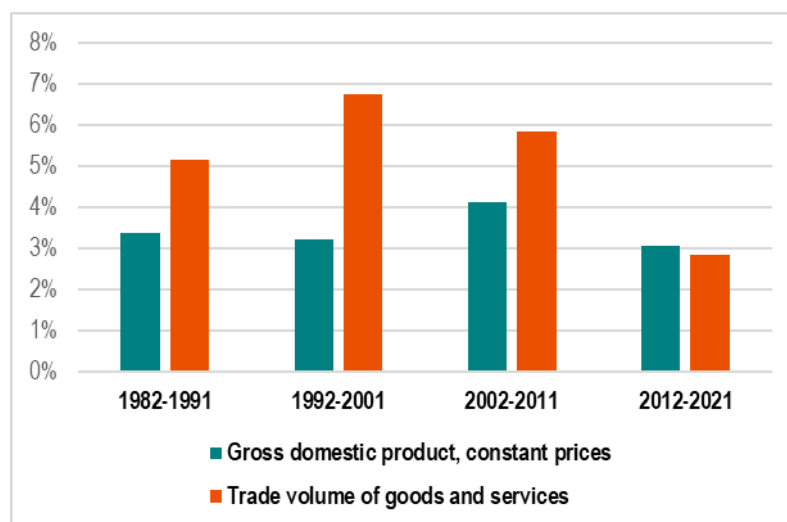
**2019-2020: development of links in South-East Asia**, notably in Viet Nam, including both inter-Asian and Asia-Europe connections, development on North – South links along South Caucasus / Central Asia / Caspian Sea down to I.R. Iran – these links being not so much part of New Silk Road and thus having less confirmed cargo volumes, e-commerce rocketing and rise of air cargo transportation.

**By the beginning of 2020, a new system of inland trade**– benefitting transit in landlocked countries and ensuring higher general global connectivity – was **actively developing as an alternative to maritime trade**. Clearly, the fracture distancing Europe and Africa has not been caused only by the war or by Russian sympathies. Rather, the war has unveiled deeper incomprehension and resentment that must be carefully analyzed. The African reaction to the war reflected past mistakes, prejudice and missed opportunities on both sides of the equation. At the same time, the war has shown vividly how much Europe and Africa need each other. It is a question of mutual interest, but also of shared prospects and values.

## 2.2 Disconnected World and Black Swan Lake

**The previous decade** – for the first time since the 1970s – **has shown the lag of international trade growth rates behind GDP rates**. The global trade stopped to be an economic growth driver which is one of the reasons for the world’s economy cool down.

**Figure 3: 10-year Average Growth Rates of GDP and International Trade**



Source: International Monetary Fund, World Economic Outlook Database, October 2022.

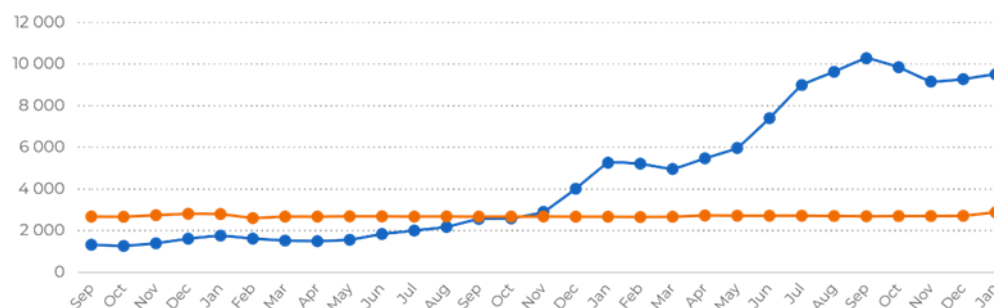
The disconnected period did not last for a long time, but it turned out that quarantine restrictions were partially hidden: while borders, terminals, seaports and other transport and logistics facilities for international trade were mainly kept open, restricted referred largely to business mobility and face-to-face communications. This resulted rather quickly in deconstruction of trusted networks and integrative initiatives, mainly for newly built inland corridors.

**Logistics went from just-in-time to just-in-case (deliveries at the recipient's convenience).** Because of the closure of consumption end points, suppliers' warehouses were overcrowded as offline retailers were unable to pick up goods, importers could not find space to accommodate shipments that had not yet arrived by sea. The ports were filling up with containers that were being used as storage and moving out very slowly. Against this background, cargo ships were sailing at a reduced speed to allow distribution of goods from the ports to the warehouses, and to save fuel.

**Since the end of Q3 2020, when several Asian and European countries began to gradually lift quarantine restrictions, sea rates began to rise.** The main reason for a significant rise in sea freight prices was the lack of free empty equipment in Asian ports amid the increase in export volumes from Asia to Europe.

The Shanghai Containerised Freight Index (SCFI) since March 2020 increased by 313 per cent, and the same index for shipments to Europe increased from 1005 to 5212, which is 519 per cent. The China Containerised Freight Index (CCFI) rose from 889 to 1,810 during the same period. The World Container Index (WCI), calculated by Drewry, an international analytical agency, rose 326 per cent from 1505 to 4905. Rates peaked in January-February 2021, when there was maximum demand for shipping goods from Asia to Europe. But **the problems on maritime container lines even worsened in 2021 due to a series of adverse events, both pandemic and non-pandemic related.** In addition to container shortages at Asian ports, which began to decline slightly after the Chinese New Year in 2021, there was an accident in the Suez Canal, as well as partial closures of some Chinese ports associated with local outbreaks of COVID-19. A series of other accidents occurred further on (floods in Europe and typhoons in Eastern Asia, civil unrest in South Africa, etc.). In a normal situation, they would have had a minor impact on transport links, but considering the covid-related restrictions, each of them became a new black swan for global connectivity resulting in a domino effect for connectivity, trade and economies.

**Figure 4: WCI Drewry (maritime) and ERAI (rail) Freight Rates Indices, September 2019 – January 2022**



Source: WCI Drewry, ERAI (UTLC ERA)

**All these factors led not only to continued growth of sea freight rates, but also to a significant increase of shipping time.** After the Suez accident, sea freight prices on a number of routes between ports in China and Europe rose to 8,000 US Dollars per FEU.

**In these conditions and in the case of Euro-Asian trade, inland transportation once again gained terrain, actively supported by “green” transport policy, notably in the EU, but meeting the same problems as sea transport in terms of equipment availability and longer handling procedures.**

As a result, by the end of 2021 previously available global connections were distorted, the existing links were not sufficient to balance supply and demand and lack of trust prevented the recovery of supply networks –all this has led to the gradual and, yes, painful formation of the new principles of global connections.

### **2.3 Misconnected World**

**When post-pandemic recovery could already be foreseen by the analytics, another wave of drastic shifts in geopolitics led to a very fast change in global connectivity principles.**

Since February 2022, restrictions imposed on Russian infrastructure undertakings and transportation companies led to the deconstruction of economically efficient Eurasian links in favor of other, slower, and more expensive routes.

For inland trade flows, one of the examples is having switched from the Northern route via Kazakhstan and Russia to the Middle corridor via Kazakhstan, the Caspian Sea, and Turkey for China – EU connections. The Middle corridor is longer and crosses more countries resulting in slower and more expensive trade and financial flows, also due to lacking operational management, whereas the Northern route has a dedicated one-window facility.

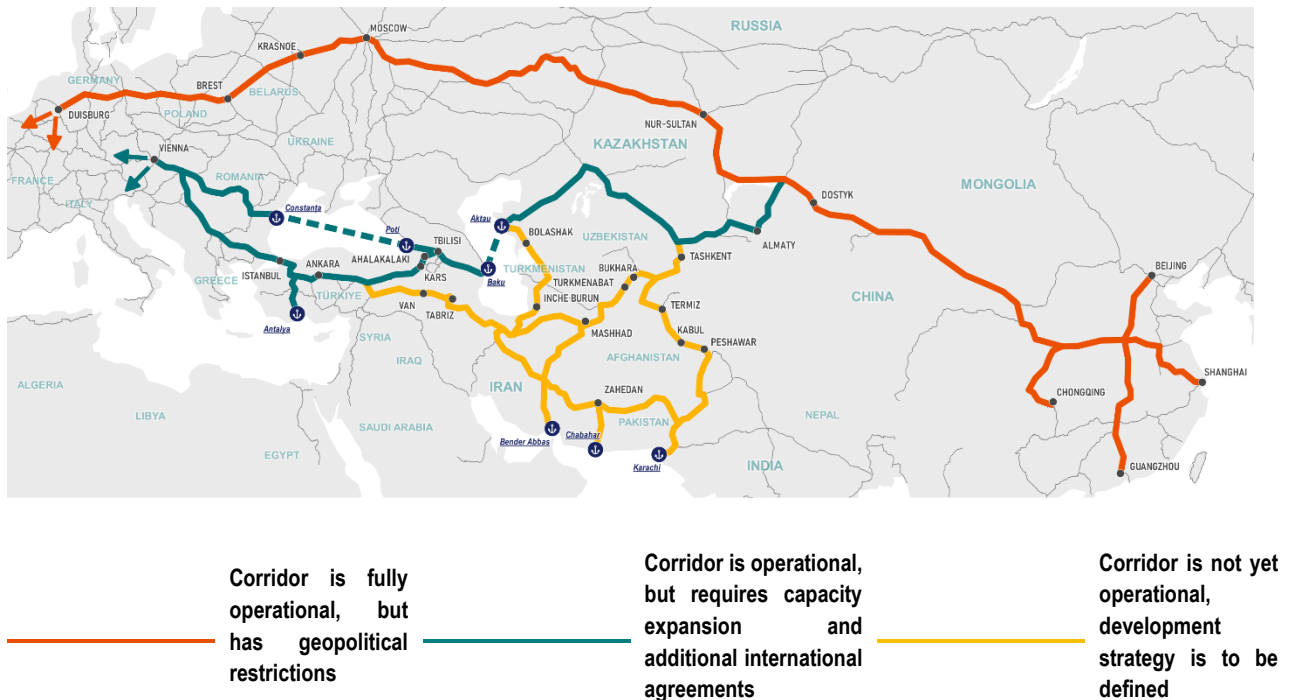
**It turned out that in many cases the focus on the unique optimal solutions – the cheapest, the fastest and the most operationally convenient – resulted in (a) infrastructural and operational gaps with all other options, (b) lack of quickly available alternatives.**

In the case of inland trade, the Northern corridor via Russia and Belarus corresponded to more than 86 per cent of China – Europe inland traffic in 2019-2021, while the capacities of the Trans-Caspian route without significant capital expenditures could cover less than 5 per cent of total traffic.

**In terms of alternativity, the landlocked developing countries of Central Asia may be considered as perfect examples of losing parties.** While historically all Central Asian connections have been linked to Russia's networks and even traffic planning systems, in 2020 it turned out that limitations on Russia resulted in important limitations for these countries. And every political or economic step should be checked against these limitations.

**Announcements on the development of alternative routes mainly aimed at keeping transit links with Europe and China in view of the new market opportunities** and at developing new routes to non-Russian seaports in view of the necessary unlocking, officially started a new paradigm of alternativity in connectivity.

**Figure 5: International Transport Corridors in North and Central Asia, 2022**



Source: own conception.

The misconnection refers, on the one hand, to the fact that new links may not be optimal or most efficient in terms of transport costs. On the other hand, some previously funded connectivity projects will probably not be used to the full extent, but the infrastructure is still there requiring both physical and financial support to maintain at least the existing level of trade flows.

This requires new approaches to planning of connectivity and relevant investments corresponding to a new paradigm of “obligatory alternativality”.

### 3 The New Nature of International Trade: Is There a Place for Regional Cohesion?

The new nature of trade links refers to a politically driven choice of partners and directions (the necessity of such choice or restrictive measures are not judged in any way). It shifts the policy focus from optimization of costs to long-term control and reliability of trade.

This launches two “engines” of change in global transport flows (but so far not of financial links – this will follow):

- **enclosing commodity trade within geopolitical blocks** of countries and friendly shoring (reshoring to allies)
- **backshoring, nearshoring and developing new trade links within geographical blocks** of countries.

In the previously existing model of trade, geopolitical tension could coexist with rigid economic ties. For example, Australia and the Republic of Korea belonging to the U.S. geopolitical alliance was not an



obstacle for having China as a dominating trade partner. But currently metals and coal from Australia are being replaced by Brazilian and Russian fossil fuels with non-optimal costs. Gas for the EU countries can no longer be purchased from Russia, at least not at previous volumes, and is being replaced by gas from Qatar and other countries. Similarly, sanctioned oil now must be purchased from Western and Central Asia with limitations in volume and costly connections.

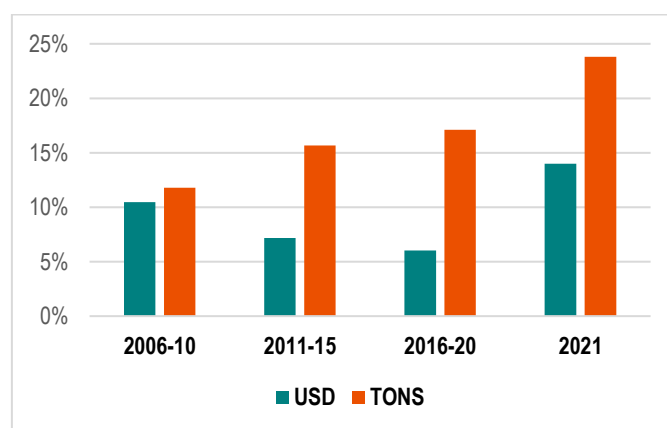
**Large volumes of bulk flows will be redistributed in upcoming years and will be transported via longer distances with higher costs.**

**Friendly shoring will lead to the same effect.** It refers to the transfer of production of a country's critically important industries to countries within a friendly block, even though it may be more costly. Friendly shoring is quickly growing in the post-pandemic world as a reaction to geopolitical tensions and a tool for trade protectionist policy.

**Backshoring and nearshoring (to geographically close countries) occur mostly with high value-added products and can decrease transportation distances opposite to friendly shoring.** Both refer to reducing the global value chains – which, according to the World Bank's analysis based on OECD data, results in higher vulnerability of national economies<sup>1</sup>.

A recent EU-funded<sup>2</sup> study addresses the issues of reshoring and states that a decisive future reshoring factor will be geopolitics, and the systemic rivalry between the U.S. and China might promote the unbundling and duplication of strategic value chains within the context of a regionalization processes.

**Figure 6: The Share of International Export Which Has Changed the Country of Destination**



Source: calculations of IEC International on UN Comtrade data.

**Resulting from these trends, an unprecedented change in trade flows geography is observed.** 25% of export in volumes has changed country of destination, which is 10 per cent points higher than the past 15-years average. Due to sanctions on Russia and China-US tensions, this share is expected to rise to 30-35% in 2022 and to remain high for several years to come.

<sup>1</sup> [Pandemic, Climate, Migration and Reshoring Impacts of a Changing Global Economuc on Trade Incomes and Poverty](#), World Bank.

<sup>2</sup> [Post Covid-19 value chains: options for reshoring production back to Europe in a globalised economy](#), 2021

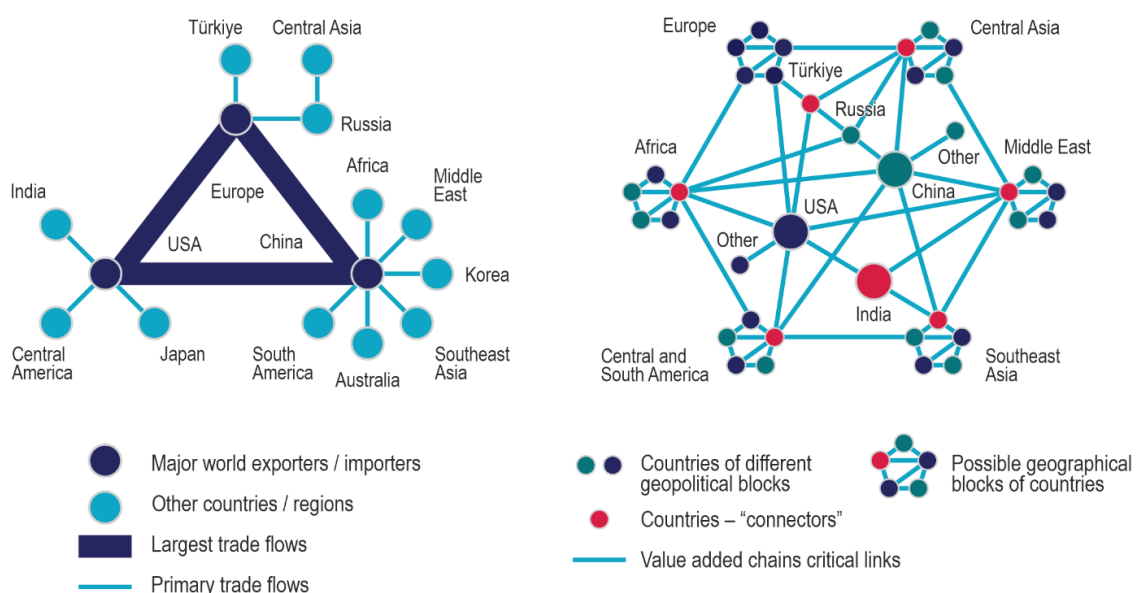
**But what is the impact on connectivity? Can existing infrastructure oriented on global value chains fit the merging production and trade links? And is there a place for regional cohesion?**

**First, the good news is that there are still fixed nodes in the existing infrastructure that will not change fast:** these are centres of resource extraction and basic production. While points of complex production and consumption may be drifting, extraction will stick to the deposits (metal ores, oil and gas, etc.) and first-level connections will stick to them as well.

**Another positive point is that regional – or rather subregional – cohesion can still boost economic growth.** In the new state of international trade, the geography of commodity flows is much more volatile insofar as today's allies can become rivals in some years. That is why it is necessary to diversify value chains and the transport routes that make them function. Transformation of geographical blocks of countries to well-connected regional unions can become one of the most reliable and efficient ways for such diversification and the increase of global economic resilience.

**Most geographical blocks consist of countries with hardly compatible customs and financial rules.** Some of them keep long-term territorial conflicts. Borders between neighboring countries are often less penetrable for freight than distant port-to-port connections between, for example, a developing country and a country of the EU, because regulation works better at least on one side. **Due to the highly centralized international trade model of the past and centripetal genesis of infrastructure, neighboring countries often are not connected enough.** All this explains the high-unexploited potential of cooperation within geographical blocks.

**Figure 7: International Connectivity Models (A – until 2020, B – Projected Model for the Next 10 Years)**



*Source: own concept*

Countries from one geographical block can belong to different geopolitical blocks, which does not help to develop trade and transportation. At the same time, **there is almost in each geographical block at**

**least one country, which positions itself as a geopolitically neutral place and offers trade facilitation for any origins and destinations.** Such policy has been officially declared and is being implemented, for example, by Turkey and the UAE in the Middle East, Thailand in Southeast Asia, Kazakhstan, and Uzbekistan in Central Asia. These countries can be served as connectors.

**The dual role of the connectors is:**

- **to provide the best option for consolidation and transportation of goods from the whole geographical block** to distant trade partners regardless of their geopolitical values,
- **to facilitate trade within a geographical block**, including trade between countries with different geopolitical interests.

When block members cannot interact with each other directly, the role of connectors is strengthened, even despite limited direct trade links, they are able to conduct goods, finance and act as a link between blocks. As a result, much larger volumes and values of goods and especially financial payments can go through them than was the case during the globalization period.

**The connectors are now growing, and additional impetus refers to those countries that already have basic financial infrastructure.**

#### **The Case of Central Asia – EU Multimodal Connectivity**

According to IEC International's model, the development of the Middle Corridor (a rail corridor connecting China and Europe via Central Asia and South Caucasus) and Southern Corridor via Uzbekistan and I. R. Iran can reduce transportation time from 25-30 days to 15-20 days between Eastern China and Western Europe. Logistic costs can be decreased by 30-40%. If reliable time and cost of delivery is provided, the market share of the routes via Central Asia will grow up to 6-8% from the current less than 1%. This can be an important step for Europe to diversify the inland routes to/from Eastern Asia and to increase reliability of logistics not only with China but also with the Republic of Korea and Japan.

For the connection between EU and Central Asia itself, transportation time and costs can be reduced by 20-30%, which will improve competitiveness of European export to the region and open the way for the imports of grain, fertilizers, oil, natural gas, and metals. Physical export can grow by 12%.

This will require debottlenecking of railway infrastructure, ports and border crossings in Central Asian and South Caucasian countries and the creation of logistic hubs in the countries-connectors. A crucial point is to simplify custom procedures and other types of border control.

In this case, Central Asia will become more attractive for friendly shoring, which will bring direct foreign investment especially in downstream supply chain projects from Europe. Together with higher competitiveness of export, this will raise investment growth rates by 1.9 per cent points.

As a result, economic growth rates for Central Asia can increase by 0.7 per cent points in comparison with an inertial scenario.

In this regard non-connector countries within specific firm blocks should consider their links via connectors and relevant connectivity diplomacy. For such connectors, in their turn, it is important to capitalize the transit potential by guaranteeing contracts, employment, and a share in the distribution of

the overall effects. Connectors can benefit from establishing and promoting interoperability as well as inter-block or supra-block standards.

**Economic impact of improving hard and soft connectivity between neighboring and close countries can be highly valuable.** It relies on two major effects:

- growth of exports due to the reduction of transportation costs and time,
- growth of nearshoring due to integration of markets and institutional improvements.

Regional cohesion within geographical blocks can become a new engine for a new type of globalization, and a new source of global economic growth. Transport connectivity, regulatory alignment and financial permeability are the pillars of this cohesion, and new connectivity programs are needed to strengthen them.

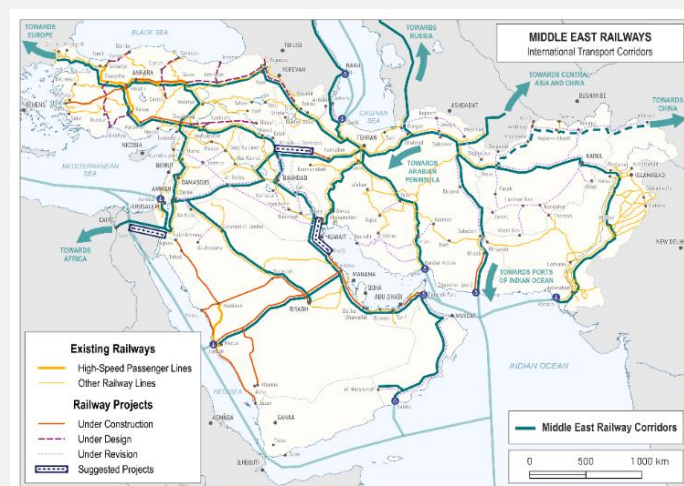
## 4 The Way Forward for Authorities: New Trade and Transport Diplomacy in Demand

**Construction of new and development of exiting connections under a new paradigm requires important efforts from national governments** in a form that might be named – trade and transport diplomacy.

### The Case of Western Asia Railway Connectivity

The Middle East region – as well as Southeast Asia, Western and Eastern Africa and others – is a new high-potential region of cohesion where economic growth of the most developed countries fosters development of all types of connections. Econometric modelling of dependency between connectivity and international trade conducted by IEC International shows that trade within the geographical block has much higher ability to grow if infrastructural and logistic changes happen compared to trade between blocks and with largest economies such as China, Europe or the USA.

**Figure 8: Optimal railway connectivity in Western Asia boosting economic growth and intra-regional links**



Source: IEC International based on data from UIC RAME ([www.uic.org](http://www.uic.org))

According to IEC International's estimations for the International Union of Railways, the realization of inland connectivity projects in the region may significantly boost intra-regional trade growth resulting in an additional 85 million tons (17% of the trade between countries of the Middle East in volumes and 15% in values) with especially high impact on the trade of agricultural products. All countries of the region will be beneficiaries of trade growth with increased effects for leading regional economies thanks to increase in their economic complexities.

As usually expected from infrastructure enhancement, the least developed countries will be the first winners of the improvement in connectivity. While capturing the new nature of international trade "connectors" such as UAE and Turkey will get no less, according to the econometric modelling.

**These efforts refer to the careful alignment of the system of alternatives, priorities for different perspectives (short-term, mid-term, long-term) and the in-depth analysis of the current and future economic nature of connectivity.** Such approach differs from what was observed in 2015-2019 when the key objective for many countries was to become a part of the international links/ corridors or programs – and achievement automatically led to the inclusion of a country into economic belts.

**Trade liberalization is replaced by trade protectionism and block-organization of trade, which by itself is evolving.** Simultaneously, regrouping of the blocks is possible, and a certain geopolitical equilibrium should be considered through the availability of alternatives. No one-option system can any more be considered as optimal – and in fact, many countries can learn from China's BRI initiative, which is fully based on alternativity. Multi-optionality is a new optimality in a world where the globalization paradigm has ceded its place to security and resilience as common priorities.

In practical terms, what could be the solutions for national connectivity policies?

**First**, consider trade, transport, and logistics, as well as financial and digital links as obligatory elements of a national external connectivity policy, referring both to current trade and trade forecasts. **Second**, ensure alternativity of connections with end-partners for each group of key traded commodities. **Third**, consider multi-optionality – prioritize top and bottom analysis of various scenarios to unique baseline forecasts that have been previously widely used. Consider and budget options for both top and bottom alternatives (here is another layer of alternativity) to ensure sufficiency but not redundancy. **Fourth**, check all connectivity projects and plans against direct and indirect economic effects for the country (first) and the block or region (second) to ensure prioritizing. **Fifth**, do not continue with previously adopted policies and programs until they have been reviewed for consistency with the previous four steps to avoid inefficient budgetary investments and construction of redundant infrastructure that will have to be maintained.

## **5 Supporting International Connectivity: What is Still Worth Doing for Financial and Development Institutions?**

**All the changes described above apply not only to national priorities, but also, of course, to the priorities of development institutions and banks.**

The criteria for selecting projects are changing with first efficiency in terms of cost reduction, economic efficiency and in many cases GVA growth, and then social and environmental aspects (ESG). These

must now be complemented by reliability and resilience. In this regard, establishment or update of project certification approaches coherent with what can be done by the authorities may be recommended to define the new common rules.

**Over the past years, many of the development institutions, especially European ones, have already introduced environmental compliance (or project certification) systems.** Now they can be significantly enlarged to consider general resilience, as described in recommendations for national policies.

**Considering specific projects, three major issues should be noted,** the first two in relation to the previously noted positive aspects of current state of global connectivity.

### **1. Transport links to extraction and basic production points**

In case connectivity projects are (a) linked to these fixed points, and (b) long-term (this to be assessed with national authorities), they may definitely be considered as priorities. Long period of investment return for connectivity projects combined with high uncertainty is a usual problem for transport projects, especially for capital requiring rail transport. For these specific links, the 'guarantees' are relatively higher, and a variety of applicable funding tools is larger (including dedicated bonds and Islamic finance tools).

### **2. Regional cohesion in new blocks, among developing economies and connectors**

Investing in connectivity is a must for actively growing economies within the regions that currently lack systematic links and its importance is even higher for connectors. These are the new growing poles, at least in Eurasia.

### **3. New necessities for a reinvented global connectivity**

Global connectivity is still possible and necessary, but three features are completely different within the new paradigm:

- A) **Uniform belts, which connect the world's largest manufacturing centers by optimal route, are no longer promising.** In the new economic realities, international transport corridors should be positioned as an interoperable infrastructure, seamless transportation and financial services uniting countries within geographical block. For example, the Middle corridor which has been formerly considered as a route between Eastern China and Western Europe, should be reinvented as several alternative routes from the Chinese border with Kazakhstan or Kyrgyzstan to the Georgian ports on the Black Sea, or to Georgia - Turkey border.
- B) **These corridors of a new type will always stay heterogeneous.** Uniform solutions proposed by one country or representatives of one geopolitical block will hardly be possible, as it is contradictory to a multi-options approach requiring reliability, alternativity and resilience. However, the new operational model of corridors requires fixed time and price of transportation. This model can be based on the long-term international agreements and can be implemented via a freight-forwarder based one-window approach with the support from the authorities of all countries along the corridor.
- C) **Connectors play a crucial role in merging the geographical blocks** and will require significant investments in the development of logistic hubs, financial and IT-services.

New necessities that arise from these features and that will require participation of development institutions are:

- funding for interconnectivity among regions or blocks,
- guarantees and solutions to secure trade, insurance and dispute settlement, interoperability of digital infrastructure linked to key connections.

## 6 Vice Versa: Financial Impact of Connectivity

**Connectivity development influences financial flows both at the stage of infrastructure development via direct investments and at the operational stage via redirecting export and import flows.** In current macroeconomic conditions, participation of European companies and authorities in reinventing connectivity across the globe can not only become a source of economic growth but also tame the inflation<sup>3</sup> surge thanks to transportation cost reduction and the creation of new export opportunities. The EU – Central Asia connectivity can be one of the best options to test these ideas.

According to the Congressional Research Service<sup>4</sup>: in the USA, 1% increase in investments would increase the long-term level of private-sector economic output from 0.06 per cent to 0.122 per cent, compared to a baseline, according to different studies<sup>5</sup>.

**The impact itself and its size depends on the demand for infrastructure, business cycle timing and the financing mechanism.** Infrastructure investments are most likely to reduce unemployment long-term and to raise total factor productivity, if undertaken during a recession. If the employment rate is low, additional spending may result in higher rates of inflation. The impact of state financed investment (especially if they lead to dept/GDP ratio deterioration) may be reduced due to the “washing out” of private investment.

**However, possible negative consequences of infrastructure investments by European budgets or development funds may be transformed into benefits,** if undertaken abroad and dedicated to the new type of connectivity improvement as presented above in this paper.

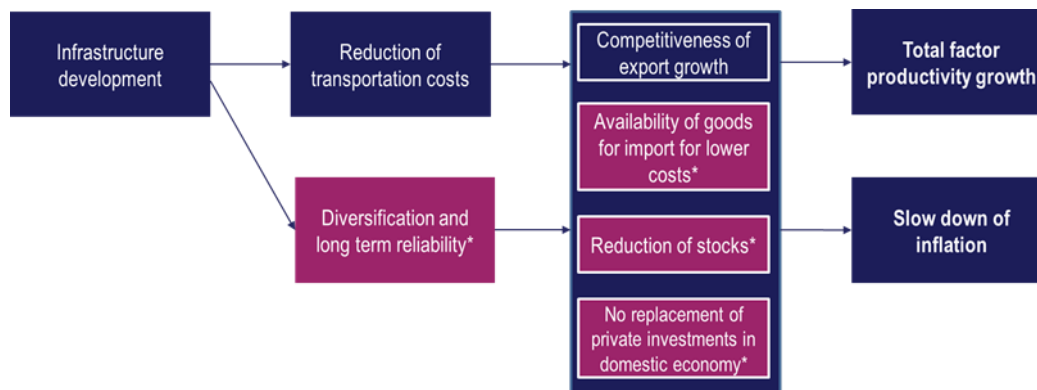
Even deficit-financed investments, for example in EU-Central Asia connectivity or international corridors in the Middle East, will not substitute or limit private investments in Europe itself and will result in the slowdown of inflation.

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<sup>3</sup> [Economic impact of infrastructure investment](#) – Congress.

<sup>4</sup> [Economic impact of infrastructure investment](#) – Congress.

<sup>5</sup> See also U.S. Congressional Budget Office, The Macroeconomic and Budgetary Effects of Federal Investment, June 2016, pp. 24-25.; Abdul Abiad, Davide Furceri, and Petia Topalova, The Macroeconomic Effects of Public Investment: Evidence from Advanced Economies, IMF Working Paper, vol. WP/15/95, May 2015.

**Figure 9: Macroeconomic Impact of the International Transport Corridors Infrastructure Investments**

\*Specific impact of investments in international corridors carried out in other geographical blocks

*Source: own concept*

**The new connectivity model is directed towards the improvement of access to mineral resources and growth of resilience of value chains in a time of black swans.**

**Finance is the flip side of trade, as financial flows are moving in the opposite direction to the transported volumes.** International corridors, in addition to increasing physical connectivity (territorial cohesion) and fostering economic growth, also contribute to linking financial systems between geographical or geopolitical blocks, considering a sad fact that the confidence in traditional reserve currencies and payment systems has declined among developing countries and own financial systems (payment, insurance) will most probably emerge within blocks.

**It is now that the role of corridor-based approach to connectivity becomes more important to maintain the interoperability of various systems.**



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