

Khan, Muhammad Ayub Mehar

**Working Paper**

## Economic integration in Central Asia regional economic cooperation member countries: Financing economic corridors and sovereign bonds market

ADB Working Paper Series, No. 1109

**Provided in Cooperation with:**

Asian Development Bank Institute (ADBI), Tokyo

*Suggested Citation:* Khan, Muhammad Ayub Mehar (2020) : Economic integration in Central Asia regional economic cooperation member countries: Financing economic corridors and sovereign bonds market, ADB Working Paper Series, No. 1109, Asian Development Bank Institute (ADBI), Tokyo

This Version is available at:

<https://hdl.handle.net/10419/238466>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by-nc-nd/3.0/igo/>



**ADB Working Paper Series**

**ECONOMIC INTEGRATION IN  
CENTRAL ASIA REGIONAL  
ECONOMIC COOPERATION  
MEMBER COUNTRIES: FINANCING  
ECONOMIC CORRIDORS AND  
SOVEREIGN BONDS MARKET**

---

Muhammad Ayub Mehar

No. 1109  
April 2020

**Asian Development Bank Institute**

Muhammad Ayub Mehar is a professor at Iqra University in Karachi, Pakistan.

The views expressed in this paper are the views of the author and do not necessarily reflect the views or policies of ADBI, ADB, its Board of Directors, or the governments they represent. ADBI does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use. Terminology used may not necessarily be consistent with ADB official terms.

Working papers are subject to formal revision and correction before they are finalized and considered published.

The Working Paper series is a continuation of the formerly named Discussion Paper series; the numbering of the papers continued without interruption or change. ADBI's working papers reflect initial ideas on a topic and are posted online for discussion. Some working papers may develop into other forms of publication.

The Asian Development Bank refers to "China" as the People's Republic of China.

In this report, "\$" refers to United States dollars.

Suggested citation:

Mehar, M. A. 2020. Economic Integration in Central Asia Regional Economic Cooperation Member Countries: Financing Economic Corridors and Sovereign Bonds Market. ADBI Working Paper 1109. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/economic-integration-carec-member-countries>

Please contact the authors for information about this paper.

Email: [ayubmehar@yahoo.com](mailto:ayubmehar@yahoo.com)

Asian Development Bank Institute  
Kasumigaseki Building, 8th Floor  
3-2-5 Kasumigaseki, Chiyoda-ku  
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500  
Fax: +81-3-3593-5571  
URL: [www.adbi.org](http://www.adbi.org)  
E-mail: [info@adbi.org](mailto:info@adbi.org)

© 2020 Asian Development Bank Institute

**Abstract**

The nexus of the modes of financing, trade, and transport-related infrastructure, quantum of trade activities, and economic growth is the core area of this paper. It covers the impacts of regional economic integration of Central Asia Regional Economic Cooperation (CAREC) member countries on their trade and GDP growth. Though several bilateral and multilateral agreements to boost mutual trade are considered as a measure of economic integration, in the absence of high-quality physical infrastructure of transport and logistic services the implementation of such agreements is not possible. So, the provision of good trade and transport-related logistic services has been taken as a key indicator of integration among the countries in the region. The role of the magnitudes and modes of financing in determining the provision of logistic services and transport-related infrastructure has also been covered in the study. The results emphasize the causal relations between trade and transport-related infrastructure and GDP growth. The most important conclusion is the identification of short-term external borrowing as the most effective mode of financing. The study does not recommend long-term external borrowing or multilateral borrowing for the development of trade and transport-related infrastructure. The strong, significant, and robust impact of the share of short-term borrowing in total external debt on GDP growth, exports, and infrastructure development indicates the pressure on policy makers and economic managers to utilize resources effectively and efficiently. The global financial architecture should focus on the provision of short-term lending facilities to improve the efficiency of developing projects.

**Keywords:** Central Asia Regional Economic Cooperation, CAREC, regional integration, transport infrastructure, short-term external debt, domestic credit to private sector

**JEL Classification:** F15, F34, R42

## Contents

1.	INTRODUCTION .....	1
2.	CAREC MEMBER COUNTRIES AND TRANSPORT-RELATED INFRASTRUCTURE .....	2
3.	FINANCING OF TRANSPORT AND TRADE-RELATED INFRASTRUCTURE .....	5
4.	IMPACTS OF THE MODES OF FINANCING: ESTIMATION TECHNIQUES.....	10
5.	CONCLUSIONS AND POLICY IMPLICATIONS .....	15
	REFERENCES .....	17

## 1. INTRODUCTION

One of the desirable objectives of globalization and a free trade regime is reducing the global disparities in human welfare and development through the interaction of people in a free world. This theory favors the strong mutual dependency, participation, and relations among nations. Some experts have considered regional economic integration as an important way of transitioning from today's world to a world without extreme poverty, characterized by universal healthcare, education, water, and sanitation. There is one premise in this reasoning: that if integration is feasible, transaction costs will be reduced and economies of scale will emerge (Pozuelo-Monfort 2018).

Though the ultimate goal of a free trade regime is global participation, it also encourages regional integration. In this paradigm, regionalization can be considered an initiation of ultimate globalization. So it should not be seen as an alternative approach to globalization; it is a subset of globalization. It is widely believed that economic integration and mutual dependency on economic resources may diffuse political tensions and avert a cold war or warlike situation. The quantum of trade in goods and services (particularly health, education, tourism, and transportation) and cross-border mobilization of labor and capital lead to interactions among the people of participant countries.

Various models and stages of economic integration have been discussed and analyzed in economic literature. Bekeart (1995) analyzed the barriers to economic integration, while Yoshino, Morgan, and Rana (2018) and Li (2014) described economic integration in the context of contemporary globalization and the formation of a monetary union. Integration from the infrastructure development point of view has been described by Yoshino et al. (2018) and Mehar (2015).

Economic integration does not mean economic linkages among nations. In fact, economic integration is something more than economic linkages. In contrast to free trade, economic integration has been considered the second-best option for global trade where barriers to free trade cannot be removed for several political, economic, and social reasons. Various types of trade agreements construct a path for economic integration, but integration requires physical transfer of goods and services from one country to another. This implies that logistics and transport-related infrastructure are integral parts of economic integration. Table 1 explains the various stages of economic integration and indicates that the formation of preferential trading areas, free trade areas, customs unions, and economic and monetary unions are the earlier stages of a complete economic integration. This table is based on Balassa's (1967) theory of economic integration. According to this theory, the barriers to trade are reduced with increased economic integration, while free movement of economic factors across national borders generates demand for further integration, not only economically but also politically. Consequently, economic communities evolve into political unions over time.

**Table 1: Stages of Economic Integration**

No.	Degree of Integration	Scope of Integration
1	Preferential Trading Area (PTA)	A partial abolishment of custom tariffs on the inner borders of member states
2	Free Trade Area (FTA)	A full abolishment of custom tariffs on the inner borders of member states
3	Customs Union	Unified (common external) tariffs on the exterior borders of the union
4	Common Market	Inclusion of the movement of services, capital, and labor into an FTA
5	Economic Union	A combination of the customs union and a common market
6	Fiscal Union	Introducing a shared fiscal and budgetary policy
7	Monetary Union	Introducing a shared currency
8	Complete Economic Integration	Unification of economic policies (tax, social welfare benefits, etc.), reductions in the rest of the trade barriers, introduction of supranational bodies, and gradual moves towards the final stage, a "political union"

Source: Developed by the author based on Balassa (1967).

Various levels of economic integration have been experimented with in different parts of the world. The North American Free Trade Area (NAFTA), which belongs to the second stage (free trade), has presented a successful model of resource allocations. The European Union (EU) has adopted an advanced version of integration after passing through earlier stages. The eurozone has embraced a single currency (euro), which has eliminated the currency risk. There have been several integration attempts, including ASEAN in Asia, Mercosur in Latin America, Ecowas/Comesa/SADC in sub-Saharan Africa, and SAARC in South Asia. Some supranational institutions have played important roles in establishing economic integrations among countries that are undergoing severe political disputes. For instance, the South Asian Association for Regional Cooperation (SAARC) played an important role in the implementation of the South Asian Free Trade Area (SAFTA). However, no significant enhancement in the mutual trade of South Asian countries has been observed because of the rapid growth in nontariff bearers (NTBs) in the trading between India and Pakistan. The most important institution that can play an important role in the economic integration of Asia and Europe is the Economic Cooperation Organization (ECO). Currently this institution is emphasizing the construction of economic corridors to connect South Asia, Central Asia, the Middle East, and Europe. Almost the same role is being played in a different way by the Central Asia Regional Economic Cooperation (CAREC) Program. The junctions of the Economic Cooperation Organization (ECO) and the Central Asia Regional Economic Cooperation (CAREC) Program is shown in Table 2.

## **2. CAREC MEMBER COUNTRIES AND TRANSPORT-RELATED INFRASTRUCTURE**

The economic history of Central and South Asia is largely associated with the connectivity of trade and natural and human resources among the peoples of Central and South Asian countries. The "Silk Route" and the "Grand Trunk Road" (famously known as the "GT Road" in Pakistan and India) have been providing the major source of this connectivity. The direction of trade and the mobility of human resources in Central Asian Republics were changed from South Asia to Eastern Europe during the Soviet regime. Now, visible signs of the revival of historical routes can be observed in the region. After a long period of economic disassociation among the countries in this region, the Central Asia Regional Economic Cooperation (CAREC) Program introduced the concept

of “Economic Corridor Development” (ECD) in 2010, while the Economic Cooperation Organization (ECO) also introduced several projects aimed at enhancing economic relations among the countries in this region. The ratification of the Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention) by the ECO member countries, the white card scheme to make it easier for drivers to travel across the borders in ECO member countries, simplification of the visa process for traveling to ECO member countries, an ECO trade agreement to enhance the trade among the member countries, a visa sticker scheme for leading businessmen to allow them across the border without a visa, and the formation of the “ECO Trade and Development Bank” and the “ECO Insurance Company” are the steps that have been taken by the ECO to revive the historical relations among the Central and South Asian countries.

**Table 2: Intersection of CAREC and ECO**

No.	Country	CAREC Member	ECO Member
1	Afghanistan	√	√
2	Azerbaijan	√	√
3	PRC	√	
4	Georgia	√	
5	Iran		√
6	Kazakhstan	√	√
7	Kyrgyz Rep.	√	√
8	Mongolia	√	
9	Pakistan	√	√
10	Tajikistan	√	√
11	Turkmenistan	√	√
12	Turkey		√
13	Uzbekistan	√	√

Source: Author’s compilation.

Several agreements on economic cooperation and trade facilitation have been signed in the present regime, while various bilateral and multilateral organizations are serving to boost the economic relations among the CAREC member countries. However, no significant enhancement in their mutual trade can be observed. In fact, in the absence of good trade and transport-related infrastructure, integration among the Central Asian economies is not possible. This prerequisite step for regional integration is recognized by the member countries and several works to develop the transport-related infrastructure in the member countries are in progress.

The China–Pakistan Economic Corridor (CPEC) is one of the strategies to improve the regional connectivity for economic and business purposes. It is the main component of the development strategy initiated by the People’s Republic of China (PRC), the Belt and Road Initiative (BRI), formerly known as “One Belt One Road” (OBOR). The basic concept of the CPEC is to join Gwadar (an Arabian seaport in Pakistan) with Kashgar (Xinjiang province) in the west of the PRC. Other than the BRI, several corridors and trade enhancement projects are in progress in ECO member countries. The following are included in these corridors and projects: the Quadrilateral Agreement on Traffic in Transit (QATT), the Islamabad–Tehran–Istanbul (ITI) Train Network, the Trilateral Transit Trade Agreement (TTTA), the Pakistan–Uzbekistan Transit Trade Agreement, the Pakistan–Iran–Turkmenistan Commerce Cooperation (PITCC), the Afghanistan–



Pakistan–India–Bangladesh–Myanmar (APIBM) Corridor, the Pakistan–India–Nepal Integrated Network, the Central Asia and South Asia (CASA) – 1000 energy corridor, the Indus River Trade Corridor, the North–South Transnational Corridor (Kazakhstan–Turkmenistan–Iran railway link), the Iran–Pakistan–India Pipeline, the Turkmenistan–Afghanistan–Pakistan and India (TAPI) Pipeline, and the Trans-Iranian Canal. All these projects for efficient connectivity in transportation and energy reflect the direction of trade and mobilization of resources in the future (Mehar 2017).

The CPEC starts from the seaport city of Gwadar in Pakistan and runs all the way to the historic western Chinese city of Kashgar near the Tajikistan and Kyrgyz Republic borders. High-speed trains, adjacent major cities and economic zones, power plants, dry ports, water treatment facilities, the prospective oil and gas pipelines from Iran to the PRC, mineral deposit areas, the availability of cheap labor, big markets with growing demand, and good climatic conditions are the favorable factors for success of the CPEC. It is a common opinion that this project may provide connectivity to Central Asian landlocked countries. South Asia, Central Asia, and the Middle East may be connected by this project in a greater way (Mehar 2017).

Several other plans to connect the various countries in Asia and to provide connectivity between Europe and Asia are in progress or under active consideration. One of those big projects is the Trans-Asian Railway (TAR) project, which was initiated by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) to create an integrated freight railway network across Europe and Asia. However, it is important to note that the success of this global mega plan depends on the participation of ECO and CAREC member countries.

The deterioration in transport-related logistic services is the biggest barrier to economic integration, while it has been observed that the landlocked countries in Central Asia, Pakistan, and Afghanistan are far behind in the development of trade and transport-related infrastructure compared to other developing countries. We applied the availability of good ‘trade and transport-related infrastructure’ as a proxy of regional integration. It is commonly observed that trade agreements and regional integrations do not get success in the absence of good transport infrastructure and logistics facilities (Mehar 2013). To establish a strong and sustainable economic integration, the participant countries have to improve their transport-related infrastructure.

It is notable that various agreements on regional integration have failed in various parts of world because of the lack of the required trade and transport-related infrastructure. One example of this is the SAFTA (South Asia Free Trade Area), which has failed to make significant improvement in the mutual trade of South Asian countries. Apart from political tensions, the lack of trade and transport-related infrastructure is the main reason for the failure of regional integration in South Asia.

It is quite obvious that compatibility in trade and transport-related infrastructure is required for integration among the countries in the region. The availability of a good and compatible transport and trade-related infrastructure in a country will support its economic integration with the other countries in the region. In the absence of a compatible infrastructure, there will be a requirement to develop the trade and transport-related infrastructure, which is a prerequisite of regional integration. This implies that the quality of the transport infrastructure in a country is an indicator of economic integration.

In the absence of compatible infrastructure, the participating countries will be interested in its development, upgrading, and modernization. The decision to finance the cost of infrastructure development will be determined by the incremental benefits to the participating countries after integration.

### 3. FINANCING OF TRANSPORT AND TRADE-RELATED INFRASTRUCTURE

One of the problematic areas in developing trade and transport-related infrastructure is the lack of fiscal resources. The financing for the development of transport-related infrastructure is the most important step in considering the benefits of economic integration. It is noteworthy that the development and modernization of physical infrastructure in developing countries during the bipolar regime was largely dependent on subsidized external debts and grants from rich industrialized countries. Such facilitations were based on political ideology and alliances with the big powers. Dependency theory and the “Domino Effect” model explain the sustainability of developmental works in the middle- and lower-middle-income countries in the bipolar regime. Hegemonic stability theory (Kindleberger 1970) has explained the role of leading states in the changes of capabilities of the world economy. The belief in these theories had encouraged the developing countries to depend on big powers for their development. Higher leveraged financing is one of the offshoots of such belief (Mehar 2018).

The Asian Development Bank has estimated that developing Asia will need to invest \$1.5 trillion per year in infrastructure through 2030 to maintain its economic growth momentum and tackle poverty. Total infrastructure financing as a share of gross domestic product (GDP) will need to increase from around 3.8% to 5.6% by 2020 worldwide (Yoshino, Helble, and Abidhadjaev 2018). But the drastic side of infrastructure financing in CAREC member countries is the overdependency on public-sector fiscal resources. Participation of the private sector in infrastructure financing is not common in these countries, while there is no active bonds market.

A worldwide comparison of infrastructure financing shows that debt was the most popular source of financing in 2017. The share of debt financing in infrastructure projects with private participation was 70%, divided between international and local (commercial) participants: 55% financed by international and 15% by local participants. Out of 55% of international debt financing, 30% belonged to DFIs, while 6% were multilateral and 24% bilateral (Inderst 2018). This detail is enough to understand the patterns of infrastructure financing by private sector. It is obvious that long-term debt is the main source of infrastructure financing, while the share of short-term financing is declining globally.

Several options for financing regional connectivity-related projects are available in the contemporary world. Public–private partnership (PPP), infrastructure sovereign bonds, equity participation, public funding, private-sector financing, institutional lending, and bilateral or multilateral borrowing are the possible options for financing transport infrastructure. However, the financing for such megaprojects to build transport and trade-related infrastructure is always associated with some macroeconomic implications. Repayment of debt and interest costs, an impact on the value of the local currency, increases in taxes to generate the funds for repayments, and possible effects on the value of the local currency if repayments are required in foreign currencies are the possible macroeconomic implications of debt financing for such megaprojects. The failure of fiscal policy to meet modern infrastructure requirements in various developing countries emphasizes the importance of the private sector for investment in infrastructure projects.

In this study we analyzed the various options for financing transport-related infrastructure for economic integration among countries. It has been hypothesized that a sovereign bonds market and long-term financing by private-sector organizations can finance the required investment in transport infrastructure for regional integration. It was also thought that financing should be generated through the public or private sectors of participant countries or other international investors. The use of sovereign bonds to finance the corridors' infrastructure may be one of the viable options, but the success of these multilateral global projects requires the participation of all beneficiaries. The issuance of sovereign bonds to finance global or regional projects should not be based on the guarantees of a single country's government. If the objective of the construction of economic corridors is to establish an economic integration, then the participating countries should consider the formation of a fiscal union. The issuance of sovereign bonds jointly by the participant countries of a fiscal union will minimize the political risks, which may reduce the cost of debt. Otherwise, the sizeable subscription of sovereign bonds at appropriate cost cannot be successful in countries where the private bonds market is inactive and its size is negligible.

A comparison of the financial markets and monetary and fiscal policies of CAREC member countries suggests the synchronization of economic policies before launching the sovereign bonds to finance their joint infrastructure projects for their planned economic integration. The formation of a fiscal union ensures the synchronization of tax policies.

Comparison of the macroeconomic and financial markets of ECO and CAREC member countries reveals the limitations of monetary and fiscal policies in these countries. A bird's-eye view of the macroeconomic strength, composition of financial assets, debt burdens, and financial market development of these countries shows a big variation in the financial strength and development. The bonds markets in these countries are not comparable with the industrialized countries while macroeconomic and financial risk exposures reflect the risks associated with the sovereign bonds. The most important point is that there are only four countries (the PRC, Pakistan, Kazakhstan, and Turkey) where capital markets are performing. The capital markets in other CAREC member countries are either not performing or their size is negligible. The patterns of trade and financing in CAREC and ECO member countries are shown in Tables 3 to 6. These patterns show the diversification in the financial development and financing patterns among the countries in the region.

**Table 3: Sovereign Risk and Market Strength: Ranking (Based on 62 Countries)**

Indicator/Country	Pakistan	PRC	Kazakhstan	Turkey
Infrastructure Development Index	60	45	37	41
Financial Development Index	58	23	47	42
Bonds Market Development Index	30	24	35	40
Risk of Sovereign Debt Crisis	59	7	26	45
Local Currency Sovereign Rating	59	20	32	42
Foreign Currency Sovereign Rating	59	18	28	47

Source: World Economic Forum (2018).

**Table 4: Trade and Infrastructure**

<b>Country/Region/Group</b>	<b>GDP Growth (%)</b>	<b>Exports (billion \$)</b>	<b>Transport and Trade-Related Logistic Index (1–5; 5 is best)</b>	<b>Investment in Transport Infrastructure with Private Participation (billion \$)</b>
<b>2007</b>				
Afghanistan	13.8	..	1.10	..
Azerbaijan	25.0	22.4	2.00	..
PRC	14.2	1,257.1	3.20	4.49
Georgia	12.6	3.2	..	0.06
Kazakhstan	8.9	51.8	1.86	0.03
Kyrgyz Republic	8.5	2.0	2.06	..
Mongolia	10.2	2.5	1.92	..
Pakistan	4.8	21.9	2.37	0.58
Tajikistan	7.8	1.7	2.00	..
Turkmenistan	11.1	..	..	..
Uzbekistan	9.9	..	2.00	..
<b>For Comparison</b>				
Low-income countries	5.8	81.9	1.98	..
Middle-income countries	8.5	4,339.6	2.30	27.88
High-income countries	2.6	12,981.3	3.41	..
Europe and Central Asia*	7.7	820.8	2.24	..
South Asia	7.3	290.9	2.07	4.51
European Union	3.1	6,755.0	3.34	..
World	4.2	17,396.3	2.58	..
<b>2016</b>				
Afghanistan	2.3	1.1	1.84	..
Azerbaijan	-3.1	17.6	..	..
PRC	6.7	2,197.9	3.75	3.47
Georgia	2.8	6.2	2.17	..
Kazakhstan	1.1	43.6	2.76	..
Kyrgyz Republic	4.3	2.4	1.96	..
Mongolia	1.2	5.6	2.05	..
Pakistan	5.5	26.8	2.70	..
Tajikistan	6.9	0.9	2.13	..
Turkmenistan	6.2	..	2.34	..
Uzbekistan	7.8	..	2.45	..
<b>For Comparison</b>				
Low-income countries	3.2	115.5	2.14	..
Middle-income countries	4.3	5,978.0	2.46	21.25
High-income countries	1.7	14,777.1	3.54	..
Europe and Central Asia*	1.5	841.6	2.41	..
South Asia	7.7	519.4	2.45	2.62
European Union	2.0	7,279.6	3.56	..
World	2.6	20,868.0	2.75	..

Source: World Bank (2019).

**Table 5: Patterns of External Debt Financing**

<b>Country/Region/Group</b>	<b>Domestic Credit to Private Sector (% of GDP)</b>	<b>Total Outstanding Debt (billion \$)</b>	<b>Public Sector Long-term Debt (billion \$)</b>	<b>Short-term Debt (% of Total Outstanding Debt)</b>	<b>Multilateral Debt (% of Total Outstanding Debt)</b>
<b>2007</b>					
Afghanistan	6.8	2.0	1.9	1.07	40.49
Azerbaijan	14.4	3.9	2.3	28.99	24.60
PRC	105.7	373.5	86.9	54.54	7.83
Georgia	27.9	3.0	1.6	22.22	33.99
Kazakhstan	58.9	96.2	1.7	11.98	0.74
Kyrgyz Republic	6.4	2.9	1.9	11.09	44.39
Mongolia	41.6	1.7	1.6	3.34	54.22
Pakistan	27.8	42.0	36.9	5.30	47.56
Tajikistan	13.2	1.3	1.1	5.37	49.52
Turkmenistan	..	0.9	0.6	10.74	2.70
Uzbekistan	..	4.7	3.2	4.26	19.48
<b>For Comparison</b>					
Low-income countries	12.6	77.1	62.1	13.43	47.46
Middle-income countries	59.7	3,014.9	1,178.0	23.81	10.50
High-income countries	148.5	..	..	..	..
Europe and Central Asia	..	1,063.8	277.4	22.46	4.37
South Asia	42.5	289.0	144.5	14.27	28.81
European Union	112.0	..	..	..	..
World	127.9	..	..	..	..
<b>2016</b>					
Afghanistan	3.6	2.4	1.9	8.48	40.74
Azerbaijan	32.9	15.0	11.0	9.73	30.45
PRC	156.8	1,415.8	162.7	56.60	2.34
Georgia	61.9	15.8	5.7	14.88	19.94
Kazakhstan	33.0	163.7	21.4	4.25	4.38
Kyrgyz Republic	20.6	7.9	3.6	4.43	17.20
Mongolia	56.9	25.7	5.1	10.06	4.68
Pakistan	16.5	72.2	51.6	9.87	34.77
Tajikistan	19.2	5.3	2.3	15.35	18.89
Turkmenistan	..	0.5	0.2	29.64	22.51
Uzbekistan	..	16.3	7.4	2.13	21.44
<b>For Comparison</b>					
Low-income countries	20.7	139.9	109.1	8.19	40.84
Middle-income countries	99.2	6,295.0	2,233.3	24.28	8.21
High-income countries	144.6	..	..	..	..
Europe and Central Asia	54.1	1,527.8	470.9	14.31	6.05
South Asia	45.6	623.4	269.9	17.17	17.47
European Union	96.0	..	..	..	..
World	128.2	..	..	..	..

Source: World Bank (2019).

**Table 6: External Financing by International Market Mechanism**

<b>Country/Region/Group</b>	<b>Bonds Issued by Private Sector, Nonguaranteed (billion \$)</b>	<b>Bonds (Amount Disbursed) by Private Sector, Nonguaranteed (billion \$)</b>	<b>Bonds Issued by Public Sector, Guaranteed (billion \$)</b>	<b>Bonds (Amount Disbursed) by Public Sector, Guaranteed (billion \$)</b>	<b>Foreign Direct Investment (FDI) (billion \$)</b>
<b>2007</b>					
Afghanistan	0.0	0.0	0.0	0.0	..
Azerbaijan	0.0	0.0	0.0	0.0	5.0
PRC	0.0	0.7	0.0	1.5	-139.1
Georgia	0.0	0.0	0.0	0.0	-1.7
Kazakhstan	0.4	11.0	0.4	0.0	-8.0
Kyrgyz Republic	0.0	0.0	0.0	0.0	-0.2
Mongolia	0.0	0.0	0.0	0.1	-0.4
Pakistan	0.0	0.0	0.0	0.8	-5.5
Tajikistan	0.0	0.0	0.0	0.0	-0.4
Turkmenistan	0.0	0.0	0.0	0.0	..
Uzbekistan	0.0	0.0	0.0	0.0	..
<b>For Comparison</b>					
Low-income Countries	0.0	0.0	0.0	0.0	..
Middle-income Countries	16.6	59.6	40.5	64.4	..
High-income Countries	..	..	..	..	..
Europe and Central Asia	2.4	20.2	8.1	16.1	..
South Asia	0.4	7.8	5.3	8.6	..
European Union	..	..	..	..	..
World	..	..	..	..	..
<b>2016</b>					
Afghanistan	0.0	0.0	0.0	0.0	-0.1
Azerbaijan	0.0	0.0	0.0	1.0	-1.9
PRC	0.0	27.6	6.9	9.5	41.7
Georgia	7.9	0.4	0.0	0.3	-1.2
Kazakhstan	0.10	1.0	0.0	0.0	-13.4
Kyrgyz Republic	1.5	0.0	0.0	0.0	-0.6
Mongolia	0.0	0.0	0.0	0.5	4.2
Pakistan	0.0	0.0	0.5	1.0	-2.4
Tajikistan	0.0	0.0	0.0	0.0	-0.2
Turkmenistan	0.0	0.0	0.0	0.0	..
Uzbekistan	0.0	0.0	0.0	0.0	..
<b>For Comparison</b>					
Low-income Countries	0.0	0.0	0.0	0.0	..
Middle-income Countries	53.7	76.2	56.9	119.8	..
High-income Countries	..	..	..	..	..
Europe and Central Asia	6.1	13.0	9.1	29.0	..
South Asia	0.7	3.2	8.8	4.5	..
European Union	..	..	..	..	..
World	..	..	..	..	..

Source: World Bank (2019).

#### 4. IMPACTS OF THE MODES OF FINANCING: ESTIMATION TECHNIQUES

In the light of all this background, we established a growth model in this study. It is proposed that the underlying objective of regional economic integrations is to accelerate the economic growth. Economic Growth (GROWTH) in this study indicates the annual growth in GDP. The model is based on three equations, which have been estimated through Ordinary Least Squares (OLS) estimators. In the first equation, it is hypothesized that GDP growth (GROWTH) depends on Exports (EXPRT\$), External Debt Financing (DBTTOT\$), Domestic Credit to Private Sector (DCPSGDP), and Short-term External Debt (DBTSTTOT). Exports (EXPRT\$) have been taken in billion US dollars, Short-term Debt (DBTSTTOT) as percentage of total external debt, and Domestic Credit to Private Sector (DCPSGDP) as percentage of GDP. The second equation of the model explains the causal factors of exports (EXPRT\$). Foreign Direct Investment (FDI\$) in billion US dollars, Domestic Credit to Private Sector (DCPSGDP) as percentage of GDP, Share of Short-term Debt (DBTSTTOT) as percentage of total external debt, and Transport and Trade-Related Logistic Index (LGSTTRANS) have been taken as explanatory variables in determining the Exports (EXPRT\$) of a country. To measure the quality and capacity of transport infrastructure we applied the “Trade and Transport-Related Logistic Services Index” constructed by the World Bank (2019). This Index ranges from 1 to 5, with “1” indicating the lowest quality of transport and trade-related infrastructure in a country. The third equation in the model identifies determinants of the quality of trade and transport-related infrastructure (LGSTTRANS) in a country. Public-Sector Long-term Debt (DBTLTPB\$), Share of Multilateral Debt in Total External Debt (DBTMLTOT), Share of Short-term Debt in total External Debt (DBTSTTOT), and Domestic Credit to Private Sector (DCPSGDP) as percentage of GDP have been taken as determinants of the Quality of Trade and Transport-related Infrastructure (LGSTTRANS) in a country.

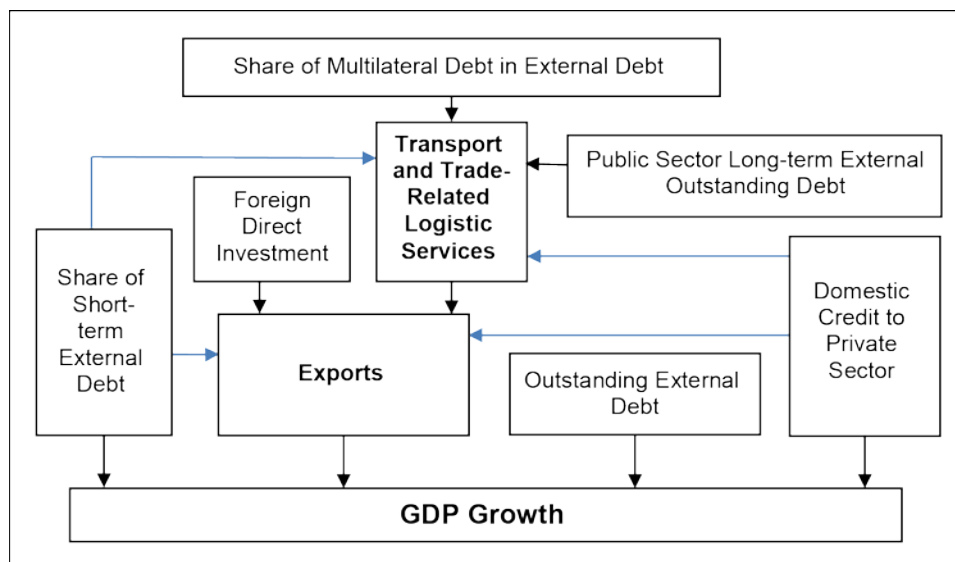
The simultaneity in the model is shown in Figure 1, which explains how regional economic integration is transformed into trade enhancement and GDP growth. Trade enhancement is measured by the Exports (EXPORTS), while the Quality of Trade and Transport-related Infrastructure (LGSTTRANS) has been taken as a proxy of regional integration.

Data for this analysis were extracted from the World Development Indicators data bank (World Bank 2019). The data consist of 219 countries for ten years (from 2007 to 2016). The last two years (2017 and 2018) could not be included in the model because of the unavailability of data on some indicators included in the analysis. It provides 2190 observations.

Through this pooled data we can analyze the impact of the regional integration policies (intervening variables) of participating governments. For this purpose, we need to introduce intervening variables in the model and establish a “difference in differences” (DID) analysis. However, it was observed that the explanatory variables included in our models represent almost the entire effect of the policy interventions. No dramatic changes over time were observed in the explained variables, which may indicate the effect of policy change over time. So we did not introduce the policy intervening variables in the model and applied OLS estimation techniques for all the models included in the study.

Although panel data were used to estimate the parameters, we applied the ordinary least squares (OLS) estimation technique. Country-specific effects were not observed in cross-country comparison, so we have not applied a fixed-effect model.

**Figure 1: The Simultaneity in the Model  
Modes of Financing, Transport Infrastructure, and GDP Growth**



Source: Author's depiction.

The robustness in estimated parameters has been checked by using alternative options, with some falsification tests also having been conducted. For this purpose, some control variables have also been included in the regression analysis. To explain GDP Growth (GROWTH) we included aggregate logistic index to measure the impact of all kinds of logistic infrastructure (LGSTALL), Trade to GDP ratio (TRADGDP), Export to GDP ratio (EXPRGDP), Share of Multilateral Debts in Total External Debt (DBTMLTOT), Foreign Direct Investment (FDI\$), Net Inflow of Foreign Direct Investment (FDIINF\$), and Business Losses due to Electric Outage (ELECLOS). In determining Exports, we have also tested the effects of Logistic Index for Tracking the Shipment (LGSTTRAK) and Logistic Index for Custom Services (LGSTCUS).

To explain the quality of trade and transport-related infrastructure (LGSTTRANS), which is a proxy of regional trade integration, we included External Log-term Debt to Private Sector (DBTLTPV\$), Amounts of Bonds Sanctioned to finance private-sector projects (BNDPN\$A), Amounts of Bonds Sanctioned to finance public-sector guaranteed projects (BNDPP\$A), Amounts of Bonds Disbursed to finance private-sector projects (BNDPN\$D), Amount of Bonds Disbursed to finance public-sector guaranteed projects (BNDPP\$D), Foreign Direct Investment (FDI\$), Investment in Transport Infrastructure under the Public-Private Partnership Program (ITRANSPPP), Investment in Transport Infrastructure with Private Partnership (ITRANSPP), Gross Domestic Product (GDP), GDP Growth (GROWTH), and Per Capita Income (PCI\$) as control variables.

The results of the regression analysis are presented in Tables 7, 8, and 9. These results quantify the impacts of the explanatory variables. The OLS results indicate the significance of parameters and overall goodness of fit in the equations. However, some results are surprising and against the common intuitive.



**Table 7: Determinants of Growth  
Dependent Variable: GDPGROW**

Variable	Option I		Option II		Option III	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	6.291	3.92	4.209	10.05	4.613	15.99
DBTSTTOT	0.050	3.13	0.015	1.33	0.010	0.95
DBTTOT\$						
DCPSGDP	-0.022	-3.14		-5.94	-0.028	-6.05
EXPRT\$						
DBTMLTOT	0.011	1.36	0.008	1.33		
LGSTALL	-0.823	-1.398				
FDI\$	-2.770E-11	-2.78	-3.707E-11	-4.65	-3.626E-11	-4.56
TRADGDP	0.005	1.06				
EXPRGDP			0.012	1.63	0.010	1.40
Adjusted R <sup>2</sup>	0.0613		0.0422		0.0414	
F-statistics	5.71		10.06		12.07	
Variable	Option IV		Option V		Option VI	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	4.418	17.46	4.357	15.43	4.711	24.20
DBTSTTOT			0.031	3.22	0.027	2.80
DBTTOT\$						
DCPSGDP	-0.025	-8.39	-0.018	-4.09	-0.024	-5.55
EXPRT\$					4.761E-13	3.77
DBTMLTOT						
LGSTALL						
FDI\$	-1.151E-11	-2.49				
TRADGDP						
EXPRGDP	0.011	2.43	0.003	0.40		
Adjusted R <sup>2</sup>	0.0471		0.0141		0.0302	
F-statistics	27.48		6.51		13.04	
Variable	Option VII		Option VIII		Option IX	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	4.874	24.94	4.701	24.15	4.289	33.45
DBTSTTOT	0.018	1.91	0.026	2.75		
DBTTOT\$	-3.480E-12	-5.04			-9.465E-12	-4.29
DCPSGDP	-0.025	-5.80	-0.023	-5.47		
EXPRT\$	3.346E-12	5.74	-8.886E-13	-1.07	6.443E-12	3.79
DBTMLTOT						
LGSTALL						
FDI\$					-1.709E-11	-1.44
FDIINF\$			1.335E-11	1.66		
ELECLOS						
Adjusted R <sup>2</sup>	0.0490		0.0310		0.0234	
F-statistics	16.34		10.49		9.65	
Variable	Option X		Option XI		Option XII	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	5.007	27.37	5.138	26.25	5.245	13.23
DBTSTTOT					0.032	2.46
DBTTOT\$	-3.709E-12	-5.45	-8.424E-12	-3.86	-3.743E-12	-4.25
DCPSGDP	-0.022	-5.47	-0.027	-6.06	-0.025	-4.33
EXPRT\$	3.578E-12	6.27	7.489E-12	4.59	3.300E-12	4.68
DBTMLTOT						
LGSTALL						
FDI\$			-1.421E-11	-1.20		
FDIINF\$						
ELECLOS					-0.012	-0.94
Adjusted R <sup>2</sup>	0.0471		0.0553		0.0562	
F-statistics	20.52		16.59		8.90	

Source: Author's Estimations.

**Table 8: Determinants of Exports**  
**Dependent Variable: EXPORTS\$**

Variable	Option I		Option II		Option III	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	-5.944E11	-5.67	-5.480E11	-5.60	-6.489E11	-6.56
DBTSTTOT						
DCPSGDP	7.805E8	1.37	8.179E8	1.43	7.126E8	1.25
LGSTTRANS	3.105E11	3.33	3.648E11	4.44	2.153E11	3.07
FDI\$	4.922	8.19	4.904	8.16	4.908	8.16
LGSTTRAK	9.024E10	1.23			6.651E10	0.93
LGSTCUS	-1.446E11	-1.55	-1.206E11	-1.32		
Adjusted R <sup>2</sup>	0.2476		0.2471		0.2462	
F-statistics	47.11		58.46		58.16	
Variable	Option IV		Option V		Option VI	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	-6.474E11	-7.47	-2.484E11	-5.74	-2.063E11	-4.52
DBTSTTOT			3.644E9	5.71	3.162E9	4.77
DCPSGDP					8.467E8	2.87
LGSTTRANS	3.450E11	3.95	9.741E10	5.07	6.844E10	3.19
FDI\$	4.943	8.36	-7.224	-16.52	-7.207	-16.78
LGSTTRAK	9.383E10	1.32				
LGSTCUS	-1.472E11	-1.65				
Adjusted R <sup>2</sup>	0.2470		0.5651		0.5882	
F-statistics	60.61		202.81		161.74	

Source: Author's Estimations.

**Table 9: Determinants of Trade and Transport Related Infrastructure**  
**Dependent Variable: LGSTTRANS**

Variable	Option I		Option II		Option III	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	2.154	20.04	2.327	22.37	2.518	26.72
DBTSTTOT	0.014	4.31	0.013	3.94	0.013	4.67
DBTMLTOT	-0.002	-0.76	-0.006	-1.90	-0.012	-3.81
DBTLTPB\$	3.680E-12	2.34				
DCPSGDP						
DBTLTPV\$	3.136E-13	0.41				
BNDPN\$D	7.435E-12	1.11	1.229E-11	1.90	3.887E-13	0.08
BNDPP\$D	-1.126E-11	-1.24	7.788E-12	1.50	-3.391E-12	-1.02
FDI\$	-2.914E-13	-0.21	-7.005E-13	-0.48		
ITRANSPPP	3.958E-12	0.49	1.498E-11	1.96	2.308E-12	0.44
ITRANSPP						
BNDPN\$A						
BNDPP\$A						
Adjusted R <sup>2</sup>	0.6011		0.5342		0.3331	
F-statistics	14.94		15.12		10.90	

*continued on next page*

**Table 9** *continued*

Variable	Option IV		Option V		Option VI	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	2.503	27.17	2.329	62.03	2.505	27.11
DBTSTTOT	0.013	4.69	0.009	6.55	0.013	4.86
DBTMLTOT	-0.011	-3.66	-0.004	-5.45	-0.011	-3.58
DBTLTPB\$						
DCPSGDP						
DBTLTPV\$						
BNDPN\$D	3.877E-13	0.08	4.376E-12	1.34		
BNDPP\$D	-3.310E-12	-1.00	-2.622E-12	-1.25		
FDI\$						
ITRANSPPP						
ITRANSP	2.436E-12	0.47			-1.013E-12	-0.23
BNDPN\$A					4.406E-12	0.64
BNDPP\$A					-8.976E-12	-1.52
Adjusted R <sup>2</sup>	0.3181		0.1952		0.3201	
F-statistics	10.61		35.38		10.68	
Variable	Option VII		Option VIII		Option IX	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	2.325	62.46	2.163	95.13	2.087	19.25
DBTSTTOT	0.009	6.70	0.012	9.46	0.011	3.12
DBTMLTOT	-0.004	-5.48			-0.003	-0.95
DBTLTPB\$					2.626E-12	3.48
DCPSGDP					0.003	2.09
DBTLTPV\$					1.372E-12	1.82
BNDPN\$D			1.344E-12	1.14		
FDI\$					-1.033E-13	-0.08
ITRANSP					-6.3768E-13	-0.09
BNDPN\$A						
BNDPP\$A						
GDP					-4.487E-14	-1.28
GROWTH					-0.008	-0.65
PCI\$					3.087E-5	2.71
Adjusted R <sup>2</sup>	0.1961		0.1555		0.6642	
F-statistics	69.88		52.85		19.53	
Variable	Option X		Option XI		Option XII	
	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics
CONSTANT	2.184	18.29	1.970	17.23	2.324	61.86
DBTSTTOT	0.011	2.96	0.009	2.96	0.009	6.84
DBTMLTOT	-0.003	-0.93	-0.001	-0.19	-0.004	-5.38
DBTLTPB\$	2.527E-12	3.26	2.389E-12	3.27		
DCPSGDP	0.003	1.68	0.003	2.16		
DBTLTPV\$	8.189E-13	1.31	5.215E-13	0.87		
BNDPN\$D						
FDI\$	2.924E-13	0.23	2.498E-13	0.21		
ITRANSP	1.085E-12	0.15	5.916E-13	0.09		
BNDPN\$A					5.218E-12	1.04
BNDPP\$A					-3.713E-12	-0.93
GDP						
GROWTH						
PCI\$						
Adjusted R <sup>2</sup>	0.6551		0.6903		0.1941	
F-statistics	18.53		21.85		35.16	

Source: Author's Estimations.

## 5. CONCLUSIONS AND POLICY IMPLICATIONS

The conclusion can be drawn that a country's exports are a significant determinant of its GDP growth, while the share of short-term debt in total external debt also affects GDP growth positively. The negative impact of domestic credit to the private sector on GDP growth is against the common intuitive. However, its positive effect on exports indicates that domestic credit to the private sector may positively affect GDP indirectly. The simultaneity in the model describes the positive effect of trade and transport-related logistic infrastructure on exports while exports lead to GDP growth. Exports have a positive association with GDP growth while domestic debt to the private sector improves the level of exports from a country.

Other than domestic credit to the private sector, the most important significant determinant of "Exports" is the "Trade and Transport-Related Logistic Conditions," which are an indicator of the regional connectivity. It is notable that the indices of "Trade and Transport-Related Logistic Infrastructure" are much lower in CAREC member countries (except for the PRC), which indicates the demand for investment in transport-related infrastructure for the success of regional integration.

Foreign Direct Investment (FDI) was a significant determinant of "Exports," however the presence of "External Debt" falsifies the impact of FDI on Exports. It is the external financing that supports the exports from a country. The role of FDI and short-term external debts is significant but reflects some complicated relations. FDI significantly contributes to the enhancement of exports, which is a result of global economic linkages. Multinational companies and foreign investors establish their businesses and production units in countries where comparative advantages are available. The surplus domestic production enhances the exportability. However, in the presence of short-term external borrowing, the impact of FDI on exports becomes negative.

However, "External Debt" affects GDP growth negatively. This may be because of the burden of interest payments on the national exchequer, which reduces the fiscal space. In the presence of higher debt liability and interest payments, national governments cannot provide the funds for public-sector development programs, which affects the rate of GDP growth.

The results indicate that the share of short-term debt in total external debts affects the quality of trade and transport-related logistic infrastructure positively. The effects of short-term debts are robust and significant. The effect of external long-term debt to the public sector is also positive, which indicates that utilization of public-sector external long-term debt plays an important role in the improvement of trade and transport-related infrastructure. The effects of domestic credit to the private sector in the determination of logistic infrastructure is also positive. Surprisingly, no significant impact of multilateral external loans on trade-related infrastructure has been proved. Sovereign bonds, private-sector bonds for long-term financing, private-sector long-term debts, and foreign direct investment (FDI) have not been recognized as significant determinants of trade and transport-related logistic infrastructure, which indicates that long-term external financing to the private sector does not have a significant role in the determination of trade-related infrastructure or economic corridors.

The role of sovereign bonds is also insignificant, though it seems counterintuitive. The empirical results indicate that sovereign bonds are not a feasible option for transport infrastructure to integrate the economies in a region. The higher share of short-term borrowing in external debts and long-term public-sector debts have been identified as good options for growth and development, while the role of expansion in the domestic credit to the private sector is also important.

The significant negative impact of domestic credit to the private sector on GDP growth and its insignificant role in the determination of exports invites the rethinking of financial policies. Transport-related logistic infrastructure has proved to be an important factor in export enhancement. Its support for trade-related activities is quite obvious. These findings concern the core area of this study. The development of trade and transport-related infrastructure is the main component of economic integration policies. This component of economic integration becomes more important in the presence of some landlocked countries in the region. The export-led growth model is confirmed in this study by equations (1) and (2).

The results emphasize the causal relations between trade and transport-related infrastructure and GDP growth. It has been shown in earlier sections that there are no significant changes in the trade and transport-related infrastructure in CAREC member countries during the period included in this analysis. The transport-related infrastructure has been identified as the weakest area in these countries. The region is far behind the developed countries in the world. The weakest infrastructure explores the causes of “less integration” in the region. To achieve the benefits of integration mere trade agreements and regulatory works are not enough. Here the development of trade and transport-related infrastructure is the most important area as it can provide linkages of seven landlocked countries with the Arabian Sea. Their mutual linkages may provide a bigger market for export enhancement and GDP growth.

These results provide important insights. The most important conclusion is the identification of short-term external borrowing as the most effective mode of financing. The results show the significant and robust effects of short-term external borrowing on growth and development. The study does not recommend long-term external borrowing or multilateral borrowing for the development of trade and transport-related infrastructure. The strong, significant, and robust impact of the share of short-term borrowing in total external debt on GDP growth, exports, and infrastructure development indicates the pressure on policy makers and economic managers for effective and efficient utilization of resources. In the presence of short-term loans, the managers have to show their success in the short term. They cannot transfer the burden of repayments and their policies to forthcoming governments. In fact, short-term borrowing is not a source of financing for long-term development; it is a part of operational activities.

This requires the attention of policy makers. A global change in the lending and investment policies of industrialized countries and lending institutions is required. Providing lending facilities to governments and public-sector organizations is a *modus operandi* for the development of financing by international financial institutions (IFIs). In this way, the risk of failure is transferred to the governments of developing countries, which usually enhances indirect taxes for payment of interest and repayment of these loans. Unfortunately, the history of public finance in various developing countries shows the misuse of external borrowing for politically motivated and popular projects. It is quite obvious that this is a bias mechanism against lower-middle-class people in developing countries. The global financial architecture should focus on the provision of short-term lending facilities to improve the efficiency of developing projects.

## REFERENCES

- Balassa, B. (1967); 'Trade Creation and Trade Diversion in the European Common Market', *The Economic Journal*, 77, 1–21.
- Bekeart G. (1995); 'Market Integration and Investment Barriers in Emerging Equity Markets', *The World Bank Economic Review*, 9, 75–107.
- Li, Fu-you (2004); 'On the Path of Dependence of East Asia Monetary Cooperation and its Policy Coordination: Lesson from Europe', in *Accounting and Finance in Transition (Volume: I)* by Zeljko Sevic; London: Greenwich University Press, 2004.
- Inderst, Georg (2018); 'Infrastructure Investment, Private Finance, and Institutional Investors: Asia from a Global Perspective' in *Financing Infrastructure in Asia and the Pacific Capturing Impacts and New Sources*; Asian Development Bank Institute: 2018.
- Kindleberger, Charles P (1970); *Power and Money: The Economics of International Politics and the Politics of International Economics*; New York: Basic Books Inc.
- Mehar, Ayub (2013); *South Asia in New Economic Order*, Islamabad: Economic Freedom Network/ NFST: 2013.
- . (2015); *Infrastructure Development by Liberalizing Economic Policies: The Straight Path of Economic Prosperity*; Islamabad: Economic Freedom Network.
- . (2017); *Infrastructure Development, CPEC and FDI in Pakistan: Is There any Connection?* *Transnational Corporation Review*; September 2017, 2–10.
- . (2018); 'Impacts of Monetary Policy on Growth and Poverty: Drastic Consequences of Government Intervention', *Journal of Modern Economy*; 2018 (1), 1–16.
- Yoshino, Naoyuki, Matthias Helble, and Umid Abidhadjaev (2018); 'Financing Infrastructure in Asia and the Pacific Capturing Impacts and New Sources', Asian Development Bank Institute: 2018.
- Yoshino, Naoyuki, Peter J. Morgan, and Pradumna B. Rana (2018); 'Global Shocks and the New Global and Regional Financial Architecture: Asian Perspectives', Asian Development Bank Institute and S. Rajaratnam School of International Studies: 2018.
- Yoshino, Naoyuki, Saumik Paul, Vengadeshvaran Sarma, and Saloni Lakhia (2018); 'Land Trust Saws as a Solution to the Land Acquisition Dilemma for Infrastructure Development in Asia'; Asia Pathways: 2018.
- Pozuelo-Monfort, Jaime (2018); 'Why I Embrace Integration', [https://www.huffingtonpost.com/jaime-pozuelomonfort/why-i-embrace-integration\\_b\\_4420969.html](https://www.huffingtonpost.com/jaime-pozuelomonfort/why-i-embrace-integration_b_4420969.html).
- World Bank (2019); 'World Development Indicators', Washington, DC: The World Bank.
- World Economic Forum (2012); 'Financial Development Report 2012', Geneva.
- . (2018); 'World Competitiveness Report: 2017', Geneva: World Economic Forum.