

Role of China-Pakistan Economic Corridor in Pakistan's Trade, Investment, Energy, Infrastructure, and Stock Market

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ABSTRACT

The beginning of 21st century is considered as atmosphere of economic globalization and geo-strategic partnership among countries. The China-Pakistan Economic Corridor (CPEC) is one of such partnership that will connect these two countries with Asia, Africa and Middle East. The CPEC agreement includes projects of energy, Gwadar port, highways, railways and others having total investment of 46 billion U.S \$. In this study, we have examined business articles, news articles, facts and figures under content analysis to test the potential impact of CPEC on Pakistan's trade, investment, energy, and infrastructure. We may conclude that at present CPEC has limited impact, but it will increase on completion of CPEC. We have also analyzed impact of CPEC on Pakistan Stock Market (PSX) by using idea of event study and have identified four events from start of CPEC (April 2015) to purchase of 40% share of Pakistan Stock Exchange (PSX) by China (December 2016). We established theoretically and practically that CPEC has positive impact on stock market. This finding is supported by practical occurrences that Morgan Stanley Capital International (MSCI) announced to include Pakistan index in Emerging Market Index and Bloomberg ranked Pakistan index as 5th best performing stock around the world in 2016. Overall the CPEC is game changer for the Pakistan economy and will support to China as well as to achieve its targets.

JEL Classification: E-01, O-11, G-14

Keywords: Chine-Pakistan Economic Corridor (CPEC), Trade, Foreign Direct Investment, Energy, Infrastructure, Pakistan Stock Exchange (PSX), One Belt and one Road

INTRODUCTION

The end of Cold War and beginning of 21st century is considered as atmosphere of economic globalization and geo-strategic partnership among nations. States have realized that standing alone and fulfilling all vital interests is not possible and partnership with world is mandatory. The states agreed on cooperation in field of defense, industrial ventures and working together for economic benefits as a result of high diplomatic talks (Noor et al., 2008). Pakistan and China are two neighboring countries in Asia and have good relationships since five decades. The economic cooperation between Beijing and Islamabad started in Sino-Pakistan agreement since 1999 and become more intimate with the passage of time (Hartpence, 2011).

In 2003, Chinese President, Hu Jinto established a "Good Neighbors Policy" as part of China foreign affairs and emphasized on strategic partnership with Pakistan. This strategy let the China to relate to world and Pakistan remained as important component of Chinese foreign policy since 1951. Beijing also dreamt of the "One belt and One road" that would link multiple

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countries. This project of “one belt and one road” would cover 4.4 billion of world population and 63% of world total economic activities (Liping, 2015).

China and Pakistan have developed bilateral trade and economic partnership and signed first bilateral trade agreement in 1963. Later, different agreements have been signed between China and Pakistan like Free Trade Agreement (FTA), 2006 and FTA in service, 2009. This economic partnership between China and Pakistan has positive impact on Pakistan’s economy, politics and defense. The Asian’s time changer project of “China-Pakistan Economic Corridor” is also result of such long-term friendship between two countries. The agreement of China Pakistan Economic Corridor (CPEC) was signed in May 2013 and finally started in 2015 (Abid and Ashfaq, 2015). The policy makers, politicians, researchers and different sovereign countries are concerned about this CPEC agreement to understand its main features and economic impact in Asia and worldwide.

In academic research there are limited studies which critically examined the overview, demographic, Challenges (Ramay, 2015 and Sial, 2014) security concerns (Ahmar, 2015 and Hussain, 2016) and risk (Arshad and Dong, 2016) related to CPEC. Only few researchers analyzed the effect of CPEC on Pakistan economy (Ali, Gang and Raza, 2016; Esteban, 2016; Irshad, Xin and Arshad, 2015) and regional cooperation (Wolf, 2016a and Wolf, 2016b) in Pakistani prospective. As per best of our knowledge there is no previous study which examined the impact of CPEC on Pakistan stock market.

This study aims to fill this gap by critically analyzing the impact of CPEC on Pakistan economic indicators as trade, investment, energy and infrastructure through content analysis and on Pakistan stock market by applying event study methodology. The objectives of this study are; (1) to discuss the overview, demographic, and security concerns of CPEC in Pakistan prospective, (2) to critically examine the impact of CPEC on Pakistan trade, investment, energy and infrastructure through content analysis and (3) finally, to analyze the impact of CPEC on Pakistan’s stock market by applying the idea of event study methodology. The remainder of the paper proceeds as follows. Section 1 explains, CPEC’s overview, phases and compilation, demographics and security Concerns. Section 2 provides literature review. Section 3 describes methodology of the paper (content analysis and event study technique) and section 4 based on conclusion.

Overview of CPEC

In 2013, Prime Minister Main Muhammad Nawaz Sharif visited China and signed different agreements of construction under CPEC. However, the practically the work on CPEC delayed due to political unrest in Pakistan and in 2015 the Mr. Nawaz and Chinese President XI Jinping, signed fifty-one agreements. The China intended to invest \$ 46 Billion (U.S dollars) as foreign direct investment in Pakistan (Abid and Ashfaq 2015) and it is largest foreign investment after U.S aid after 9/11(Sial, 2014). The project of CPEC will link Gwadar port (Pakistan) with Kashgar (China). There are different mega projects of highways, railways, optical fiber, energy and ports in CPEC. The CPEC will link China-Pakistan with Africa and Middle East and reduce distance of 12000 KM between China and Middle East (South China Morning Post, 2014). The detail of CPEC projects, investment share and official route is given in table 1 and figure 1 & 2.

Table-1
CPEC Funds and Projects Share

Name of Projects	Approx. Share of China Investment	
	US \$ Billion	Percent
Energy	32.66	71
Gwadar Port	1.84	4
Roadways	5.98	13
Railways	3.68	8
Others	1.84	4
Total	46	100%

Note. The details of the CPEC projects with approximate value of investment, retrieved from “Sandia report”¹.

Figure 1
CPEC Projects, Percent Share

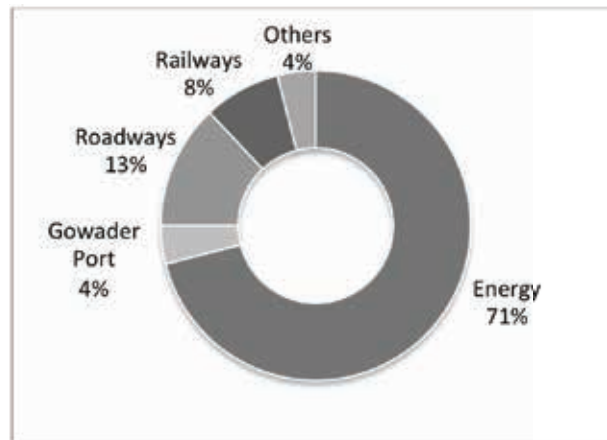


Figure 1. CPEC Project's percent share, the figure illustrates the percentage of investment in each project, calculated by authors based on data from table 1.

Figure 2
Official Map of CPEC issued by Planning, Development and Reform Commission of Pakistan

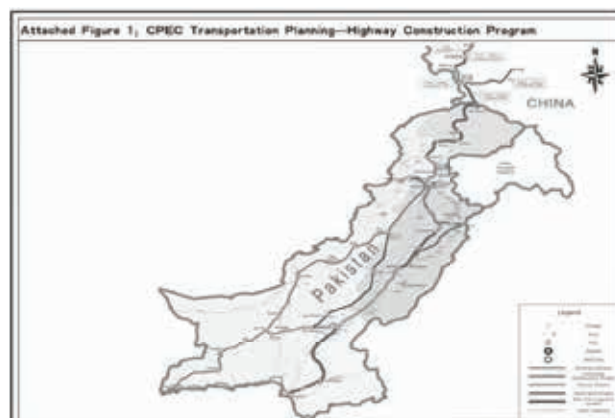


Figure 2. Official map of CPEC issued by the Planning, Development and Reform Commission of Pakistan, retrieved from <http://www.nihao-salam.com/news-detail.php?id=ODE5OQ#>.

Overview of CPEC

The China Pakistan Economic Corridor (CPEC) is divided in to following three phases² as mentioned below table 2. The planned completion period of CPEC different phases is from 2014 to 2030 that link with Chinese One Belt and One Road project and initiative of Silk Road. The first phase of CPEC (Gwadar Port) is inaugurated by former Chief of Army Staff (Gen. Raheel Sharif) and Prime Minister of Pakistan (Mian M. Nawaz Sharif) with Chinese government representatives on November 13, 2016³.

Table 2
CPEC Phases and Details

Phase	Named	Estimated year of Completion	Detail of Projects
1	Short-term Projects	Up to 2017	Gwadar Port, Construction of roads, International Airport
2	Mid-term Projects	Up to 2025	Linking and Construction of otorways
3	Final-term Projects	Up to 2030	Collaboration in all sectors

Note. The phases and details of the CPEC project is presented, source “The News”²

Phases and Completion of CPEC

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Geographic's of CPEC

The CPEC passes through different part of Punjab, Sindh, Balochistan, Khyber Pakhtunkhwa (provinces of Pakistan) & Gilgit Baltistan and connects Gwadar in Balochistan with Kashgar in western China. In Pakistan, the CPEC is based on three corridors to connect whole country for trade, investment and developing infrastructure, these are the eastern alignment, the central alignment and the western alignment. The eastern alignment starts from Gwardar and after passing in sequence through Sindh (Interior), Punjab (southern, central and northern regions), Islamabad, Haipur, Abbottabad, Mansehra, Hazara, Muzaffarabad (capital of Azad Jammu and Kashmir) and reaches through Khunjrab. The central alignment passes through Pamir Plateau, Karakoram mountains, Taxila, Peshawar, and Torkhum. Western alignment run through Balochistan (Khuzdar and Dera Bugti), Punjab (South to D.I Khan), Islamabad, Abbottabad and connects with eastern alignment (Rana and Khan, 2015).

Security Concerns of CPEC

The successful completion and implementation of China Pakistan Economic Corridor (CPEC) project is primarily based on high class security. The security for all projects like energy, highways, Gwadar port, railways and airports under the CPEC is very challenging for both China and Pakistan. The security situation in Pakistan after disturbance in Afghanistan has

created a big issue for Pakistani government, military and law enforcement agencies. The enemy of China and Pakistan are continuously trying to demolish the concept of CPEC politically, diplomatically and through militant activities (Abid and Ashfaq, 2015). Pakistan army has established a special force for the security of CPEC named as “Special Security Division” based on 10000 men. This special force for CPEC is comprised of different battalions and paramilitary divisions.

Literature

The limited literature on CPEC is divided into two streams; first academic papers which critically examined the foreign policy of China-Pakistan, overview, demographics, challenges, risk and security issues related to CPEC. Second, stream of literature interested to analyze the effect of CPEC on China and Pakistan economy and regional cooperation. Hartpence (2011) examined economic dimensions of Sino-Pakistan relationship in full detail. He discussed many factors of China and Pakistan foreign policy elements since 1999 and analyzed shift of policy elements. He reviewed domestic and international factors that influenced the China Pakistan relationship and made them strategic partner in all fields like defense, diplomatic affairs and trade and business. He also emphasized on the benefits of Sino-Pakistan trade, Gwadar port and Karakoram High in south Asia.

In the same stream of research, Abid and Ashfaq (2015) conducted an enlightening research to study the challenges and opportunities related to China Pakistan Economic Corridor (CPEC). They provided a detail overview of China-Pakistan relationship, introduction of CPEC, geographic of CPEC, CPEC and Pakistan geographic, CPEC and different provinces of Pakistan, challenges and opportunities of CPEC. They concluded that CPEC is very beneficial for Pakistan to overcome energy crises, develop infrastructure, and improve economy. The overcome security problems and government willingness to complete from both side, China and Pakistan is vital for completion of CPEC in time. In 2015, Ahmer’s study significantly analyzed the strategic meaning a benefit of the CPEC for Pakistan and China and recommended that Pakistan should focused on the proper implementation of CPEC and security concerns.

Prominently, Butt and Butt (2015) examined strategic importance of CPEC for regional (Asia) and external (other than Asia) players They explained that CPEC is economic and strategic integration between China and Pakistan. However, China Pakistan Economic Corridor (CPEC) is under much criticism by some regional and extra-regional players. Because this CPEC hurt the trade and economic activities of many countries and they feel un-protective related to CPEC. They also emphasized that for successful completion and implementation of CPEC, China and Pakistan should play strategic and diplomatic roles with all these regional (Asia) and extra-regional (other than Asia) players.

Further, the implementation concern of CPEC related to Pakistan is vital and Hussain (2016) recommended that Pakistan should improve its education system and political stability. Because there are a lot of risk involved during the implementation phases of CPEC and most prominent is political instability, may the different political parties have different view about the CPEC importance. CPEC is considered as the game changer project in Asia and analysis of myths and realities related to CPEC is very important to analyze. The material, literature and historical theory related to CPEC to confirm the realities of CEPC is examined and it is recommended that best security is very vital for the completion of CPEC and it would impact Pakistan economy positively (Yaseen et al. (2016).

Arshad and Dong (2016) also highlighted the important factor that is security issues related to CPEC. They analyzed terrorist activities, security and governance issues of Pakistan and discussed security issues faced by the China from north western region from group of militants. They suggested that both of countries China and Pakistan should arrange high class security measures for all projects of CPEC to reduce external threats of enemies.

Notably, Wolf (2016) critically examined the feasibility and impact of CPEC on regional cooperation in Asia while considering the key players, China, Pakistan, India, Afghanistan and the recommended to include the India and Afghanistan in CPEC to truly get the benefit of CPEC for Asia and make it time changer. In the second stream of literature the effect of CPEC is studied by the Esteban (2016) in a detailed review and he concluded that the CPEC is a vital opportunity for the Pakistan to improve its economic and security concerns for economic growth and development. So, Pakistan should truly focused, support and work on the implementation of the CPEC with its original sprit and vision. The CPEC has short-term benefits for the China because it is already an emerging market but for Pakistan CPEC will result long-term economic benefits (Irshahad, Xin and Arshad, 2015).

Further, Avais et al. (2016) also analyzed and discussed the socio-economic benefits of China Pakistan Economic Corridor (CPEC) for both counties, China and Pakistan. Their study is explanatory research that is based on the secondary data analysis and discussion. They concluded that this economic corridor is economically and socially benefited for Pakistan and China. They have recommended that Pakistan should be more effective for completion of CPEC because the membership of Shanghi Cooperation Organization (SCO) and Central Asian Cooperation (CAC) through China would be beneficial for Pakistan. Further, that they added that free industrial tax zone in CPEC would gain the interest of foreign investors and ultimately beneficial for Pakistan.

Specifically, Shaikh, Ji and Fan (2016) examined the impact of the CPEC on the energy sector and need to China and Pakistan empirically by applying the weight-based model to estimate the CAPEX, OPEX and per barrel levelized cost of a proposed oil pipeline in the CPEC. They concluded that CPEC will affect as significant booster for both nations and to complete and grow in energy sector. The relational effect of CPEC is also examined on infrastructure of Pakistan that results as positive impact and will help the nation to deal with different economic challenges (Ahmed and Mi, 2017).

Finally, significant research work on China-Pakistan relationship; in prospective of trade, investment, energy and infrastructure is conducted by Kumar (2007). She studied the strategic relationship of China and Pakistan and benefits to both countries in trade, investment, energy and infrastructure. She analyzed development of infrastructure in form of Gwadar port and other and concluded that it is valuable for Pakistan and China. She also recommended that both the countries would continue such kind of partnership in future because China needs access to new markets for its goods and Pakistan needs economic support.

We have discussed the valuable literature related to China and Pakistan long term partnership and examined research literature about CPEC. We find that there is a limited research work that discussing CPEC impacts on Pakistan, specifically related to trade, investment, energy and infrastructure. Moreover, to the best of our knowledge there is no prior research work that

studied CPEC impact on Pakistan stock market (after purchase of 40% share of Pakistan Stock Exchange (PSX) by Chinese Consortium). The detail literature review and ongoing discussion in local and international media about China Pakistan Economic Corridor (CPEC) have raised a question that what is the impact of CPEC on trade, investment, energy, infrastructure and stock market in Pakistan?

METHODOLOGY

The objectives of this research work are completed by applying content analysis (Bos and Tarnai, 1999) and idea of event study methodology (Hudson and Urquhart, 2015). The four main elements like trade, investment, energy and infrastructure are studied through content analysis and stock market is analyzed with the idea of event study. In content analysis, we have replicated and studied the valid references by coding the text material. We systematically studied and evaluated the previous data like documents, reference papers, working papers and official quantitative and qualitative data to check the role of CPEC in four major elements as trade, investment, energy and infrastructure.

We collected the closing index value of exchange and then returns are also calculated with these index values. Further, the event study methodology is applied to compare the returns of stock market before and after some specific events related to CPEC. We identified four specific events from the start of CPEC to purchase of 40% share of PSX by China as detail is given in table 7. We analyzed the impact of CPEC on stock market return by comparing the average return and daily return trends before and after each event. Moreover, we also compared the returns after first event (start of CPEC) and forth event (purchase of 40% share of PSX by China) to conclude the impact on stock market.

DATA ANALYSIS AND RESULTS

CONTENT ANALYSIS

CPEC and Trade & Foreign Direct Investment

The balance of trade and foreign direct investment is main indicator of an economy. The Pakistan is trade deficit country since 1985 and this deficient has reached to -23,898 U.S \$ millions in 2015-16 as given in table and figure 3. Pakistan imports have increased from export because of poor performance of industrial sector. The industrial sector of Pakistan is mainly destroyed due to energy crises and poor infrastructure. According to the analysis of Tribune in December 2016 the Pakistan trade will boost on completion of CPEC because it will help to overcome the energy crises and develop infrastructure¹⁴.

It is important to note that the Pakistan has major bilateral trade with China in 2014 is 11.85 (including import, 9.6 and export 2.25) US \$ Billion and Pakistan total trade with rest of world is 72.26 (47.54 import and 24.72 is export) US \$ Billion (Irshaq et al., 2015). The CPEC will ultimately support the Pakistan to overcome the problem of energy problem and lead to higher export than import in future.

Table 3
Pakistan Trade

Year	U.S \$ Million		
	Export	Import	Deficit
2006-2007	16,976	30,540	-13,564
2007-2008	19,052	39,966	-20,914
2008-2009	17,688	34,822	-17,134
2009-2010	19,290	34,710	-15,420
2010-2011	24,810	40,414	-15,604
2011-2012	23,624	44,912	-21,288
2012-2013	24,460	44,950	-20,490
2013-2014	25,110	45,073	-19,963
2014-2015	23,667	45,826	-22,159
2015-2016	20,787	44,685	-23,898

Note. The data related to import, export and deficit from 2006 to 2016 is presented, source Pakistan Bureau of Statistics, retrieved from <http://www.pbs.gov.pk/trade-tables>

Figure 3
Pakistan Trade, Graphical representation

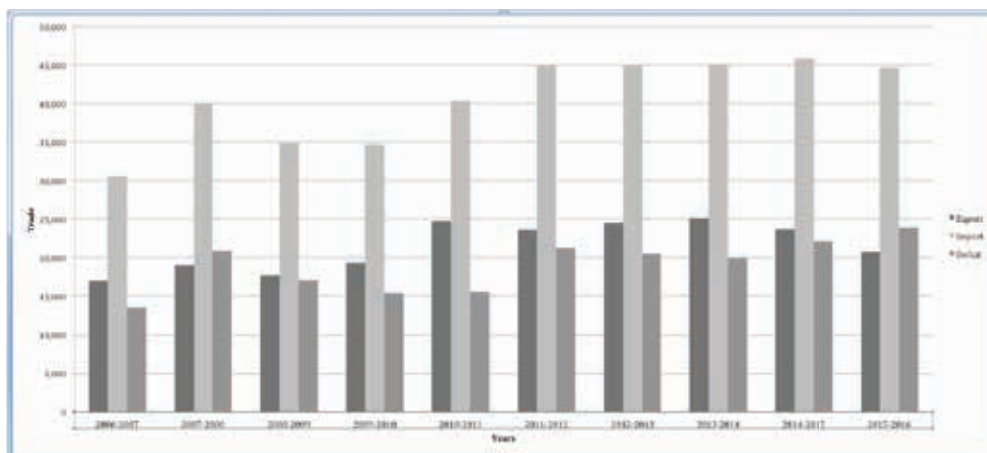


Figure 3. Pakistan's trade graphical representation, the figure shows trend in trade, calculated by authors based on the data from table 3.

Additionally, Pakistan's foreign direct investment (FDI) is continuously declining from 5.2 billion U.S \$ since 2007-08 to 2761.1 million U.S \$ in 2016 as reported by State Bank of Pakistan¹⁵. As shown in the figure 4 the historical data of Pakistani's trade from 2010 to 2016, reflects a declining trend. The main reasons of decline are political instability, poor government and military relationship, security issues and worst energy crises in Pakistan. However, after the start of CPEC there is growth of 30 million U.S \$ in FDI in December 2016 and the economist also expecting a positive impact of CPEC on FDI¹⁷. Kumar (2007) also recommended that if CPEC was implemented in true sense it would bring positive change in Pakistan's economy. Further as per policy document share by the Pakistan- Sustainable Development Policy Institute that CPEC has upto 6 % growth in GDP which ultimately result of FDI in the form of CPEC and it will be largest FDI in Pakistan.

Figure 4
Foreign Direct Investment in Pakistan

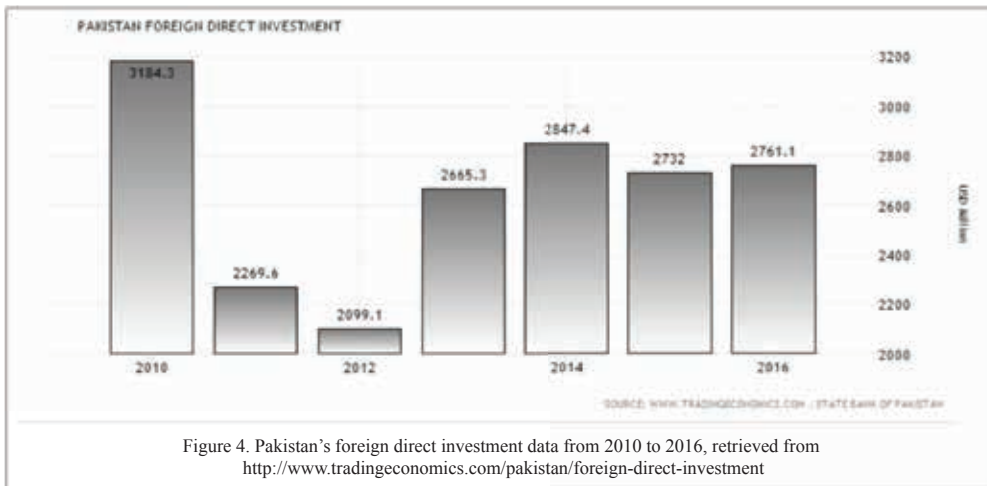


Figure 4. Pakistan's foreign direct investment data from 2010 to 2016, retrieved from <http://www.tradingeconomics.com/pakistan/foreign-direct-investment>

CPEC and Energy & Infrastructure

The energy and infrastructure sector are the main pillars of industrialization that lead to economic growth and economic development of a country. Unfortunately, Pakistan is poor in both sector and continuously facing economic issues. Pakistan has total energy requirement of approximately, 29330 MW and currently have short fall of 4500 MW resulting as power cut of 5 hours and GDP cut off is 2-2.5%. The energy sector is much focused under CPEC and “Early Harvest” Scheme started that expected to produce 10,400 MW in 2018. The renewable-energy, coal, and liquefied natural gas projects are included in “Early Harvest” Scheme as given in table 516. According to report of PakChian.com the 33 \$ U.S billion investment in energy sector of Pakistan will help Pakistan’s energy crises and boost energy sector16.

As the energy and infrastructure are most focused in CPEC total investment and which will impact the economic growth and development of Pakistan because these two factors are key ingredients of development. Further, our argument is also confirmed by a recent study in which the effect of CPEC on perspective of Pakistan and China energy is empirically is analyzed and confirm (Shaikh et al, 2016). The main idea behind the CPEC is to develop infrastructure to link China-Pakistan with Asia, Europe and Africa to reduce transportation and trade barriers. On successful completion of CPEC infrastructure projects as given in table 6 and Pakistan will be attractive market for trade (Abid and Ashfaq, 2015). Kumar (2007) and Abid and Ashiq (2015) also concluded that there would be good impact of CPEC in development of energy and infrastructure sector in Pakistan.

Table 5*Early Harvest” Energy Projects, linked with CPEC*

Sr. No.	List of Projects and Production Capacity	Location
1	Suki Kinari hydropower (870 MW)	KPK
2	Sahiwal Coal (1320 MW)	Punjab
3	Rahimyar Khan Coal (1320 MW)	Punjab
4	Quaid-e-Azam Solar (1000 MW)	Punjab
5	Karot hydropower (720 MW)	Punjab
6	HUBCO coal (660 MW)	Balochistan
7	Gwadar coal (300 MW)	Balochistan
8	Matiari to Faisalabad transmission line (660MW)	Sindh and Punjab
9	Martiar to Lahore transmission line (660 MW)	Sindh and Punjab
10	UEP windorm (100 MW)	Sindh
11	Dawood wind (50 MW)	Sindh
12	Sachal windfarm (50 MW)	Sindh
13	Sunnec Windfarm (50 MW)	Sindh
14	Thar Engro Coal (660 MW)	Sindh
15	Thar SSR coal power and mine (1320 MW)	Sindh
16	Pakistan Port Qasim (1320 MW)	Sindh

Note. The data related to list of projects, production capacity and location is presented, source <http://pakchina.pk/energy-sector-projects-cpec/>

Table 6*Infrastructure Projects under CPEC*

Sr. No.	List of the Projects and Length	Estimated cost (US \$ M)
Rail Sector Projects		
1	i-HavelianDry Port (450 KM)	40
2	i-Expansion of Line ML-1 (1872KM)	
	ii-Expansion and of Existing Pakistan Railway	8172
Road		
3	i-KKH Thakot-Raikot N35 (136 KM)	
	ii-Upgradation of D.K.Khan N-50 (210 KM)	
	iii-Khuzdar-Basima Road, N-30 (110 KM)	
	iv-Peshawar-Karachi Motorway (392 KM)	2846
4	i-KKH Phase II (118 KM)	1305

Note. The data related infrastructure projects including the road and rail are presented, source <http://cpec.gov.pk/infrastructure>

EVENT STUDY ANALYSIS**CPEC and Stock Market**

The efficient stock markets are always responsive to local and international political and economic events. The Pakistan stock market was based on three exchanges, Karachi, Lahore and Islamabad. The Government of Pakistan merged all these exchanges and established Pakistan Stock Exchange (PSX) on January 11, 2016 with three trading floors in Karachi, Lahore and Islamabad. PSX has market capitalization of 72.3 US \$ billion with listing of 559 companies (June 30, 2016) 4. At present, there are six indices available in Pakistan Stock

Table 7*Important events related to CPEC and Stock Market*

Event	Event Name	Dated
1 st	Start of CPEC, (Official MOU signed)	April 20, 2015
2 nd	MSCI announcement to reclassify Pakistan as Emerging Market index	June 13, 2016
3 rd	Completion of first Phase, (Cargo Shipment Launched from Gwadar port)	November 13, 2016
4 th	China Consortium Purchased 40% Share of Pakistan Stock Exchange	December 22, 2016

Note. The four events are created from the start of CPEC to China consortium purchased 40% share of Pakistan stock exchange, created by authors.

We examine potential impact of CPEC on stock market returns by comparing seven working days returns before and after four events, separately. The daily returns are calculated with formula (Closing index value - Opening index value/Opening index value X 100) and data of daily indices is collected from website of Karachi stocks¹⁷. Additionally, we also compared average daily returns before and after events of four major indices of PSX.

First Event: Start of CPEC (Official MOU signed)

The CPEC agreement was signed in May 2013 initially but due to political unrest in Pakistan it was delayed up to April 20, 2015 (Abid and Ashfaq 2015). The first event has no impact on stock market indices as reflected in table 8 and figure 6. The average returns before start of CPEC was (KSE-100, KSE-30, KSE-ALL, KSE-MI30) 0.60, 0.68, 0.48, 0.53 respectively and after that declined to 0.07, 0.12, 0.05, 0.03. This abnormal movement in stock market in April 2015 is due to growing protest government by Qadri in the end of 2014⁹ instead of CPEC initiation. This protest resulted in low confidence of investors on Pakistan stock market.

Table 8*First Event, Start of the CPEC's impact on the Stock Market Returns.*

No. of Days	Status	Date (Working Days)	KSE-100		KSE-30		KSE-ALL		KSE-MI30	
			Closing	Return	Closing	Return	Closing	Return	Closing	Return
	Before	8-Apr-15	31,887.30		20,186.94		22,561.87		52,644.09	
1	Event	9-Apr-15	32,013.91	0.40	20,257.71	0.35	22,715.15	0.68	52,691.00	0.09
2		10-Apr-15	32,350.93	1.05	20,515.01	1.27	22,893.21	0.78	53,323.63	1.20
3		13-Apr-15	32,248.45	-0.32	20,450.54	-0.31	22,806.72	-0.38	53,169.89	-0.29
4		14-Apr-15	32,109.87	-0.43	20,322.06	-0.63	22,727.21	-0.35	52,865.67	-0.57
5		15-Apr-15	32,248.86	0.43	20,393.14	0.35	22,814.75	0.39	52,838.65	-0.05
6		16-Apr-15	32,736.44	1.51	20,776.36	1.88	23,058.40	1.07	53,781.20	1.78
7		17-Apr-15	33,234.73	1.52	21,164.48	1.87	23,333.77	1.19	54,609.84	1.54
	Average		32,420.46	0.60	20,554.19	0.68	22,907.03	0.48	53,325.70	0.53
0	Event	20-Apr-15	33,304.64	0.21	21,290.06	0.59	23,371.26	0.16	54,436.66	-0.32
1	After	21-Apr-15	33,035.77	-0.81	21,123.54	-0.78	23,214.91	-0.67	53,943.44	-0.91
2		22-Apr-15	33,490.65	1.3(8	21,459.19	1.59	23,453.21	1.03	54,693.17	1.39
3		23-Apr-15	33,456.74	-0.10	21,417.08	-0.20	23,424.84	-0.12	54,756.47	0.12
4		24-Apr-15	33,775.12	0.95	21,705.91	1.35	23,605.57	0.77	55,086.97	0.60
5		27-Apr-15	33,844.30	0.20	21,768.03	0.29	23,607.58	0.01	55,090.97	0.01
6		28-Apr-15	33,575.94	-0.79	21,558.44	-0.96	23,486.74	-0.51	54,681.60	-0.74
7		29-Apr-15	33,460.01	-0.35	21,458.46	-0.46	23,458.37	-0.12	54,551.86	-0.24
	Average		33,519.79	0.07	21,498.66	0.12	23,464.46	0.05	54,686.35	0.03

Note. The effect of first event is analyzed on the stock returns of Pakistan Stock Exchange through 7 days window. The data for the closing indices of Pakistan Stock Exchange is collected from KSE website (<http://www.ksestocks.com/MarketSummary>). * The stock return is calculated with formula $(SRHD = (I_1 - I_0) / I_0)$, where Stock Return through Market Historical Data = SRHD, beginning value of index on that day = I_0 and closing value of index on that day = I_1)

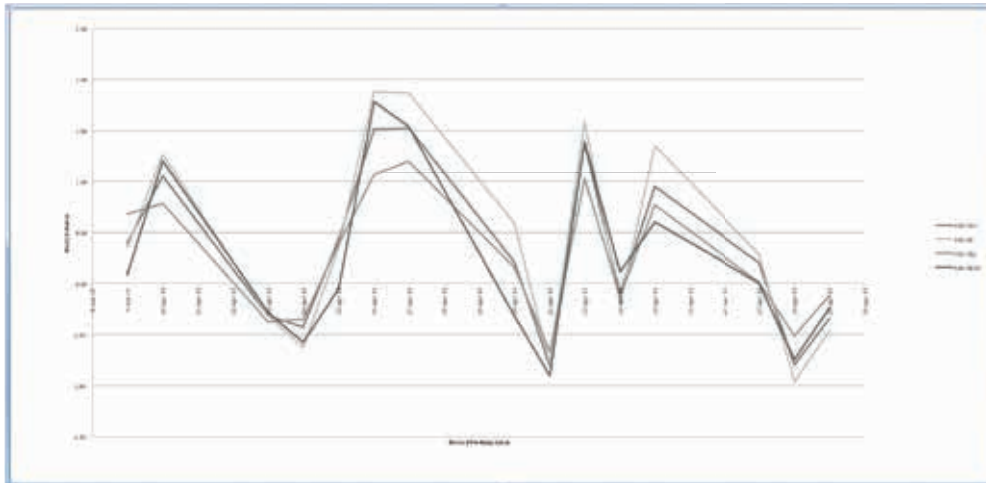
Figure 6*First Event*

Figure 6. The stock returns and average returns of the first event window are presented in the graph form, calculated by the authors based on the findings from table 8.

Second Event: MSCI announcement to reclassify Pakistan as Emerging Market index

The time duration between first event (start of CPEC on April 20, 2015) and second event (announcement of MSCI to reclassify Pakistan as Emerging Market index on June 13, 2016) reflected a positive impact of CPEC initiation on Pakistan Stock Market as given in table 9 and figure 7. The daily returns are positive and average returns after second event (0.45, 0.60, 0.39, and 0.44) are also higher than average returns after first event (0.07, 0.12, 0.05, and 0.03). These findings are also supported by Dawn news that stock market hits a record high in June 2016. Further, the announcement of MSCI is the practical confirmation that CPEC has positive impact on stock market.

Table 9

Second Event, MSCI classification of Pakistan as Emerging Market index's impact on the Stock Market Returns.

No. of Days	Status	Date	KSE-100		KSE-30		KSE-ALL		KSE-MI30	
			Closing	Return	Closing	Return	Closing	Return	Closing	Return
1-7	Before Event	1-Jun-16	36,496.16		21,045.86		24,721.52		64,008.68	
		2-Jun-16	36,839.14	0.94	21,224.07	0.85	24,894.18	0.70	64,650.79	1.00
		3-Jun-16	37,223.00	1.04	21,367.98	0.68	25,115.51	0.89	65,483.80	1.29
		6-Jun-16	37,352.27	0.35	21,429.24	0.29	25,108.05	-0.03	66,047.71	0.86
		7-Jun-16	37,392.29	0.11	21,420.23	-0.04	25,116.26	0.03	66,006.21	-0.06
		8-Jun-16	37,426.39	0.09	21,371.28	-0.23	25,093.72	-0.09	65,915.32	-0.14
		9-Jun-16	37,414.26	-0.03	21,332.17	-0.18	25,067.55	-0.10	65,685.11	-0.35
		10-Jun-16	36,940.88	-1.27	20,929.82	-1.89	24,759.50	-1.23	64,542.80	-1.74
	Average		37,226.89	0.18	21,296.40	-0.08	25,022.11	0.02	65,475.96	0.12
0	Event	13-Jun-16	36,979.96	0.11	20,972.09	0.20	24,738.85	-0.08	64,479.38	-0.10
1-7	After Event	14-Jun-16	37,517.75	1.45	21,385.38	1.97	25,016.87	1.12	65,463.66	1.53
		15-Jun-16	38,559.87	2.78	22,156.24	3.60	25,557.48	2.16	67,519.80	3.14
		16-Jun-16	38,751.60	0.50	22,348.52	0.87	25,604.84	0.19	67,447.08	-0.11
		17-Jun-16	38,776.94	0.07	22,370.82	0.10	25,632.17	0.11	67,099.60	-0.52
		20-Jun-16	38,469.82	-0.79	22,137.72	-1.04	25,550.06	-0.32	67,058.60	-0.06
		21-Jun-16	38,415.31	-0.14	22,085.65	-0.24	25,537.02	-0.05	67,034.43	-0.04
		22-Jun-16	38,149.26	-0.69	21,855.27	-1.04	25,423.86	-0.44	66,456.62	-0.86
	Average		38,377.22	0.45	22,048.51	0.60	25,474.61	0.39	66,868.54	0.44

Note. The effect of second event is analyzed on the stock returns of Pakistan Stock Exchange through 7 days window. The data for the closing indices of Pakistan Stock Exchange is collected from KSE website (<http://www.ksestocks.com/MarketSummary>). * The stock return is calculated with formula $(SRHD = (I_1 - I_0) / I_0)$, where Stock Return through Market Historical Data = SRHD, beginning value of index on that day = I_0 and closing value of index on that day = I_1

Figure 7
Second Event

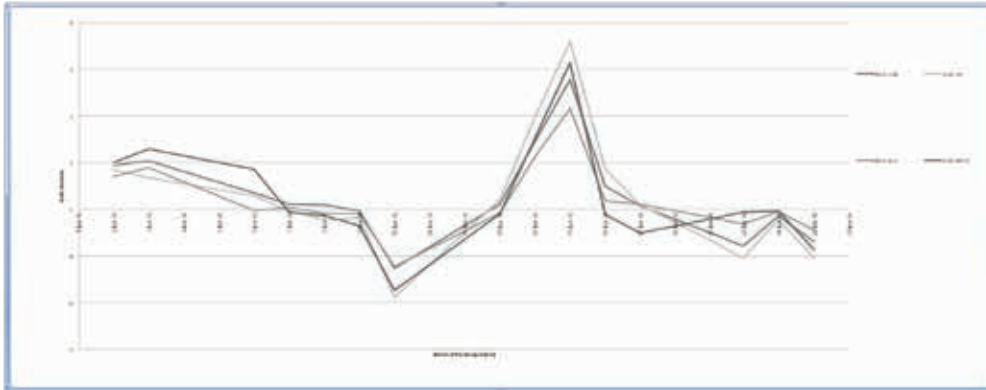


Figure 7. The stock returns and average returns of the second event window are presented in the graph form, calculated by the authors based on the findings from table 9.

Third Event: Completion of first Phase, (Cargo Shipment Launched from Gwadar port)

The first phase of CPEC was completed on the November 13, 2016 and cargo shipment was launched from Gwadar. It was a new milestone in history of Pakistan and has positive impact on stock market. But after this event daily and average returns showing a decline (-0.07, -0.15, 0.03, 0.05) presented in table 10 and figure 8. This abnormal movement in stock returns is linked with another short-term factor that is lockdown call against government by Pakistan Tehreek-e Insaf (PTI) that fully nullified the positive impact of CPEC on stock market in November 2016. The justification of this short-term effect is acceptable because when PTI Chairman announced cancellation of lockdown call against government, the PSX gained 1446 points next day¹¹.

Figure 8
Third Event

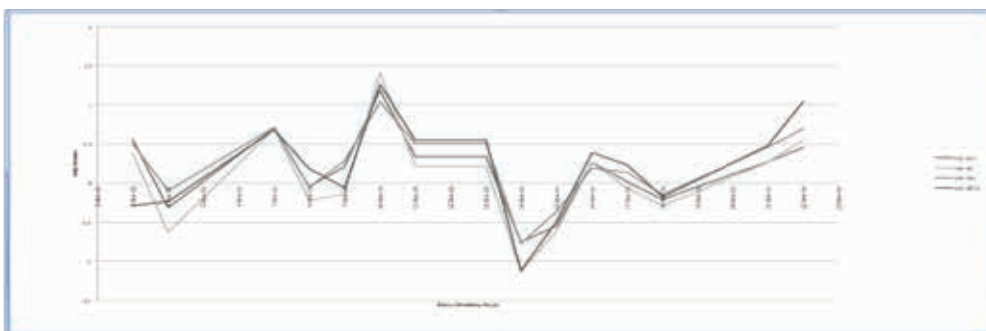


Figure 8. The stock returns and average returns of the third event window are presented in the graph form, calculated by the authors based on the findings from table 10.

Table 10
Third Event

No. of Days	Status	Date	KSE-100		KSE-30		KSE-ALL		KSE-MI30	
			Closing	Return	Closing	Return	Closing	Return	Closing	Return
		2-Nov-16	41,742.75		22,809.63		28,553.26		69,856.07	
1	Before Event	3-Nov-16	41,974.46	0.56	22,894.45	0.37	28,696.34	0.50	69,651.88	-0.29
2		4-Nov-16	41,841.56	-0.32	22,750.74	-0.63	28,668.33	-0.10	69,488.61	-0.23
3		7-Nov-16	42,133.54	0.70	22,909.15	0.70	28,872.10	0.71	69,960.61	0.68
4		8-Nov-16	42,113.91	-0.05	22,858.96	-0.22	28,856.04	-0.06	70,090.06	0.19
5		9-Nov-16	42,203.63	0.21	22,827.70	-0.14	28,937.51	0.28	70,047.20	-0.06
6		10-Nov-16	42,703.99	1.19	23,150.22	1.41	29,238.34	1.04	70,930.63	1.26
7		11-Nov-16	42,849.12	0.34	23,199.96	0.21	29,385.74	0.50	71,319.79	0.55
	Average		42,260.03	0.38	22,941.60	0.24	28,950.63	0.41	70,212.68	0.30
0	Event	13-Nov-16	42,849.12	0.34	23,199.96	0.21	29,385.74	0.50	71,319.79	0.55
1	After Event	14-Nov-16	42,525.93	-0.75	22,936.93	-1.13	29,157.74	-0.78	70,519.96	-1.12
2		15-Nov-16	42,292.67	-0.55	22,797.27	-0.61	29,051.42	-0.36	70,176.08	-0.49
3		16-Nov-16	42,404.47	0.26	22,855.72	0.26	29,107.52	0.19	70,447.75	0.39
4		17-Nov-16	42,411.80	0.02	22,841.64	-0.06	29,148.10	0.14	70,615.37	0.24
5		18-Nov-16	42,324.94	-0.20	22,775.87	-0.29	29,105.44	-0.15	70,491.22	-0.18
6		21-Nov-16	42,439.04	0.27	22,835.96	0.26	29,239.03	0.46	70,825.75	0.47
7		22-Nov-16	42,631.58	0.45	22,961.92	0.55	29,441.90	0.69	71,562.44	1.04
	Average		42,432.92	-0.07	22,857.90	-0.15	29,178.74	0.03	70,662.65	0.05

Note. The effect of third event is analyzed on the stock returns of Pakistan Stock Exchange through 7 days window. The data for the closing indices of Pakistan Stock Exchange is collected from KSE website (<http://www.ksestocks.com/MarketSummary>). * The stock return is calculated with formula $(SRHD = (I_1 - I_0) / I_0)$, where Stock Return through Market Historical Data = SRHD, beginning value of index on that day = I_0 and closing value of index on that day = I_1

Forth Event: China Consortium Purchased 40% Share of Pakistan Stock Exchange (PSX)

The China Consortium purchased 40% share of Pakistan Stock Exchange with on December 22, 2016 that indirectly linked with CPEC. It is clear from table 11 and figure 9 that all indices have positive trend and higher average returns. We can also identify practically that when average returns (0.07, 0.12, 0.05, 0.03) of first event are compared with average returns (0.84, 0.86, 1.08, 0.75) of forth event, it has shown a positive change in returns which reflected that CPEC has positive impact on Pakistan stock market. Our findings are also confirmed by of Bloomberg that Pakistan ranked 5th best performing stock in the world¹².

Table 11

Forth Event, China Consortium purchased 40% shares of Pakistan Stock Exchange's impact on the Stock Market Returns.

No. of Days	Status	Date	KSE-100		KSE-30		KSE-ALL		KSE-MI30	
			Closing	Return	Closing	Return	Closing	Return	Closing	Return
	Before	9-Dec-16	45,387.23		24,447.43		31,119.40		77,320.38	
1	Event	13-Dec-16	45,857.89	1.04	24,781.24	1.37	31,418.26	0.96	78,399.24	1.40
2		14-Dec-16	46,185.27	0.71	25,027.58	0.99	31,603.73	0.59	79,407.64	1.29
3		15-Dec-16	46,358.35	0.37	25,073.69	0.18	31,732.59	0.41	79,562.33	0.19
4		16-Dec-16	46,584.53	0.49	25,183.86	0.44	31,835.13	0.32	80,159.57	0.75
5		19-Dec-16	46,938.59	0.76	25,380.04	0.78	31,998.48	0.51	80,716.69	0.70
6		20-Dec-16	47,210.06	0.58	25,608.73	0.90	32,069.21	0.22	80,675.48	-0.05
7		21-Dec-16	46,993.31	-0.46	25,492.96	-0.45	31,902.80	-0.52	80,289.57	-0.48
	Average		46,589.71	0.50	25,221.16	0.60	31,794.31	0.36	79,887.22	0.54
0	Event	22-Dec-16	46,699.78	-0.62	25,237.94	-1.00	31,761.74	-0.44	79,728.55	-0.70
1	After	23-Dec-16	46,633.99	0.10	25,151.74	-0.28	31,828.83	0.11	79,684.20	-0.25
2	Event	26-Dec-16	46,689.73	-0.02	25,187.25	-0.20	31,918.97	0.50	79,873.58	0.18
3		27-Dec-16	46,920.47	0.61	25,347.98	0.78	32,099.53	0.85	80,366.83	0.86
4		28-Dec-16	47,424.63	1.57	25,665.88	1.90	32,461.98	1.70	81,338.15	1.83
5		29-Dec-16	47,666.66	1.59	25,771.81	1.67	32,641.93	1.69	81,917.18	1.93
6		30-Dec-16	47,806.97	0.81	25,851.71	0.72	32,842.43	1.17	81,794.73	0.56
7		2-Jan-17	48,240.28	1.20	26,144.28	1.45	33,145.71	1.54	82,047.50	0.16
	Average		47,340.39	0.84	25,588.66	0.86	32,419.91	1.08	81,003.17	0.75

Note. The effect of forth event is analyzed on the stock returns of Pakistan Stock Exchange through 7 days window. The data for the closing indices of Pakistan Stock Exchange is collected from KSE website (<http://www.ksestocks.com/MarketSummary>). * The stock return is calculated with formula $(SRHD = (I_1 - I_0) / I_0)$, where Stock Return through Market Historical Data = SRHD, beginning value of index on that day = I_0 and closing value of index on that day = I_1)

Figure 9
Forth Event

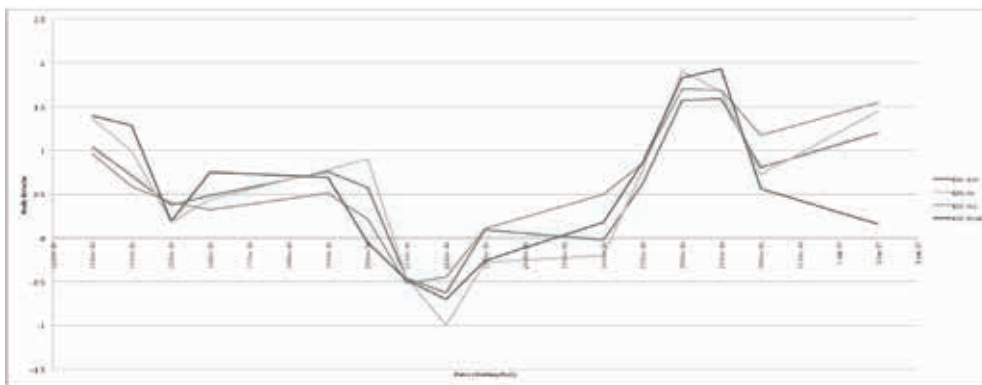


Figure 9. The stock returns and average returns of the forth event window are presented in the graph form, calculated by the authors based on the findings from table 11.

We have examined the business articles, news articles, facts and figures under the content analysis to test potential impact of China Pakistan Economic Corridor (CPEC) on Pakistan's trade, investment, energy, and infrastructure. At present, CPEC has very limited statistical impact on trade, investment, energy and infrastructure because projects under CEPC are in process. However, we may conclude that CPEC has positive impact on all these economic factors and this impact will increase with completion of other two (02) stages. Our findings are also supported by Kumar (2007), Avais et al. (2016) and Yaseen et al. (2016) that CPEC successful completion will impact positively on Pakistan's trade, investment, energy and infrastructure and overall economy.

Additionally, this is the first study to test the impact of CPEC on Pakistan Stock Exchange (PSX), to the best of our knowledge. We have used idea of event study (Hudson and Urquhart, 2015) and have identified four events from start of CPEC (April 2015) to purchase of 40% share of PSX by China (December 2016). These four events are; first event (start of CPEC, (Official MOU signed), April 20, 2015), second event (MSCI announcement to reclassify Pakistan as Emerging Market index, June 13, 2016), third event (completion of first Phase, (cargo Shipment launched from Gwadar port), November 13, 2016), and fourth event (China Consortium purchased 40% share of Pakistan Stock Exchange, December 22, 2016). By comparing, daily and average returns before and after four events separately, we may conclude that CPEC initiation has positive impact on Pakistan Stock Market. The findings are supported by the two practical activities that MSCI announced to include Pakistan index in Emerging Market Index and Bloomberg ranked Pakistan index as 5th best performing stock around the world in 2016. We also recommend empirical research study to confirm this impact of CPEC on all economic factors because the realization of importance of CPEC is very important for Pakistan's Government, nation and policy makers.

REFERENES & NOTES

- Abid, M., & Ashfaq, A. (2015). CPEC: Challenges and Opportunities for Pakistan. *Journal of Pakistan Vision*, 16 (2), 142-169. Retrieved from http://pu.edu.pk/images/journal/studies/PDF-FILES/Artical-7_v16_2_2015.pdf
- Ahmar, M. (2015). Strategic Meaning of the China-Pakistan Economic Corridor. *Working Paper*, 35-49. Retrieved from http://www.issi.org.pk/wp-content/uploads/2015/12/Moonis-Ahmar_3435_SS_41_20142015.pdf
- Ahmad, R., & Mi, H. (2017). China-Pakistan Economic Corridor and Its Social Implication on Pakistan: How Will CPEC Boost Pakistan's Infrastructures and Overcome the Challenges? *Arts and Social Sciences Journal*, 08 (02), 01-08. doi:10.4172/2151-6200.100026
- Ali, W., Gang, L., & Raza, M. (2016). China-Pakistan Economic Corridor: Current Developments and Future Prospect for Regional Integration. *International Journal of Research*, 03 (10), 210-222. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2794276
- Arshad, M. U., & Dong, Z. (2016). China Pakistan Economic Corridor: A Spatial Analysis on the Security Risk of CPEC. *International Journal for innovative research in Multidisciplinary field*, 2 (9), 100-103. Retrieved from <http://www.ijirmf.com/wp-content/uploads/2016/11/201609031.pdf>

- Avais, M. A., Shaikh, S., Mahesar, H. A., & Memon, F. (2015). China-Pak Economic Corridor: Social analysis for Pakistan. *The Government-Annual Research Journal of Political Science*, V, 163-171. Retrieved from <http://sujo.usindh.edu.pk/index.php/THE-GOVERNMENT/article/view/2617>
- Bos, W., & Tarnai, C. (1999). Content analysis in empirical social research. *International Journal of Educational Research*, 31(8), 659-671. doi:10.1016/s0883-0355(99)00032-4
- Butt, K. M., & Butt, A. A. (2015). Impact of CPEC on Regional and Extra-Regional Actors. *Journal of Political Science*, XXXIII, 23-44. Retrieved from <https://search.proquest.com/penview/e74b8d28ba3f703bf4771185da41bac1/1?pq-origsite=gscholar&cbl=616521>
- Esteban, M. (2016). The China-Pakistan Corridor: A Transit, Economic or Development Corridor. *Working Paper-ISSI*, 36 (2), 63-74. Retrieved from <http://www.issi.org.pk>
- Hartpence, M. (2011). The Economic Dimension of Sino-Pakistan Relations: an overview. *Journal of Contemporary China*, 20 (71), 581-599. doi.org/10.1080/10670564.2011.587160
- Hudson, R., & Urquhart, A. (2015). War and stock markets: The effect of World War Two on the British stock market. *International Review of Financial Analysis*, 40, 166-177. doi:10.1016/j.irfa.2015.05.015
- Hussain, E. (2016). China–Pakistan Economic Corridor: Will It Sustain Itself? *Fudan Journal of the Humanities and Social Sciences*, 10 (2), 145-159. doi:10.1007/s40647-016-0143-x.
- Irshad, M. S., Xin, Q., & Arshad, H. (2015). One Belt and One Road: Dose China-Pakistan Economic Corridor benefit for Pakistan’s Economy? *Journal of Economics and Sustainable Development*, 6 (24), 200-207. Retrieved from <http://www.iiste.org/Journals/index.php/JEDS/article/view/27923/29916>
- Kumar, S. (2007). The China-Pakistan Strategic Relationship: Trade, Investment, Energy and Infrastructure. *Strategic Analysis*, 31 (5):757-790. <https://doi.org/10.1080/09700160701662278>
- Liping, X. (2015). The Development of the “One Belt and One Road” and its Impact on China-US Relations. *Chinese People’s Association for Peace and Disarmament*, 2 (12), 110-130. Retrieved from <http://www.cnki.com.cn/Article/CJFDTotal-HPHP201502007.htm>
- Noor, S. N., Shah, M. A., Khan, S. M., & Ali, S. F. (2008). Pakistan’s Foreign Policy, Quarterly Survey–June 2008. *Pakistan Horizon*, 61(3), 01-09. Retrieved from <http://www.jstor.org/stable/23725979>
- Ramay, S.A. (2015). CPEC: A Chinese Dream Being Materialized Through Pakistan. *Pakistan- Sustainable Development Policy Institute, Policy Brief No. 6694*, 1-8. Retrieved from <https://think-asia.org/handle/11540/6694>
- Rana, S., & Khan, T. (2015, May 17). China-Pakistan Economic Corridor: Lines of development – not lines of divide. *The Express Tribune*. Retrieved from <https://tribune.com.pk/story/887949/china-pakistan-economic-corridor-lines-of-development-not-lines-of-divide>
- Saleem, A. H. (2016). CPEC and Pakistan’s Stock Market. *Institute of Strategic studies, China Pakistan Study Centre, Issue Brief No. 136*, 01-03. Retrieved March 10, 2017, from <http://issi.org.pk/13649-2/>
- Shaikh, F., Ji, Q., & Fan, Y. (2016). Prospects of Pakistan–China Energy and Economic Corridor. *Renewable and Sustainable Energy Reviews*, 59, 253-263 <https://doi.org/10.1016/j.rser.2015.12.361>

- Sial, S. (2014). The China-Pakistan Economic Corridor: An Assessment of Potential Threats and Constraints. *Conflict and Peace Studies*, 6 (2), 24-40. Retrieved from <http://pakistanhouse.net/wp-content/uploads/2016/11/cpec.pdf>
- Wolf, S. (2016a). The China-Pakistan Economic Corridor: An Assessment of its Feasibility and Impact on Regional Cooperation. *South Asia Democratic Forum (SADF), Working paper* No. 2506-8199 (28/6/2016), 01-60. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2834599
- Wolf, S. (2016b). China-Pakistan Economic Corridor, Civil-Military Relations and Democracy in Pakistan. *Asia Democratic Forum (SADF), Working paper* No. 2506-8199 (13/9/2016), 01-60. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2838520
- Yaseen, Z., Butt, T. M., & Riaz, M. (2016). China-Pakistan Economic Corridor: Myth and Realities. *Sci. Int. (Lahore)*, 28 (4), 267-271. Retrieved from <http://www.sci-int.com/pdf/4704819301%20a%20267-274%20Zahid--GUJRAN.pdf>

NOTES

- ¹Boyceied, T. (2017). The China-Pakistan Economic Corridor: Trade Security and Regional Implications. *California: Sandia National Laboratories, Working Paper* No. 0207, 01-36. Retrieved March 10, 2017, from <http://prod.sandia.gov/techlib/access-control.cgi/2017/170207.pdf>
- ²Chinese firms ready to invest billions of dollars in Pakistan. (2013, July 5). *The News*. Retrieved March 10, 2017, from <https://www.thenews.com.pk/archive/print/631508-chinese-firms-ready-to-invest-billions-of-dollars-in-pakistan>
- ³PM inaugurates Gwadar Port as trade activities open. (2016). *The Tribune.com*. Retrieved March 10, 2017, from <https://tribune.com.pk/story/1229642/pm-arrives-gwadar-inaugurate-worlds-largest-deep-sea-port/>
- ⁴Overview, Pakistan Stock Exchange Limited. (2017). Retrieved March 10, 2017, from <https://www.psx.com.pk>
- ⁵Kazim, A. (2016). Pakistan upgraded to emerging markets status. *The Tribune.com*. Retrieved March 10, 2017, from <https://tribune.com.pk/story/1122910/pakistan-upgraded-emerging-markets-status>
- ⁶Market Classifications, MSCI. (2017). Retrieved March 10, 2017, from <https://www.msci.com>
- ⁷Risen by CPEC, bullish PSX signs share purchase agreement with Shanghai Consortium. (2017). *Pakistan-China Institute (PCI)*. Retrieved March 10, 2017, from <http://www.cpecinfo.com>
- ⁸Hussain, D. (2016, December 23). PSX sells 40pc stake to Chinese consortium. *The Dawn*. Retrieved March 10, 2017, from <https://www.dawn.com/news/1304006/>
- ⁹Pakistan stocks drop 4.6 per cent as fears grow over protests. (2016). *The Dawn.com*. Retrieved March 10, 2017, from <https://www.dawn.com/news/1124647>
- ¹⁰Pakistan Stock Exchange hits record high in lacklustre trade. (2016). *The Dawn.com*. Retrieved March 10, 2017, from <https://www.dawn.com/news/1262529>
- ¹¹PSX gains 1446 points after PTI postpones Islamabad lockdown. (2016). *Pakistan Today.com*. Retrieved March 10, 2017 from <http://www.pakistantoday.com.pk/2016/11/01/psx-gains-1446-points-after-pti-postpones-islamabad-lockdown>

- ¹² The Pakistan ranked 5th best performing stock market in 2016 by Bloomberg. (2016). *Time of Islamabad.com*. Retrieved March 10, 2017, from <https://timesofislamabad.com/pakistan-ranked-5th-best-performing-stock-market-2016-bloomberg/2016/12/30/>
- ¹³ Pakistan Trade data, Pakistan Bureaus of Statistics. (2017). Retrieved March 10, 2017, from <http://www.pbs.gov.pk/trade-tables>
- ¹⁴ CPEC: upgrading Pakistan's trade. (2016). *Tribune.com*. Retrieved March 10, 2017, from <https://tribune.com.pk/story/1275774/cpec-upgrading-pakistans-trade>
- ¹⁵ Where's CPEC in our FDI? (2016). *The Dawn*. Retrieved March 10, 2017, from <https://www.dawn.com/news/1291819>
- ¹⁶ Energy Sector project under CPEC. (2017). *PakChian.com*. Retrieved March 10, 2017, from <http://pakchina.pk/energy-sector-projects-cpec/>

