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ENHANCING CONNECTIVITY AND TRADE BETWEEN CENTRAL ASIA REGIONAL ECONOMIC COOPERATION COUNTRIES AND THE WORLD: BENEFITS, RISKS AND POLICY IMPLICATION

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Abstract

Transportation corridors and reduced trade costs are essential to develop Central Asia Regional Economic Cooperation (CAREC) countries' foreign trade. However, to intensify intra-CAREC trade as well as the region's global exports, the product portfolio of CAREC countries' industry and agriculture has to be broadened. Otherwise CAREC countries will just face strong import competition or become pure transit territories. The need and opportunities of change brought about by global decarbonization efforts and green transition, widely discussed now in connection with efforts to revive the global economy after the slump caused by the COVID-19 pandemic, make this even more urgent, especially for hydro-carbon exporters. At the same time, the green transition and the general move to more science-intense production provides opportunities for new products and employment.

Broadening and expansion of the export range of products and services require a robust set of measures in areas such as trade policy, coordination of sectoral policies, diversification, and business reforms. In particular, the countries that are in the center of the CAREC region's trade flows such as Uzbekistan and Kazakhstan should step up their initiatives for industrial change and closer cooperation among the CAREC countries. The paper analyses the importance of such initiatives by CAREC countries and discusses the need for further steps in developing production that is based on countries' natural or historically accumulated comparative advantages. The paper suggests that initiatives can be clustered into economic corridors that provide economies of scale and scope and good connectivity, and therefore the impact can be scaled up. However, corridor development must be well-aligned with the overall economic policies and development plans of the countries involved.

The paper concludes that progress will require redesigning schemes both for local and foreign investments, along with the development of capital markets. Trade facilitation remains an overarching objective. Better coordination of sectoral policies and priorities by measures for collaborative policy formulation and implementation, alignment of national and regional planning, and regulatory convergence in the region is required. Recommendations include suggestions to revise development plans in the light of accelerated technological change, not least due to COVID-19, and to facilitate the social change brought about by the technological change by active requalification and labor market policies.

Keywords: transportation corridors, trade, CAREC countries, COVID-19, connectivity

JEL Classification: F13, P25, P28, O19, Q35

Contents

1. INTRODUCTION

Increased trade and business relations have resulted in the rise of linkages among CAREC countries and the rest of the world. This has been intensified since the CAREC region has become an important transit area for Euro–Asian trade. In 2006, as part of a United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) initiative the "Trans-Asian Railway Network Agreement" was signed by 17 Asian nations to build a transcontinental railway network between Europe and Pacific ports in the People's Republic of China (PRC). As linkages have increased the debate has grown about risks as well as the benefits from such connectivity.

Both separate CAREC and overreaching initiatives contributed to increasing connectivity in the region. Kazakhstan adopted a program called "Nurly Zhol" (Bright Way), in which infra-structure construction and particularly roads and railways play a major role. There are important transcontinental transport routes being established between Europe and Asia, such as the "Western China–Western Europe Corridor" and the "New Silk Road" within the PRC's Belt and Road initiative. In December 2014, a new railway connecting Central Asia with the Persian Gulf through Iran was officially opened. Turkmenistan is building a railway line to Tajikistan via Afghanistan, bypassing Uzbekistan. Talks about a Pakistan, Afghanistan, Uzbekistan railway have recently intensified. There are longstanding plans for the construction of a PRC–Kyrgyz Republic–Uzbekistan railway.

The development of Eurasian transit routes and the contribution of Central Asian economies to these routes are important enablers of enhancing the trade potential of the region. However, due to challenges related to connectivity, market access, lack \of large-scale and focused trade facilitation programs, institutional differences, and limited bilateral relations this potential is not yet fully utilized. Despite the region's high potential as transshipment routes, realizing this potential requires intensified, coordinated efforts and international actions.

A number of CAREC countries, the countries of Central Asia, are landlocked countries with limited (or no) direct access to the sea. They are remote from major world markets. In addition, these countries have a low economic density and long distances. Fragmented supply chains combine with inadequately structured transit procedures. This can result in significantly higher transport costs for landlocked countries in reaching the nearest ports, inhibiting the realization of the full trade potential. Smooth and timely supply chain management is of particular importance for agricultural/agribusiness products. Therefore, trade connectivity plays a significant role in the overall economic prosperity of the CAREC countries.

Without doubts, better connectivity can increase the CAREC region's linkage to international networks. Countries with very low or very high levels of connectivity are both more resilient to shocks in global networks. In the first case, due to the limited number of partners, and in the latter due to the limited number of diversified connections, which could provide alternative routing.

The paper analyses the importance of better connectivity for CAREC countries and discusses the need for further steps in developing production that is based on natural or historically accumulated comparative advantages. The paper suggests that initiatives can be clustered into economic corridors that provide economies of scale and scope and good connectivity, and therefore their impact can be scaled up.

The paper concludes that progress will require redesigning schemes both for local and foreign investments, along with the development of capital markets. Trade facilitation remains an overarching objective. Better coordination of sectoral policies and priorities by measures for collaborative policy formulation and implementation, alignment of national and regional planning, and regulatory convergence in the region a required.

2. TRENDS IN CAREC'S CONNECTIVITY

2.1 Trade Costs

Enhanced connectivity, as well as regional and global integration contribute to the diversification of the economy through new jobs and opportunities. Improvements in the transport sector and digitalization are expected to lower transportation costs and time, better integrate rural areas into national and regional economic centers and increase trade volumes. Improved transport systems contribute to the re-clustering of manufacturing industries alongside transportation networks. This provides greater opportunities also for knowledge transfers (Duernecker et al. 2014) which will allow the Central Asian countries to adapt and to increase competitiveness. However, better connectivity will also intensify import competition.

New transportation corridors enable the reduction of trade costs, which triggers further Euro–Asian economic integration (Pomfret 2019). At the same time, economic growth and enhanced integration call for new, more efficient, and more environment-friendly transport solutions.

Investments into physical infrastructure need to be prioritized on the grounds of commercial viability, the priorities of individual countries, regional cooperation options, and the expected enhanced role of transit routes (Pomfret 2010). Coordinated action is required towards institutional improvements. There are inefficiencies, related to complicated tariff structures, customs procedures, cabbotage, and other rules and procedures inhibiting smooth logistics. There is sometimes also a lack of skills and personnel within the responsible authorities. There is the need to standardize, digitalize, and simplify procedures to establish corridors also in the legal/procedure/ technical sense: Transport costs account for only about 38% of trade costs for goods trading, according to the WTO's World Trade Report 2018. The rest of the costs are due to expenses on logistics, border crossing, information and transactions, trade policy, and some others. For trade in services, transport costs account only for about 15%, and the rest are "soft" costs. The CAREC countries have a legacy of high trade costs (Pomfret 2019) and will only benefit if governments are able to further reduce barriers that increase the trade costs.

There remain many issues to be resolved for improving connectivity infrastructure in CAREC, especially soft infrastructure. The "CAREC Corridor Performance Measurement and Monitoring Annual Report 2019" shows that there have been improvements in rail transportation, especially since 2015. The speed for rail transport to travel on CAREC corridors rose from 27.2 kilometers per hour in 2010 to 45.0 kilometers per hour in 2019, net of delays. However, with delays of various kinds, the average speed for rail transport was only 19.0 kilometers per hour in 2019. The average time needed to cross a border for rail transport was 20.6 hours in 2019, a lot less than in 2014, but only slightly below the time of 22.1 hours in 2010.

There has been some modal shift of PRC–EU trade as shipping and air services were disrupted by COVID (and rail was not), and also due to longer term developments because rail transport is often more suitable for just-in-time delivery—rail offers speed and reliability while ships are slower and subject to disruption by weather, pirates, etc. (this is a good development for landlocked countries hoping to participate in GVCs) (Kalyuzhnova and Pomfret 2020). Table 1 indicates the rapid growth in Eurasian rail traffic by the "United Transport and Logistics Company – Eurasian Rail Alliance," founded by Kazakhstan, the Russian Federation and Belarus in 2014.

Table 1: Number of Twenty-foot Equivalent Containers (TEUs), 2015–2020

Year	Number of Twenty-foot Equivalent Containers (TEUs)
2015	46,000
2016	100,500
2017	175,800
2018	280,500
2019	333,000
2020	546,900

Source: UTLC website at *www.utlc.com* (accessed 16 February 2021).

Unfortunately, there was much less progress on road transportation. The speed without delay (SWOD) for road transport to travel on CAREC corridors was at 43.6 kilometers per hour in 2019, only slightly above the 2010 figure of 41.0. Speed with delay (SWD) slowed to 22.6 kilometers per hour in 2019 from 24.4 in 2010. The border crossing time remains critical. The average time needed to cross a border for road transport was 12.2 hours in 2019, up from 6.3 hours in 2010. This increase was mostly the result of lengthy customs controls, commercial inspection, and loading and unloading at high-traffic border crossing points, and lengthy physical examination of trucks associated with anti-smuggling operations.

2.2 Globalization in Transition

In order to profit from reduced trade costs, and to live up to the new economic realities and competition on the Euro–Asian continent, CAREC countries have to turn transport corridors into economic corridors. If CAREC countries are able to do so, modernize production and find appropriate export niches, then reduced trade costs would have a positive impact on economic growth (Demidova 2008).

The technological change that is underway currently modifies how global value chains can be organized. Digitalization, robotics, and 3D printing lead to revised production schemes (Giroud and Ivarsson 2020). Some of the revisions might be in opposite directions such as insourcing and outsourcing or reshoring and offshoring, based on technological disruptions involved in the industrial process. However, whatever the reorganizing of global value chains looks like exactly, the net result is likely to be even faster growth of trade in services than in goods than is already the case. Trade in telecom and IT services and in business services is rising especially fast. A trend towards growing trade in services, as against stagnating trade in goods and tangible foreign direct investment flows, was already visible in the past decade. This will become even more pronounced now. COVID-19 boosted digitalization and is moving the world additionally towards intangibles.

Globalization reached a turning point in the mid-2000s. Value chains for the production of goods have become less trade-intensive. Goods production and trade in goods continue to grow in absolute terms, but a smaller proportion of goods are traded across borders now. Trade in services grows significantly faster than trade in goods and generates larger economic value. At the same time, less than 20% of cross-border trade in goods is now based on labor cost arbitrage. Global value chains are becoming more knowledge-intensive and relying on highly qualified workforce. Investments in intangible assets (such as R&D, brands, and intellectual property) have more than doubled since 2000, from 5.5 to 13.1% (McKinsey 2019). Technological change such as 3D printing allows value chains to become more regionally concentrated in future. Companies may increasingly build their production closer to demand.

In his work, Antràs (2020) evaluates to what extent the world economy has entered a phase of deglobalization and provides some thoughts on the future of global value chains in the post-COVID-19 age. The observed slowdown in globalization is a natural consequence of the rapid increase in globalization in the late 1980s, 1990s, and early 2000s. The COVID-19 pandemic might negatively influence the future of globalization if heavy policy tensions across countries will prevail.

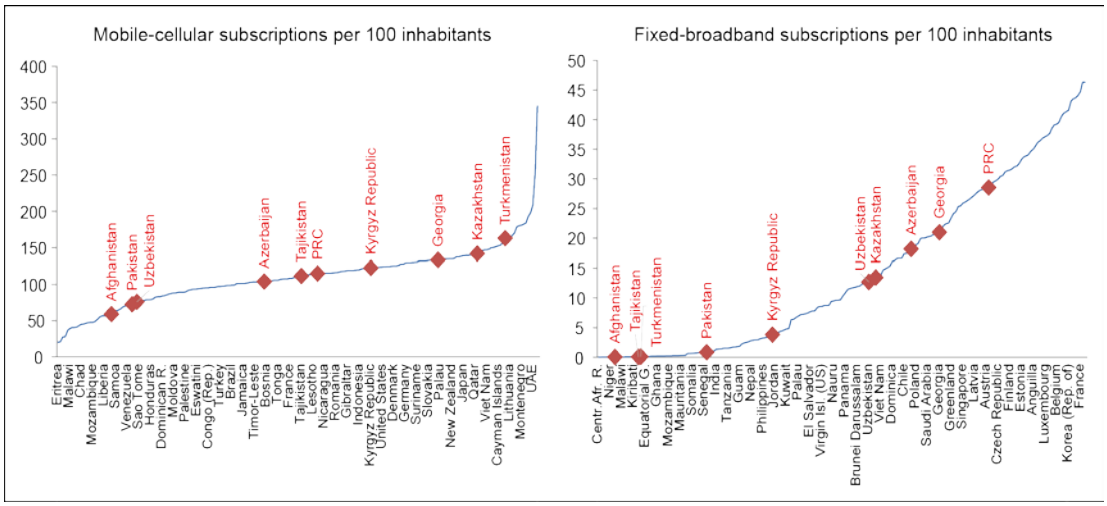
The popularization of digital life by the COVID-19 pandemic will further speed up the adoption of digital technologies in all spheres of life (Iivari et al. 2020) and thus also boost related technologies. While the COVID-19 pandemic might slow the adoption of some new technologies because of weaker investment due to worsened finances and sentiment, it will speed up adoption in the mid to long run. One reason for this is also that companies less adaptable to the new environment will go out of business or at least significantly lose in importance (Deimler and Reeves 2011).

Beside significant social and economic impacts in the short run, the COVID-19 pandemic has significant implications for the CAREC countries in the long run due to its modification of global development trends.

Attracting multinational enterprise operations and related FDI, local sourcing and consequent employment generation might become even more difficult due to the reorganization of global value chains (GVCs), and especially difficult if there is insufficient infrastructure, an insufficiently qualified workforce, as well as an insufficient technological and business level of local suppliers. At the same time, opportunities arise to participate in GVCs, but supply chain digitalization will cause GVCs to be more platform-based and asset-light. GVC participation will require high-quality hard and soft digital infrastructure and adequately skilled local labor and suppliers (Christianty and Hidayati 2020).

Digital preparedness varies quite substantially among the CAREC countries. Turkmenistan, Kazakhstan, and Georgia are quite advanced regarding mobile phone subscriptions, whereas Afghanistan, Pakistan, Uzbekistan still need to catch up quite a lot (Figure 1). Broadband subscriptions, more important for industrial purposes, better reflect the digital preparedness of countries. The People's Republic of China (PRC), Georgia, and Azerbaijan are doing well with regard to broadband, whereas Afghanistan, Tajikistan, and Turkmenistan find themselves on the low end.

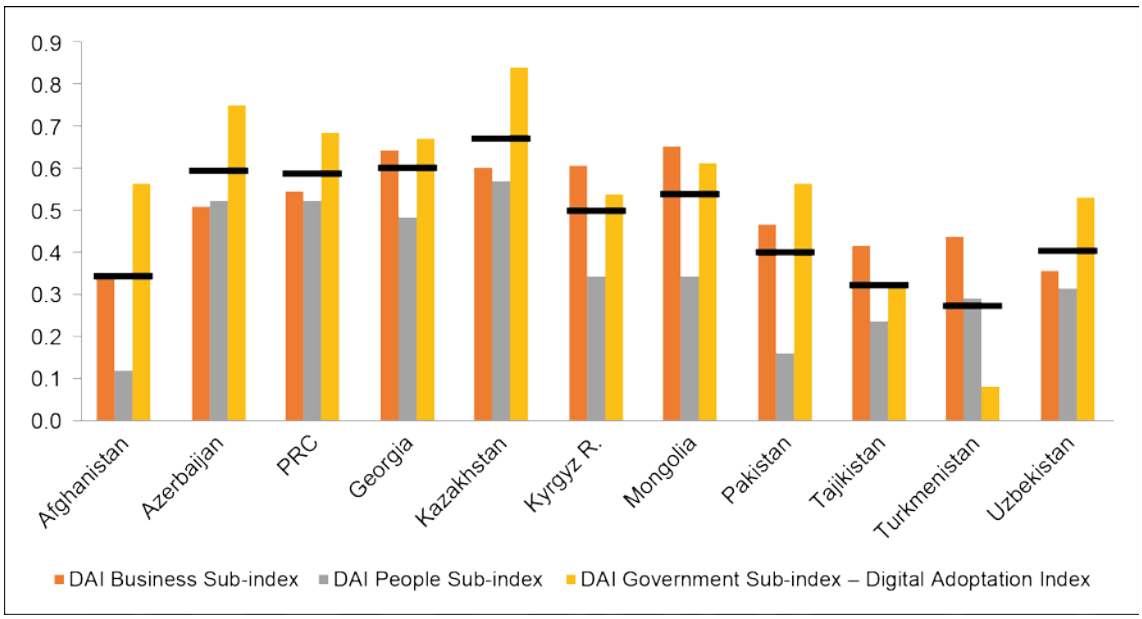
Figure 1: Digitalization in the CAREC Countries



Source: https://www.itu.int, 2018 data, authors' calculations.

The World Bank's "Digital Adoption Index" ranks Kazakhstan, Georgia, and Azerbaijan as best prepared among the CAREC countries, Turkmenistan, Tajikistan, and Afghanistan have to catch up most (Figure 2). The index also measures digital adoption across three sectors i.e., government, business, and people. It ranges from 0 to 1, with 1 indicating the most advanced digital adoption. Globally, Singapore ranks best on the index at 0.87, Central Africa worst at 0.15. The Kyrgyz Republic, Mongolia, Tajikistan, and Turkmenistan do best on the "business" subindex. All other CAREC countries are best rated on the "government" subindex. A number of CAREC countries are relatively successfully running e-government programs but will need to do more to support the private sector.

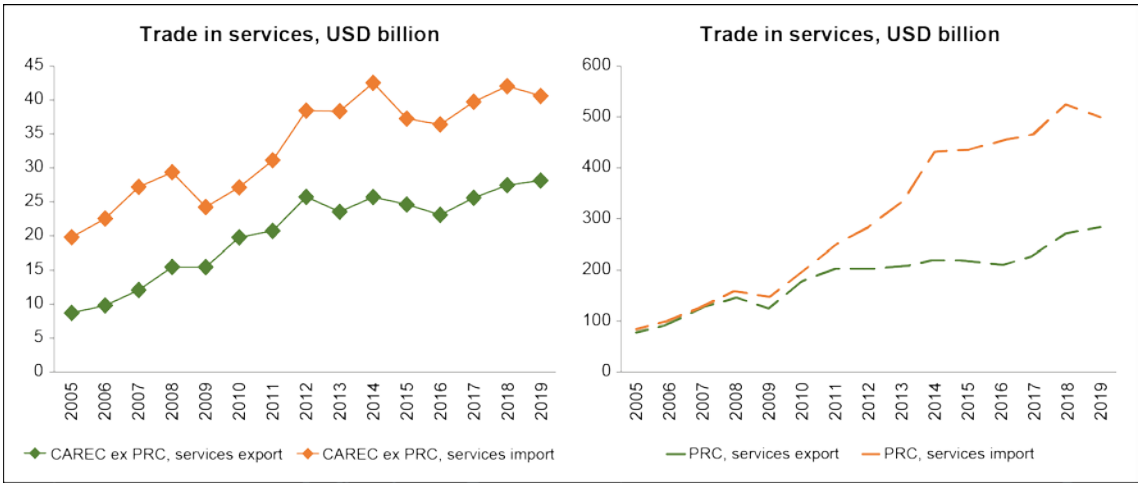
Figure 2: Digital Adaptation Index, CAREC



Source: https://www.worldbank.org/en/publication/wdr2016/Digital-Adoption-Index, 2016 data, authors' calculations.

Whereas global trade in services is expanding fast, CARECexPRC's[1] trade in services is rather stagnating (Figure 3). CARECexPRC's share in global services exports has fallen from a peak of 0.56% in 2012 to 0.46% in 2019. This indicates that CARECexPRC is not sufficiently well prepared to provide services, including in tourism, and also that the region's earnings from transit are not as high as the geostrategic location of the region would allow. The ability to provide services at a reasonable quality/cost combination will have to be augmented. The PRC's rising services imports should offer new opportunities to the CAREC countries and need to be investigated carefully.

Figure 3: CAREC ex-PRC Services Trade Is Stagnating, 2012–2019



Source: TradeMap, author's calculations.

CARECexPRC's services import is also stagnating. This can in part be explained by fewer engineering services for Kazakhstan's mining, related to the current phases of oil field development, but only in part. The stagnation is worrisome because it reflects the insufficient usage of advanced services from abroad, e.g., financial services, ICT services, usage of intellectual property such as patents, utility models, trademarks and registered designs, which can adversely affect the economic and social development in the region.

3. CONNECTIVITY AND DIVERSIFICATION

3.1 Export Diversification

Ricardo's comparative advantage approach (Ricardo 1817), emphasized that a country should develop those industries for which it has the relatively best endowments and trade the goods produced by these industries for goods for which the country is relatively less well endowed.

Global trade and integration processes have been topics of extensive discussion in academic literature (Hausman, et al. 2006; Hidalgo et al. 2007; Krugman 1985 etc.). Many scholars emphasize that the gains from trade will be realized if trade costs

[1] Because of the large weight of the People's Republic of China (PRC) in the CAREC region, and its special strategic role, it is often informative to look at indicators characterizing the region excluding the PRC ("CARECexPRC").

are sufficiently low, whereas others, such as Porter (1990), emphasize that price responses alone are not enough, and that prosperity is policy-driven.

Porter is of the opinion that "National prosperity is created, not inherited. It does not grow out of a country's natural endowments, its labor pool, its interest rates, or its currency's value, as classical economics insists. A nation's competitiveness depends on the capacity of its industry to innovate and upgrade" (Porter 1990: 73).

Porter's approach (Porter 1990) claims to open opportunities for developing countries to depart on a way of innovation, diversification, and relatively fast catching up, whereas the comparative advantage approach is sometimes accused to be a theory cementing the prevailing international division of labor in the interest of the advanced, well-diversified, high value-added-producing countries.

Among the strategies he recommends are *cost leadership*, attempting to offer products or services at the lowest costs, *product differentiation*, attempting to provide a variety of products, services, or features to consumers that competitors are not yet offering or are unable to offer, and *innovation*, attempting to leapfrog other market players via the introduction of completely new or notably better products or services.

However, history shows that it is not easy to diversify away from commodity production. Moreover, theoretical discussions on how much diversification is optimal continue.

The long-term experience of nations – such as the United Kingdom and the United States, Australia and Canada, and Argentina and Brazil – suggests that economic diversification is neither necessary nor sufficient for economic development.... The United States and the United Kingdom increased their per capita incomes tenfold since 1870, and have di-versified exports. Australia and Canada's economies have also grown as quickly, but their exports remain specialized. (Gill et al. 2014: 8)

Hausmann and Klinger (2006) point out that the probability that a country will develop the capability to be good at producing one good is related to its installed capability in the production of other similar ones, for which the currently existing productive capabilities can be easily adapted.

It will not be easy to diversify away from fuels and metals. The challenge is to find the optimal path for utilizing a country's natural endowments, existing facilities, acquired capabilities for moving towards innovation and diversification in a realistic and financeable way.

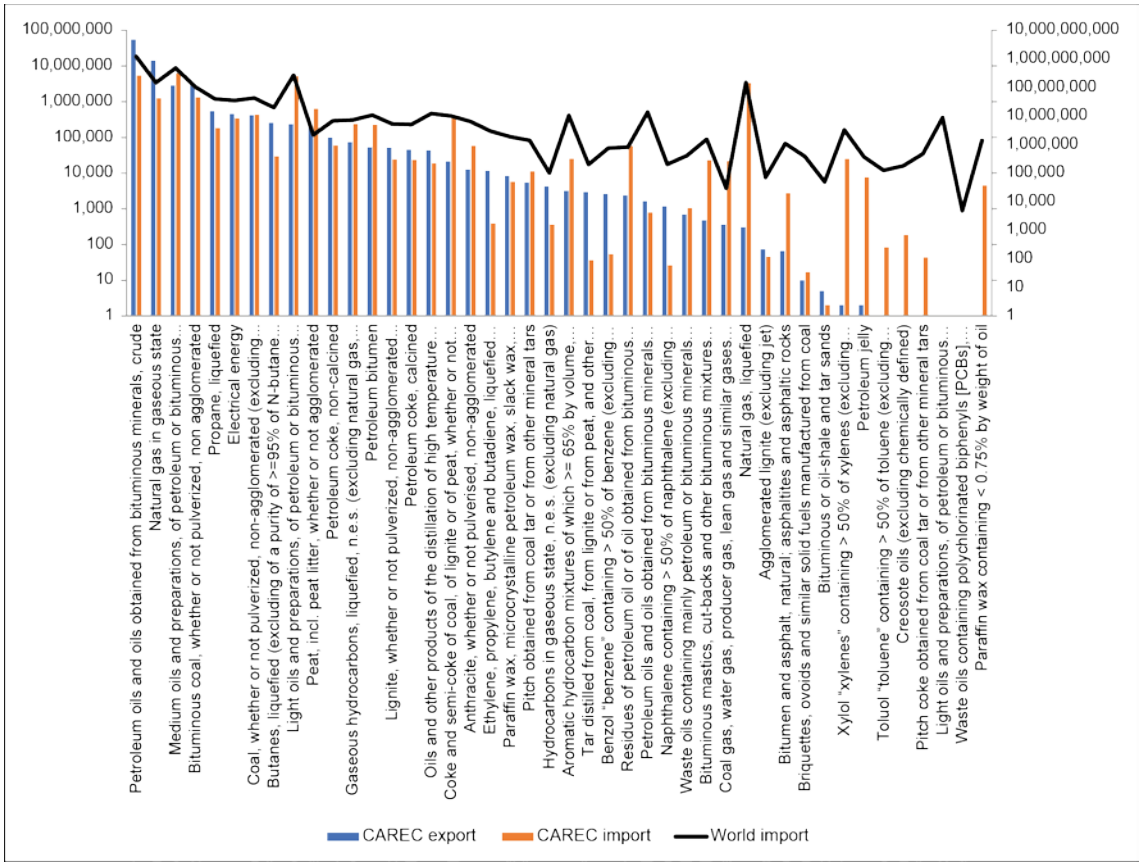
The New Trade Theory (Melitz 2003) stresses the importance of firms rather than sectors for understanding the challenges and opportunities countries face in the age of globalization. Within the very same industry, some firms are not able to cope with international competition while others thrive. The resulting intra-industry reallocations of market shares and productive resources are much more pronounced than inter-industry reallocations driven by comparative advantage.

In industries, for which the output required to attain economies of scale represents a significant proportion of external demand, only a small number of enterprises are viable. Typically, this is in industries with high fixed costs. Competition might be limited by the first-mover advantage because new entrants have no chance to develop sufficient large economies of scales, given incumbents already serve a large chunk of the market. Some argue that economies of scale and other barriers to entry require government intervention and strategic trade policy.

3.2 CAREC Starting Points and Potential Directions of Diversification?

A starting point for CAREC countries' diversification is downstream production. Downstream production is not sufficient in the longer run and does not replace finding niches for backward linkages in GVCs, but it is a beginning based on CAREC countries' comparative advantages. CAREC countries produce and export a large volume of mineral fuels. However, within this industry (Number 27 according to the Harmonized System of trade classification) the portfolio of (6 digit) products is strongly concentrated on the left-hand side of Figure 4, much more than world demand (depicted as line in Figure 4). In addition, the CAREC region's own import demand would also corroborate that. There might be opportunities to increase the production of at least some of the products, which are located more on the right-hand side of the chart, given that CAREC countries already export them, as the blue bars in Figure 4 indicate. The mineral fuels industry is only one example where downstream activities appear necessary, a similar reasoning applies also to metals and agricultural products.

Figure 4: CAREC Foreign Trade and World Import in Industry HS 27 Mineral Fuels, 2018, USD '000



Source: Trademap, World Development Indicators, authors' calculations.

There are activities to build petrochemical industrial complexes in Turkmenistan, Azerbaijan, Kazakhstan, and Uzbekistan. In June 2020, it was announced that Jizzakh Petroleum JV LLC, a joint venture of JSC Uzbekneftegaz and Gas Project Development Central Asia (a subsidiary of Gazprom International) will begin to carry out a major revamp of the Ferghana oil refinery that will enable the introduction of a hydrocracking process and the launch of production of AI-92 motor gasoline and Euro-5 diesel fuel on July 1, 2023 (Globuc 2020). During 2014–2018, the oil refinery in Shymkent, one of three refineries in Kazakhstan, was modernized (*The Astana Times* 2018). Ethylene was Uzbekistan's fifth biggest export in 2019 (World Trade Organization 2020: 386–387).

However, developing downstream productions is not an easy task, as the recent withdrawal of Borealis from investing in the construction of a polyethylene factory in the Atyrau region of Kazakhstan shows (CHEManager 2020).

Diversifying is the more urgent since global decarbonization strategies will reduce the use of these fuels for heating purposes, the generation of energy, and the running of combustion engines (Kalyuzhnova and Pomfret 2017).

Due to the COVID-19 pandemic even more emphasis is being put on the green economy transition (Sandbrook et al. 2020), with some loans and investments aimed at reviving the global economy tide to progress in this direction. Although the process might still take a while, global demand for, and prices of, mineral fuels might remain subdued for some years and in the longer term (Kalyuzhnova and Lee 2020).

CAREC countries have already undertaken initiatives and should further intensify developing production that is based on their natural or historically accumulated comparative advantages, especially by broadening the product portfolio of the mineral fuels, metals, and agricultural industries (World Bank 2011).

In its February 2020 publication about its CAREC regional integration update, the CAREC Institute emphasizes that smart diversification is of special importance for CAREC to adjust to the new global environment and to increase its global economic weight. CAREC countries adopted various plans for industrial and agricultural development, the development of the energy sector, tourism, and other sectors. CAREC countries need to foster industries able to process downstream the region's rich endowments with natural resources such as metal ores, hydrocarbons, and arable land (CAREC Institute 2021).

Green transition and decarbonization strategies, intensively discussed in connection with measures aimed at reviving the economy to overcome the outfall of the COVID-19 pandemic (Kuzemko et al. 2020), along with the substantial decrease in the cost of renewable energy, make a change in the CAREC countries' production portfolio even more necessary.

Although this transition might not advance as fast as is desirable, it will substantially affect the CAREC region's global export opportunities and revenue sources both for the business sector and governments in the medium run. At the same time, the green transition and the general move to more science-intense production provides opportunities for new products and employment. The CAREC economies can also exploit their proximity to the PRC with its fast-growing GDP and household incomes and drive for modernization and high-quality products. The PRC's 14th Five-Year Plan will probably put stronger emphasis on sourcing closer to the domestic shore.

Organizing or supporting techno-parks, special economic zones, and business incubators, including by the cooperation of more than one country, supporting universities and think-tanks can help foster technological skills and developing business services, also for exporting. (Szabó 2006).

Development of services exports is especially important. It includes joint CAREC efforts to profit from the global growth in services trade. In branches such as tourism, this might be slowed due to the COVID-19 pandemic, but longer-term joint tourism initiatives should pay off. Digitalization has further advanced during the pandemic. This opens additional opportunities for business services. Trade in services like ITC, banking, logistics, aviation etc. complement the processes of economic expansion and integration in multiple ways.

If initiatives can be clustered into economic corridors that provide economies of scale and scope and good connectivity, the impact can be scaled up. If CAREC countries are able to turn transport corridors into economic corridors, modernize production, and find appropriate export niches, then reduced trade costs would have a positive impact on economic growth (Demidova 2008).

The Great Mekong Subregion countries, economic corridor pioneers, have had encouraging experiences with economic corridors. At least in part thanks to economic corridor development, intra-regional trade grew from USD 26 billion in 2000 to USD 483 billion in 2017. Foreign direct investment flows among the countries of the region increased from USD 0.4 billion in 2010 to USD 1.4 billion in 2017. International visitor arrivals rose from 16 million in 2000 to almost 66 million in 2016 (ADB 2021).

There are two important economic corridor projects in Central Asia: The Almaty–Bishkek Economic Corridor covers Almaty city of Kazakhstan, Bishkek city of the Kyrgyz Republic, and the areas around and between these cities. Its aim is to advance health, education, and tourism services, and to aggregate agricultural product marketing, including for export (CAREC 2016). The Shymkent–Tashkent–Khujand Economic Corridor, currently under development, opens new opportunities for a broad range of goods and services, including food and textile products, construction materials, chemical products (such as fertilizers and pharmaceuticals), and tourism-related services, by developing horticulture value chains, modernizing SPS measures, and developing food-quality certification services, and marketing regional tourism products. Establishing cross-border special economic zones is also planned. (ADB 2021). The corridor is envisaged on the territory of the Shymkent city and the Turkestan region in Kazakhstan, Tashkent city and the Tashkent region in Uzbekistan, and the Sugd region (including Khujand city) in Tajikistan.

The People's Republic of China–Pakistan Economic Corridor is another highly important corridor undertaking, a project with big projects in transportation infra-structure, including the port of Gwardar, in energy, agriculture, and science and technology.

These economic corridors have contributed to the development in certain areas. However, some of the projects have not lived up fully to expectations. To improve their impact, they have to be better aligned with the overall economic policies and development plans of the countries involved.

4. CONCLUSIONS AND RECOMMENDATIONS

CAREC countries are in need of further developing their foreign trade. To do so, it is vital to have effective transportation corridors and to reduce trade costs. The product portfolios of the CAREC countries' industry and agriculture have to be broadened. This will intensify intra-CAREC trade as well as the region's global exports.

Without this there is the danger that CAREC countries will just face strong import competition and in the worst-case scenario will become pure transit territories.

Global decarbonization efforts, green transition, and the consequences of the COVID-19 pandemic, such as accelerated digitalization, and the high levels of human capital relative to income and wage levels in some CAREC countries open new avenues for development and bring about new opportunities, but also make change more urgent, especially for oil and gas exporting countries. At the same time, the shift to technologically more advanced production and the green transition provide opportunities for new employment and new types of products and services.

The broadening and expansion of the export range require a robust set of measures in areas such as trade policy, coordination of sectoral policies, diversification, and business reforms. In this paper we discussed the importance of such initiatives by CAREC countries and highlighted the need for further steps in developing production that is based on countries' natural or historically accumulated comparative advantages.

CAREC countries are still in search of appropriate global and regional niches for their production and services. Cooperation among them would provide economies of scale and scope and amplify opportunities.

Advancing production and services to higher levels to meet the requirements of the new economic area is a complex task, which requires a whole set of measures, ranging from further improving the business and investment climate over advancing digitalization to trade facilitation, developing better channels for technology transfer, knowledge exchange, and much more. (CAREC Institute 2021:23–24).

Initiatives could be clustered into economic corridors that provide much needed transport and digital infrastructure, qualified labor supply or specific economic policy measures in support of upgrading the countries' economic capabilities. However, corridor development has to be well aligned with the overall economic policies and development plans of the countries involved.

In order to enhance connectivity between CAREC countries there are a number of recommendations which could be suggested.

First, it would be important to continue efforts to improve connectivity, with a special focus on soft infrastructure. In order to implement this, provision of second-order connectivity to local users that helps them to utilize the transcontinental transportation routes would be essential.

Second, it is crucial to develop transport corridors into economic corridors in order to utilize economies of scale and scope. Businesses should be encouraged to settle in the corridor area, if needed via establishing special economic zones with good energy and digital connectivity supply, and occasionally some tax relief would also be seen as a logical step.

Third, it is essential to facilitate a better coordination of sectoral policies within countries and between them.

Fourth, accelerated technological change such as digitalization and decarbonization requires the rethinking of infrastructure investment plans, and, even more importantly, plans for the requalification of the labor force and active labor market policies.

Fifth, it is important to speed up the development of capital markets and initiatives for attracting high-quality foreign investment. At the same time, it is crucial to avoid over-indebtedness by putting proper risk mitigation systems in place.

Sixth, in order to improve the business and investment climate, the continuation of relevant reforms is required.

Finally, advance regulatory convergence in the region to allow smoother trade and better integration into regional and global supply chains, together with better aligning of national and regional planning, have a paramount importance for the effective connectivity in the CAREC countries.

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