

The Impacts of Neoliberal Policies on Corruption Regarding Institutional Quality in APEC Countries during 1996-2015

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Abstract

This research assesses the impacts of neoliberal policies on corruption, using a wide range of neoliberal variables as a measure of economic liberalization in relation to three major elements: trade liberalization, financial liberalization, and privatization, as well as the institutional quality of Asia-Pacific Economic Cooperation (APEC) during the period 1996-2015.

The application of panel data regression to different institutional settings yielded interesting empirical evidence interrelated with contemporary theoretical support. Trade liberalization and financial liberalization are associated with lower levels of corruption in APEC developed countries. Contradicting neoliberalism's main arguments, however, APEC developed countries' governments, which effectively formulate and implement sound policies promoting private sector development, permit a sphere of voluntary action and encourage free market competition, as well as minimize forms of state intercessions, may deliver illegitimate gains to government officials and private players, resulting in higher levels of corruption.

In APEC developing countries, the public policy of privatizing the state-owned enterprises, as well as fostering the development of multinational companies during international market entry and expansion phases, has resulted in increasing the level of corruption. In order to mitigate the corruption level, APEC developing countries need to improve their institutional quality in three major areas: regulatory quality, freedom rating, and ease of doing business.

Policymakers should carefully consider neoliberal policies and their potential deviating impacts in different contextual settings for effective neoliberal economic policy implementation in their countries. Hence, in curbing corruption, policymakers should not place emphasis on neoliberalization alone, but should embed the development of institutional quality in policy formulation and implementation along with people's participation in such reforms.

Keywords: Neoliberalism, economic liberalization, corruption, institutional quality

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ผลกระทบของนโยบายเสรีนิยมต่อการคอร์รัปชันที่คำนึงถึงคุณภาพของสถาบันในกลุ่มความร่วมมือทางเศรษฐกิจเอเชีย-แปซิฟิก ระหว่างปี 2539-2558

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อประเมินผลกระทบของนโยบายเสรีนิยมใหม่ (Neoliberalism) ที่มีต่อการทุจริต โดยใช้กลุ่มตัวแปรนโยบายเสรีนิยมใหม่ที่ครอบคลุม เพื่อเป็นตัวชี้วัดการเปิดเสรีทางเศรษฐกิจ ในสามประเด็นหลักคือ การเปิดเสรีทางการค้า การเปิดเสรีทางการเงิน และการแปรรูปรัฐวิสาหกิจ รวมถึงตัวแปรคุณภาพสถาบันของประเทศกำลังพัฒนาและประเทศพัฒนาแล้วในกลุ่มความร่วมมือทางเศรษฐกิจในภูมิภาคเอเชียแปซิฟิกหรือเอเปค (Asia-Pacific Economic Cooperation - APEC) ตั้งแต่ปี 2539-2558

การประยุกต์ใช้สมการถดถอยของข้อมูลตัดภาคขวางทางยาว ในภาพของคุณภาพสถาบันที่ต่างกัน ทำให้ได้หลักฐานเชิงประจักษ์ที่น่าสนใจซึ่งสัมพันธ์กับการสนับสนุนทางทฤษฎีในปัจจุบัน ปัจจัยที่ส่งผลต่อการทุจริตให้มีระดับต่ำลงของประเทศที่พัฒนาแล้วในกลุ่มเอเปคคือ การเปิดเสรีทางการค้าและการเปิดเสรีทางการเงิน แต่การกำหนดนโยบายและน่านโยบายที่มีประสิทธิภาพในการส่งเสริมการพัฒนาภาคเอกชน รวมถึงการลดบทบาทการแทรกแซงของรัฐบาลในกลุ่มประเทศที่พัฒนาแล้วได้ กลับไม่ทำให้ระดับการทุจริตลดลง เนื่องจากเจ้าหน้าที่ของรัฐและภาคเอกชนอาศัยช่องโหว่ทางกฎหมายในการคอร์รัปชันเพื่อประโยชน์ส่วนตน

ขณะที่นโยบายสาธารณะในกลุ่มประเทศกำลังพัฒนาที่เน้นการแปรรูปรัฐวิสาหกิจและการสนับสนุนบริษัทในช่วงการขยายกิจการและการเจาะตลาดระหว่างประเทศ มีผลต่อการเพิ่มระดับการทุจริตอย่างมีนัยยะสำคัญ เพื่อลดระดับการทุจริต รัฐบาลจำเป็นต้องปรับปรุงคุณภาพสถาบันทั้งสามด้านได้แก่ คุณภาพของมาตรการควบคุม ระดับสิทธิเสรีภาพ และความง่ายในการทำธุรกิจ

ผู้กำหนดนโยบายควรพิจารณาผลกระทบของนโยบายเสรีนิยมใหม่ต่อบริบทต่าง ๆ โดยรอบอย่างละเอียดรอบคอบ เพื่อให้การดำเนินนโยบายเศรษฐกิจแบบเสรีนิยมใหม่เป็นไปอย่างมีประสิทธิภาพต่อประเทศของตน ดังนั้น ในการยับยั้งการทุจริต ผู้กำหนดนโยบายไม่ควรมุ่งเน้นแค่ความสำคัญของระบบเสรีแบบใหม่เพียงอย่างเดียว แต่ควรตระหนักถึงนโยบายที่เน้นการพัฒนาคุณภาพสถาบันด้วย ซึ่งควรที่จะควบคู่ไปกับการมีส่วนร่วมของประชาชนในการปฏิรูปนั้น ๆ

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Introduction

Many Asian developing countries accepted conditional loans, the so-called Structural Adjustments Programs (SAPs), from two Bretton Woods Institutions, the International Monetary Fund (IMF) and the World Bank, during 1990s. The SAPs are designed to reflect neoliberal ideology, or economic liberalization, which drives globalization. Its essence encourages structural adjustments for the country's economy by deregulation of state control and promotion of a free competitive market. SAPs encompass the reduction of government services through the management of the balance of budgets and spending cuts, the privatization of state-owned industries, including energy and health sectors, the reduction of tariffs on imports, and the deregulation of business activities (World Bank, 1997; 2006).

Corruption is inevitably "the number one public enemy," as stated by Jim Yong Kim, World Bank Group President (World Bank, 2013). The terms political corruption and corruption are interchangeably used in this research, defined as "the abuse of entrusted power for private gain" (Transparency International, 2014).

Neoliberal ideology allows the integration of a single economy into the global economy by seeking to achieve economic development and income equality in a particular country. The key neoliberal argument suggests that corruption is an impediment to "good governance" and economic development. A neoliberal country will apprehend the market-oriented mechanism as well as diminish the role of state intervention so that a "good governance" structure can be realized, and corruption can be eradicated.

If such a relationship between neoliberalism and corruption is simply straight forward, any country that adopts part of (or all) the concepts of neoliberalism should experience a significant lower level of corruption. Eventually, its economic development should continue to grow due to fewer obstacles or corruption. Since the 1997 Asian financial crisis, Asian countries have begun to practice neoliberal concepts, but as of today, its Corruption Perception Index remains poor, and the incidents of corruption persist strongly. Therefore, how does economic liberalization play a role in corruption?

Many studies have attempted to investigate only some of the neoliberal economic factors in relation to corruption, and most existing studies examine this complex phenomenon by using cross-national analysis. Not only does this study incorporate various aspects of neoliberalism regarding corruption, but it also applies panel data analysis to

explain these complex relationships. Moreover, this study offers a comparative analysis of this multifaceted phenomenon in developing and developed countries, and addresses the importance of institutional quality.

The selected sample is the Asian-Pacific Economic Cooperation's (APEC) 21 member countries. Due to its emphasis on the economic liberalization among its members as well as the promotion of a sustainable business environment and human security, APEC country members, both developing and developed country members, seamlessly fit the selected sample for the objectives of this research (APEC, 2015).

The theoretical framework in this study highlights the crucial roles of neoliberalism and its account of economic and political institutions among the APEC countries for anticipating any necessary conditions for significant changes in corruption. The statistical analysis in the present study provides insightful explanations as to why some countries can reduce the level of corruption while implementing neoliberal policies. The separate analysis of developing and developed country members allows this study to emphasize the differences in the countries' institutional contexts regarding the economic liberalization factors and corruption as well as to address the importance of institutional quality in curbing corruption. Hence, the empirical contributions found in this study will address the significances of neoliberalism and institutionalism in fighting corruption.

Objectives of the Study

To address the impacts of neoliberalization on the level of corruption of Asia-Pacific Economic Cooperation member countries during the period 1996 to 2015

To determine which neoliberal policies discourage the level of corruption given the diverse institutional settings in the APEC countries

To evaluate the significances of institutional quality in incorporating neoliberal policies to mitigate the corruption level in APEC countries

Neoliberal Discourse on Corruption

The concepts of neoliberalism is widespread in the current climate of global capitalism and consumerism (Chomsky, 1999; Plehwe, Walpen & Neunhöffer, 2006; Saad-Filho & Johnston, 2005; Touraine, 2001). Neoliberalism is a theoretical concept of political and economic practice that emphasizes freedom of individuals within strong institutions (Harvey, 2005). In general, neoliberalism is a freely-adopted market mechanism

with minimal state interventions. It is an ideal that represents free individual choice, and a suitable way of exchanging all goods and services within society. It is thought to be a key to optimal economic performance regarding economic growth and distributional income, as well as technological advance (Harvey, 2005; Kotz, 2000; Thorsen & Lei, 2009).

The responsibilities of states underline the creation of institutional frameworks, such as proper property rights and trade regulations, whereby human well-being is better through cultivation. (Hayek, 1973). States should assign minimal economic roles such as regulating the money supply, enforcing business agreements, and imposing clear property rights. The essence of a free market and free trade will create an entrepreneurial's spirit and creativity for the spontaneous order of any human society, resulting in greater individual well-being and liberty (Hayek, 1973).

Fully market-based systems in terms of trade liberalization, financial liberalization and privatization should be less liable to government graft, and this will result in fewer opportunities for corruption (Bussmann, De Soysa, & Oneal, 2005; De Soysa & Oneal, 1999; Firebaugh, 1992; Firebaugh & Goesling, 2004; Weede, 2004). In summary, the implementation of neoliberalism will shift political power toward economic practices, and drive the control of states away from markets and individual's choice (Thorsen & Lei, 2009).

It has been widely argued that by promoting economic liberalization as well as downsizing the state's involvement in the domestic economy, the level of corruption becomes less (Ades & Tella, 1997; Dutt, 2009; Gerring & Thacker, 2005; World Bank, 1997). The World Bank further claims that in order to reduce corrupt activities, any reform that creates competitiveness is necessary. This includes macro policies that reduce the control over foreign trade and eliminate entry barriers for businesses. Through deregulation of the economy, competitiveness will increase and the corruption level will therefore be reduced (World Bank, 1997).

Compensation theory suggests that the integration of an economy into the global economy would allow the export and import prices of goods and services to fluctuate with global prices, resulting in dislocation effects, and these dislocation effects cause economic instability, unequal income distribution and unemployment problems. These effects will consequentially force the government to intervene and increase public spending to help the slow adjusted groups in their country. The government will compensate the slow adjusted groups via more social programs, such as job training and educational training, in order to increase labor capacity as well as to increase the level of

income equality through the gain of host country consumers and less-skilled labor (Bussmann, De Soysa, & Oneal, 2005; Kaufman & Segura-Ubiergo, 2001).

Core hypothesis: neoliberalism encourages market-oriented mechanism, resulting in more transparency and good governance, as well as the development of strong institutional quality, and eventually, corruption level will diminish.

This research divides the definition of neoliberalism by David Harvey (2005) into four broad areas: trade liberalization, financial liberalization, privatization and the quality of institutions, while the latter is also supported by institutionalism theory.

Trade Liberalization

H1: Trade liberalization helps to reduce the level of corruption.

H1a: A higher level of trade openness is related to a low corruption level.

The integration of one economy into the global economy will create free competitive market unbounded to domestic broader. When international trade is promoted, open-economy mechanism will encourage economic competition, resulting in a lower level of economic rents and corruption (Bussmann, De Soysa, & Oneal, 2005; De Soysa & Oneal, 1999; Firebaugh, 1992; Firebaugh & Goesling, 2004; Weede, 2004). Trade openness is the measure of total imports and exports given the national GDP.

H1b: A higher level of trade freedom is associated with a low corruption level.

Imposed trade tariffs and non-tariffs create incentives for importers and custom officials to be corrupt (Krueger, 1974). Business persons will bribe their way to avoid tax regulation in order to lower their cost of paying high tariffs. Once trade barriers, both tariffs and non-tariffs are lower, foreign firms will penetrate into domestic markets, and the rents employed by domestic firms will be significantly reduced, and thus corruption levels will be lower (Ades & Tella, 1995). Similar to the analyses on the effects of trade tariffs, the author argues that uniform tariffs limit public officials' opportunity to commit fraud by preventing them to selectively classify high taxed goods as lower taxed groups (Gatti, 1999).

Financial Liberalization

H2: Financial liberalization reduces the level of corruption.

H2a: A higher level of financial freedom is associated with low corruption.

There are two comprehensive definitions of financial liberalization. The first includes the measures of the deregulation of the regulatory control over the institutional structures, instruments, and activities of agents in different segments of the financial sector (Ghosh, 2005). The second definition concerns the deregulation of the domestic financial market and the liberalization of capital accounts (Arestis & Caner, 2009). Therefore, there are two aspects of financial liberalization to be measured.

The first aspect is the deregulation of the domestic financial market. Financial freedom is an index measuring how banking and financial sectors are regulated in general. The index also measures the independency level from government control and involvement, as well as the level of autonomy in term of supervising and regulating financial institutions. A higher score for financial freedom means greater financial liberalization and greater effectiveness of the financial sector.

H2b: A higher level of inward FDI should reduce the level of corruption.

The second aspect measures the flow of capital accounts. There are two types of the flow of capital accounts: foreign short-term (portfolio investment) and long-term (foreign direct investment) investments.

Foreign direct investment (FDI) is the capital flows into a foreign country by holding at least ten percent of the voting stock of a business, leading to substantial ownership. Because the FDI is considered a long-term investment, it is widely argued that FDI inflows lead to higher economic growth of the host country through more jobs, new business and technology sharing (Blomstrom & Kokko, 1996; Choi, 1998; Markusen & Venables, 1999). It is believed that there is an inverse relation between inward FDI and corruption. Both FDI volume and efficient investment are negatively related to the host country's corruption level. The investment costs in a host country with a relatively high corruption level are 20 percent higher in comparison to investment in a host country with a relatively lower corruption level (Alemu, 2012; Habib & Zurawicki, 2002; Kaufmann & Wei, 1999; Lambsdorff, 2003).

H2c: A higher level of outward FDI will increase the level of corruption.

On the other hand, FDI outflows refer to outward investment values, seeking more business opportunity outside the domestic market. Developing multinational companies (DMNCs) are mostly state-owned enterprises or partly privatizing companies, which

accounted for one-third of emerging countries' total FDI outflows from 2003 to 2010. The roles of the government in developing countries that foster DMNCs in terms of international market penetration and in developed countries that supports MNCs in terms of a financial crisis are generally indifferent regarding the subsidies. For instance, a study of the role of the home government in fostering the internationalization process of domestic multinational companies illustrated that higher FDI outflows of a home country are associated with higher corruption level (Bazuchi et al., 2013). In fact, during the global financial crisis, the United States government played a large, continual role in the recovery of large MNCs.

H2d: Higher portfolio investment growth leads to a lower level of corruption

A portfolio investment is a short-term investment in the financial assets, particularly equity and debt securities in a foreign country. Investors, institutions or speculators, normally invest on a short-term basis. According to Markowitz's portfolio theory (1952), investors base their decision solely on the portfolio's expected return and risk. There are certain associated systematic risks (such as business risks, political risks, currency risks, financial risks, and liquidity risks), and for any given risk level, investors decide to invest more in "high expected return" portfolio investment over "low expected return" portfolios. Given the same level of expected return on portfolio investment, investors will likely leave their money in a particular lower systematic risk (corruption) country than a higher systematic risk country compared to the previous year. A country with relatively fewer systematic risks will attract more short-term investors, and the flow of portfolio investments is likely to stay in the country (Reilly & Brown, 2004).

Privatization

H3: Privatization leads to less corruption

H3a: A higher level of public-private partnership investment values should reduce the level of corruption.

Neoliberalism is related to less government intervention in the economy. Privatization here is defined as the change of state-owned entities to private-owned entities. In order to measure privatization, the present research used the World Bank data on public-private partnership (PPP) investment; that is, the total dollar-value investment projects of the public sector with private participation in four sectors: energy, telecommunications, transportations, and water. The investment value is counted when projects have gone beyond budget approval and have received direct and indirect

financial support, as well as those projects that are meant to serve the public. SOEs can be partially or fully reformed judging by the share of ownership and the independence of the management level (World Bank, 2017). In a country, when there are vast amounts of PPP investments, it means lower level of government intervention, indicating smaller numbers of rent seeking, resulting in a lower corruption level (Yusuf, Nabeshima & Perkins, 2006).

H3b: The larger the size of the government, the higher the level of corruption.

Scholars have recently claimed that the size of government budgets and the amount of corruption are highly correlated, meaning that a larger size of government is related to the a greater corruption level. It is true when the public sector services are utilized by a monopoly, market competition does not exist, and there will be room for rent seeking, bribery, and other forms of corruption (Lapalombara, 1994; Treisman, 2000). Theoretically speaking, the concepts of “big and bad government” suggested that by entrusting regulatory and taxing power to government officials, greater interventionism is associated with lower government efficiency (Rose-Ackerman, 1999). Similarly, high levels of corruption are associated with greater public investment, resulting in smaller amounts of government revenue and the inferior quality of public investment, suggesting a positive link between corruption and government size (Tanzi & Davoodi, 1997).

Institutional Quality

H4: A high quality of institutions supports a low level of corruption.

H4a: A higher government effectiveness decreases the level of corruption.

Stable institutional settings, such as the stability of political, economic and social institutions, help promote transparency in both the private and public sectors, resulting in the mitigations of corruption. (Churchill, Agbodohu & Arhenful, 2013). A stronger government could handle social inequality problems more effectively than a weaker government, and can redistribute resources to the poor better and more efficiently, which is a necessary precondition for a decrease in the corruption level (Uslaner, 2008). Furthermore, corruption thrives in a failed state, where the legitimacy and infrastructure of the government in preventing corrupt acts are not strong. Thus, in a state that provides an inadequate salary to its officials, those officials will seek for more payoffs and commit corrupt acts in order to obtain more money (Bissessar, 2012; Rotberg, 2003). Therefore, having a more effective government helps to promote a transparent and accountable environment. A study of

18 OECD countries has suggested that improvement in institutional quality, such as government effectiveness and rule of law, leads to a lower level of corruption (Dreher, Kotsogiannis, & McCorriston, 2009).

H4b: A higher regulatory quality leads to a lower level of corruption.

The principle of regulatory quality is to promote the efficiency and effectiveness of the private sector in the market. High-quality regulation is comprehensive and enforceable, and sound policies and the ability of the government to formulate and implement policy are both essential in improving governance outcomes, resulting in a lower level of corruption (Churchill, Agbodohu & Arhenful, 2013). In a country where the citizens believe in the regulatory actions of the government, the perception of corruption seems to be lower (Enste & Heldman, 2017).

H4c: A higher property rights leads to a lower level of corruption.

Property rights are the center of economic growth and their application is a protection against associated risk for foreign investors' investment (De Soto, 2000; Khan, 2006). Generally, a high property rights enforcement, such as the effective legal protection for the property rights of individuals, is associated with a low level of corruption (Cancio, 2007).

H4d: A better freedom rating level should decrease corruption level.

Another measurement of the quality of institutions is the freedom rating, which is comprised of political rights and civil liberties as proposed by the Freedom House. When there is a competitive electoral process and political pluralism, the system will allow two or more parties to compete for power via the democratic election process, and such a mechanism helps to reduce corruption (Rose-Ackerman, 1999). Civil liberties refer to the freedom of expression and beliefs of individuals without the intervention from states. Countries that are more democratic often possess far stronger interest groups, and there is high freedom of expression and beliefs. The greater is the democracy, and more stable are the political environment, such as political rights and civil liberties, which help to promote transparency in both the private and public sectors (La Porta et al., 1999; Shleifer & Vishny, 1993).

H4e: A better Ease of Doing Business Index should bring greater transparency to the country, and eventually corruption level will decrease.

Another related institutional quality is the Ease of Doing Business Index (EDBI). As the name suggests, it measures business regulations and their enforcement in domestic countries. An open-economy country with a relatively friendly business environment will invite more foreign investment, resulting in a higher score on the EDBI. The rationale indicates that corrupt nations seem to create an unfriendly business environment, aiming at making things more complex and difficult in order to receive bribes and to commit fraud. The burdensome regulation level of market entry creates stricter barriers for new market entry and is related to higher levels of corruption (Djankov et al., 2002). Conversely, a country that is more transparent will attempt to make the business environment more healthy and friendly for both domestic and foreign stakeholders (Mongay & Filipescu, 2012).

Other Factors Influencing Corruption and Neoliberal Variables

Level of Development (GDP per Capita)

H5: A high level of development of a country reduces the level of corruption.

Level of development is a broad term and is widely discussed in the social science community. Only a narrow perspective of the level of development will be focused on here that is GDP (income) per capita. It is commonly thought that higher economic development reduces corruption (Goel & Nelson, 2010; Paldam, 2002; Pellegrini & Gerlagh, 2008; Seera, 2006). Moreover, high-quality institutions in a rich country may be considered as a normal good, meaning that a country with higher income per capita, will generally mandate more efficient and transparent institutions than a country with lower income per capita (Neeman, Paserman & Simhon, 2003). As suggested by Gerring and Thacker (2005), there is a direct causal link that bridges the gap between corruption and neoliberal policies, which is the GDP per capita variable. In the long term, neoliberal policies should encourage a higher level of economic development, such as higher economic growth and a higher level of GDP per capita, resulting in a lower level of corruption.

Inflation

H6: A high level of inflation leads to an increase in the level of corruption

When inflation rises, the real wages of employees and officials are lower, and this affects real purchasing power indirectly. Consequently, the necessity for basic needs remains despite the lower level of purchasing power. Public officials might seek illegal activities to obtain additional income, such as accepting bribes, conducting fraud, and committing embezzlement. Worsening socio-economic conditions such as rising inflation create a “moral hazard”, causing a higher level of corruption. A lower level of investment and economic growth, as well as asymmetry and uncertainty of perceived prices caused by a rise in inflation, are indirectly associated with a higher level of income inequality, leading to a higher level of corruption (Braun & Tella, 2004; Paldam, 2002).

Natural Resources

H7: Higher natural resource rents are associated with a high level of corruption.

Rose-Ackerman (1999) explained “rent seeking” theory, stating that existence of public officials in a centralized state with abundant natural resources is related to high incidents of corruption. A rich natural resource country collecting vast natural resource rents often has a high corruption level. As seen in a study in 1999, the author concluded that corruption level is positively related to the level of natural resource rents (Leite & Weidmann, 1999).

Data Collection

The APEC’s primary goal is to promote sustainable economic growth and prosperity in the Asia-Pacific region. By doing so, they are eager to highlight free and open trade and investment, to encourage member-country cooperation economically and technically, and to facilitate a favorable sustainable business environment as well as increase human security. By uniting the region since 1989, the APEC has become one of the most important regional mediums as a vital engine to boost economic growth. In 1994, the agreement on the “Bogor Goals” of free trade and investment by 2020 is to encourage APEC economies to reduce trade barriers, promote free flow of goods and services, and stimulate the flow of investment within the region. One of the successful action plans was carried out by dropping the transaction costs between the region’s borders by 5 percent between 2004 and 2006, and another 5 percent in further cost reductions took place between 2007 and 2010. The reduction in costs by 10 percent has saved approximately

USD 58.7 billion for the region (APEC, 2015). Therefore, the emphasis of open trade and investment within member countries highlights the role of economic liberalization in this research. The APEC members consist of 21 countries, mixing developing and developed countries across the Asia-Pacific region.

In order to measure neoliberalism, this research employed a proxy of trade liberalization, financial freedom, privatization, and institutional quality for the period 1995-2015. The logical reasoning for choosing the periods was to emphasize the roles of neoliberal policies highlighted by SAP programs during the period of the Asian financial crisis. Moreover, this period was the starting point of the Corruption Perception Index, which was introduced by the Transparency International Organization. In sum, the samples should represent the relationship between neoliberalism and corruption.

Table 1. APEC Countries and Date of Joining

APEC	Year	Date of Joining
Developing Countries	China	12-14 November, 1991
	Indonesia	6-7 November, 1989
	Malaysia	6-7 November, 1989
	Mexico	17-19 November, 1993
	Papua New Guinea	17-19 November, 1993
	Peru	14-15 November, 1993
	The Philippines	6-7 November, 1989
	Russia	14-15 November, 1998
	Thailand	6-7 November, 1989
	Vietnam	14-15 November, 1998
Developed	Australia	6-7 November, 1989
	Brunei Darussalam	6-7 November, 1989
	Canada	6-7 November, 1989
	Chile	11-12 November, 1994
	Hong Kong	12-14 November, 1991
	Japan	6-7 November, 1989
	New Zealand	6-7 November, 1989
	Singapore	6-7 November, 1989
	South Korea	6-7 November, 1989
	Taiwan	12-14 November, 1991
	United States	6-7 November, 1989

There are two types of data applied in this research. All aggregate data were retrieved from the World Bank, while other composite data were retrieved from several international organizations, as shown in the table 2. A full description of the data can be found in the appendix.

Table 2. Types of Data and Data Sources

Aggregate Data	Composite Data
World Bank National Account Data Trade Openness (Imports + Exports as % of the GDP) FDI Inflows FDI Outflows Changes in Portfolio Investment (as % of the GDP) Public-Private Partnership Investment Value (as % of the GDP) Government Final Consumption (as % of the GDP) GDP per Capita Inflation Rate Natural Resource Rents (as % of the GDP) Tariff Rates on All Products	Transparency International Organization Corruption Perception Index Heritage Foundation and Wall street Journal Trade Freedom Financial Freedom Investment Freedom Property Rights World Bank Governance Indicators Control of Corruption Government Effectiveness Regulatory Quality Rule of Law Freedom House

Research Methodology

Based on the objectives of this research, the basic model of regression analysis begins with an OLS regression. Then, the researcher applies fixed-effect and random-effect estimations on the sample as a validity test for the presence of fixed or random effects. If there was a statistical significance at the .05 level for either the fixed-effect or random-effect test, the OLS regression was ignored. If both fixed-effect and random-effect test were statistically significant, the decision to choose between a fixed-effect or a random-effect model was based on the Hausman test (Park, 2011). When the null hypothesis is not rejected, there is no correlation between country-specific effects and independent variables. A random-effect model is more consistent than fixed effects.

In this research, the purpose is not to identify the value of country-specific effects, but to control the omitted variable bias by emphasizing the within-variation estimations. The focuses are on the variation within each country instead of generating a large number of dummies. Equation 3 represents the fixed-effect (within) estimation.

$$\ddot{y}_{it} = \beta_1 \ddot{x}_{it1} + \beta_2 \ddot{x}_{it2} + \cdots + \beta_k \ddot{x}_{itk} + \ddot{u}_{it} \quad (\text{Equation 1})$$

Eight models are presented in the present study. Each model was tested with OLS regression first, then the fixed-effect and random-effect estimations, and finally was concluded with the Hausman test. Model 1 reported the sole influence of neoliberal impacts on corruption. Model 2 included three control variables: level of development, inflation, and natural resource rents. Model 3 reported the results after integrating all political and economic institution variables: government effectiveness, regulatory quality, property rights, freedom rating, and ease of doing business. Model 4 excluded all institutional variables in Model 3, but included only five components of ease of doing business. Model 5 included a new variable: outward FDI. Model 6 applied total FDI variable and excluded inward and outward FDI. Model 7 was the full model based on Model 3 but integrating all five components of ease of doing business, while Model 8 added the outward FDI variable from Model 7.

Descriptive Statistics and the Correlation Matrix for the Variables

The main dependent variable of the interest, the Corruption Perception Index, recorded a mean of 5.49, with a corresponding standard deviation of 2.47. The CPI for the APEC developed countries was higher than the CPI for the APEC developing countries, with a mean of 7.54 and 3.21, respectively. The higher score signifies that the APEC developed countries' anticorruption activities and control of corruption are more effective than those of the APEC developing countries.

With respect to the neoliberalism independent variables, the APEC developed countries had a higher mean score than the APEC developing countries. In terms of trade freedom and financial freedom, the APEC developed countries recorded a mean of 81.46 and 70.66 with a following level of dispersion of 6.45 and 15.72, while the APEC developing countries received a mean of 68.10 and 44.82 with a standard deviation of 13.57 and 14.00, respectively. The tariff rate for all products recorded a mean of 3.31 and had a minimum rate of 1.43 percent for those in the APEC developing countries, and on the other hand, the APEC developed countries had the lowest rate of 0.00 percent, with a mean of 1.37 percent in 2015. The APEC developed countries fully supported the reduction in tariff rates according to the APEC's missions and goals in promoting free flow of trade.

Table 3. Descriptive Data Summary for the APEC Countries, APEC Developed Countries and APEC Developing Countries

Variables	APEC Countries			APEC Developed Countries			APEC Developing Countries		
	Observations	Mean	Std. Dev.	Observations	Mean	Std. Dev.	Observations	Mean	Std. Dev.
Corruption Perception Index	408	5.49	2.47	215	7.54	1.45	193	3.21	0.85
Control of Corruption	317	0.54	1.16	160	1.56	0.62	157	-0.50	0.40
Trade Openness	397	4.35	0.74	208	4.34	0.90	189	4.35	0.51
Trade Freedom	404	75.08	12.20	211	81.46	6.45	193	68.10	13.17
Financial Freedom	404	58.32	19.73	211	70.66	15.72	193	44.82	14.00
Total FDI	410	0.07	0.13	210	0.11	0.17	200	0.04	0.02
Inward FDI	401	0.05	0.07	201	0.06	0.09	200	0.03	0.02
Outward FDI	390	0.03	0.06	210	0.05	0.08	180	0.01	0.01
Portfolio Investment	367	-0.42	6.71	183	-0.32	6.48	184	-0.52	6.94
Public-Private Partnership	n/a	n/a	n/a	n/a	n/a	n/a	178	0.01	0.02
Government Size	396	13.88	4.50	208	15.58	4.63	188	12.01	3.50
Government Effectiveness	317	0.76	0.90	160	1.54	0.39	157	-0.04	0.48
Regulatory Quality	317	0.71	0.88	160	1.48	0.40	157	-0.06	0.43
Property Rights	404	63.97	26.83	211	86.11	8.24	193	39.77	17.59
Freedom Rating	344	3.05	1.82	181	2.14	1.57	163	4.06	1.53
Ease of Doing Business	249	70.12	13.45	129	79.52	8.88	120	60.02	9.68
Starting a Business	249	79.54	14.93	129	85.87	14.65	120	72.74	11.99
Dealing with Construction Permits	209	68.26	16.39	109	77.49	7.94	100	58.19	17.30
Getting Electricity	126	78.30	16.46	66	84.42	10.78	60	71.56	18.92
Protecting Minority Investors	209	64.85	17.64	109	73.07	15.68	100	55.88	15.17
Registering Property	229	73.63	10.92	119	77.25	10.52	110	69.72	10.00
Getting Credit	229	67.46	20.86	119	76.80	15.83	110	57.35	20.99
Paying Taxes	209	73.77	16.27	109	83.98	8.86	100	62.64	15.19
Trading Across Border	209	79.03	12.16	109	85.89	6.46	100	71.56	12.54
Enforcing Contracts	249	65.79	14.28	129	72.15	11.30	120	58.95	14.03
Resolving Insolvency	249	59.96	28.75	129	80.52	19.70	120	37.85	18.84
Level of Development	431	9.07	1.36	231	10.12	0.57	200	7.85	0.92
Inflation Rate	409	4.01	4.71	210	2.06	2.01	199	6.07	5.76
Natural Resource Rents	410	6.69	8.98	210	4.46	7.33	200	9.02	9.92

Developed countries have a higher independency level from government control and involvement as well as level of autonomy in supervising and regulating financial institutions than APEC developing countries. The trade policies in developing countries are relatively less supportive of trade activities than those in APEC developed countries.

Moreover, regarding the FDI variables such as inward FDI and outward FDI, the APEC developed countries retained a noticeably higher mean for all FDI variables than that for the APEC developing countries. It is known that developing countries are attractive for FDI inflows due to cheap labor and lower costs of investment, but FDI inflow growth was significantly lower than that in the APEC developed countries for both aggregate values and as a percentage of the GDP. On the other hand, the FDI outflows provide a similar explanation to the FDI inflows. Both the FDI outflow aggregate values and as a percentage of the GDP in the APEC developed countries showed higher figures than in the APEC developing countries.

Regarding portfolio investment, the annual growth of the APEC developing countries' PI was relatively lower when compared to that in the APEC developed countries. It was recorded with a mean of -0.52 percent and -0.32 percent, with a corresponding level of dispersion of 6.94 and 6.48, respectively.

In terms of the government's final consumption as a percentage of the GDP, the amount that the APEC developing countries' government spent had a smaller mean compared to that for the developed countries by 3.57 percent. The relatively smaller number of this variable implies a smaller amount of final consumption by government spending, indicating a smaller size of government compared to the developed countries.

With respect to institutional quality, the APEC developing countries proved to be less effective in comparison to the APEC developed countries. A high score for government effectiveness and regulatory quality meant high-quality institutional settings. The APEC developing countries received a negative value for both indicators.

The freedom rating is composed of two indicators: political rights and civil liberties. The Freedom Rating Index had a higher score in comparison to the APEC developed countries, and this suggested that the APEC developing countries had less freedom in political rights and civil liberties (the lower value means a higher freedom rating).

Another economic institutional variable is the Property Rights Index. The APEC developing countries had a mean of 39.77, while its dispersion was 17.59 in comparison to the APEC developed countries, which had a mean of 86.11 and a level of dispersion of 8.24.

The Ease of Doing Business Index of the APEC developed countries was 79.52, 30 percent higher on average when compared to the APEC developing countries, whose score was 60.02. The EDBI 10 compositions such as starting a business, registering property, getting credit, enforcing contracts, and resolving insolvency of the APEC developed countries revealed higher mean figures than those for the APEC developing countries.

Five compositions of the EDBI, which deal with construction permits, getting electricity, protecting minority investors, paying taxes, and trading across borders, did not take part in the correlation or regression estimations due to the small number of observations, which could have led to a lower explanatory power for the model.

In tables 4, 5 and 6, it is the display of the correlations for the APEC, APEC developed and APEC developing countries. In table 4, all of the neoliberal variables showed a low score for the correlation estimates. The relatively low correlations among the variables led to no presence of multicollinearity issues among the neoliberal variables.

The total FDI is the sum of inward and outward FDI. Its correlation with the other variables was relative low. In order to provide a better picture of financial liberalization and corruption, this study attempted to regress the explanatory power of the FDI inflows and FDI outflows separately. Therefore, the correlation estimations showed that there was a high correlation between the two FDI variables. The FDI inflows and FDI outflows had a correlation coefficient of 0.8690. In order to prevent multicollinearity problems, the study separately included two FDI variables in all models, except Model 5 and Model 7, which were the full models.

Moreover, there was a high correlation for the political and economic institutional variables and corruption. The correlations between government effectiveness and regulatory quality, regulatory quality and property rights, and government effectiveness and property rights were 0.9445, 0.9296, and 0.8872, respectively. All three parameters were statistically significant at the .01 level. The EDBI also showed high correlations with the three institutional quality variables.

The explanation for the high correlation between the institutional variables in the full sample was that the APEC developing countries had a lower mean in these variables and received a lower score for the CPI, while the APEC developed countries recorded a high score for the institutional variables, and had a high level for the CPI. In the APEC countries' estimation, highly-correlated estimates were revealed. In order to control for this issue, the study attempted to gradually add institutional variables to the model in order to see the effects of their explanatory power.

The other five components of the EDBI showed correlation estimates no greater than 0.8062 regarding the other institutional control variables, as well as the neoliberal policy variables, while other control variables such level of development, had a high correlation with the corruption perception index, government effectiveness, ease of doing business, and resolving insolvency. This variable had theoretical support for the corruption and neoliberal policy variable interrelation, so it was added to all of the models (Gerring & Thacker, 2005).

All of the neoliberal variables in table 5, which represent the APEC developed countries, such as trade openness, trade freedom, financial freedom, inward and outward FDI, PPP and government consumption as a percentage of the GDP, showed a correlation coefficient with a CPI, of less than 0.5294, and most of neoliberal variables were significant at 5 percent. The correlation between of the FDI inflows and FDI outflows, was 0.8857. Again, the variable FDI outflows was included only in Models 5 and 7.

The correlations among the institutional quality variables, such as government effectiveness, regulatory quality, property rights, freedom rating, and ease of doing business regarding the CPI were less severe when compared to those in table 4, that is, the correlation estimates for the APEC countries. Moreover, the correlation coefficients among the institutional variables were less than 0.8, which is recommended by Anderson, Hair, and Black (1998). This holds an explanation, that a country with a higher score for the institutional quality variables led to a higher score for the control level of corruption.

In table 5, the negative sign for the correlation efficient for both control variables, inflation and natural resource rents, suggested that higher prices caused by high inflation should lead to higher corruption in the end, and a country with rich natural resources would give more rent seeking opportunities for public officials, leading to higher corruption.

The correlation results in table 6 showed minor multicollinearity problems regarding the CPI and government effectiveness, the CPI and regulatory quality, regulatory quality and government effectiveness, and property rights and regulatory quality, which possessed correlation values of 0.8261, 0.7726, 0.7337 and 0.7483. The high correlation did not pose a threat to the analysis because these political and economic institutional variables are thought to have strong associations with the dependent variable, as stated in much of the literature. Nevertheless, these four pairs of variables were statistically significant at the .05 level confidence level, meaning that it allowed this study to validate these variables as a choice of factors.

Table 4. Correlation Analysis for the APEC Countries

	X1	X1.1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X14.1	X14.2	X14.3	X14.4	X14.5	X15	X16	X17	
Corruption Perception Index	X1	1																						
	X1.1	0.9879	1																					
	X2	0.00																						
Control of Corruption	X2	0.0972	0.1037	1																				
Trade Openness	X2	0.06	0.08																					
Trade Freedom	X3	0.5873	0.5760	0.1615	1																			
	X3	0.00	0.00	0.00																				
Financial Freedom	X4	0.7361	0.7484	0.0324	0.5032	1																		
	X4	0.00	0.00	0.53	0.00																			
Total FDI	X5	0.3413	0.3495	0.6247	0.3439	0.3243	1																	
	X5	0.00	0.00	0.00	0.00	0.00																		
Inward FDI	X6	0.3146	0.3388	0.6439	0.2894	0.2889	0.9698	1																
	X6	0.00	0.00	0.00	0.00	0.00	0.00																	
Outward FDI	X7	0.3315	0.3295	0.5836	0.3793	0.3381	0.9559	0.8690	1															
	X7	0.00	0.00	0.00	0.00	0.00	0.00	0.00																
Portfolio Investment	X8	0.0399	0.0092	0.1042	0.0032	0.0321	0.1340	0.1479	0.1067	1														
	X8	0.46	0.88	0.05	0.95	0.55	0.01	0.00	0.05															
Government Size	X9	0.4200	0.3710	-0.3506	0.0771	0.2678	-0.2879	-0.3235	-0.2732	0.0222	1													
	X9	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.68														
Government Effectiveness	X10	0.9537	0.9567	0.1666	0.6087	0.6763	0.3671	0.3403	0.3615	-0.0103	0.3591	1												
	X10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.00													
Regulatory Quality	X11	0.9481	0.9571	0.1431	0.6456	0.8046	0.4120	0.3928	0.4033	0.0009	0.3151	0.9445	1											
	X11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00												
Property Rights	X12	0.8506	0.9040	0.0629	0.5050	0.7239	0.2879	0.2490	0.2965	0.0393	0.3651	0.8872	0.9296	1										
	X12	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00											
Freedom Index	X13	-0.5380	-0.5509	0.4175	-0.4836	-0.6211	0.1074	0.1552	0.0739	0.0750	-0.2292	-0.5044	-0.5941	-0.6857	1									
	X13	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00										
Ease of Doing Business	X14	0.8549	0.8572	0.1796	0.6093	0.7239	0.3803	0.3423	0.3904	0.0165	0.3367	0.8761	0.8826	0.8409	-0.4744	1								
	X14	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00									
Starting a Business	X14.1	0.6535	0.6838	0.1100	0.5562	0.6420	0.3012	0.2775	0.3003	0.0287	0.2764	0.6573	0.6925	0.6515	-0.4050	0.7887	1							
	X14.1	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00								
Registering Property	X14.2	0.4671	0.4847	-0.1600	0.1985	0.3361	0.0524	0.0723	0.0262	0.0041	0.2344	0.3601	0.4343	0.3854	-0.2594	0.4889	0.5579	1						
	X14.2	0.00	0.00	0.02	0.00	0.00	0.44	0.29	0.70	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
Getting Credit	X14.3	0.6865	0.7061	0.1353	0.4994	0.6490	0.3056	0.2718	0.3185	-0.0921	0.1632	0.7242	0.7308	0.6676	-0.3987	0.8356	0.6598	0.3662	1					
	X14.3	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.18	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Enforcing Contracts	X14.4	0.6037	0.6281	0.2930	0.1244	0.4264	0.3836	0.3698	0.3683	0.0486	0.1784	0.6840	0.6304	0.5483	-0.0308	0.7016	0.5762	0.5179	0.6236	1				
	X14.4	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.46	0.01	0.00	0.00	0.63	0.00	0.00	0.00	0.00						
Resolving Insolvency	X14.5	0.7683	0.7601	0.0020	0.4541	0.5695	0.2526	0.2023	0.2830	0.0484	0.5123	0.8062	0.7785	0.7589	-0.4662	0.8473	0.6122	0.3396	0.6223	0.6093	1			
	X14.5	0.00	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Level of Development	X15	0.8290	0.8273	-0.0367	0.7186	0.6580	0.2840	0.2272	0.3200	0.0006	0.4625	0.8684	0.8614	0.7602	-0.4573	0.8367	0.5820	0.3016	0.6674	0.6063	0.8568	1		
	X15	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Inflation	X16	-0.4461	-0.4618	-0.0382	-0.3840	-0.4080	-0.1184	-0.0960	-0.1341	0.0553	-0.1846	-0.4812	-0.4549	-0.3459	0.1921	-0.4305	-0.1883	-0.0293	-0.3312	-0.1727	-0.4313	-0.4313	1	
	X16	0.00	0.00	0.45	0.00	0.00	0.00	0.02	0.06	0.01	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00			
Natural Resource Rents	X17	-0.3685	-0.4555	0.0583	-0.2236	-0.4030	-0.1878	-0.1545	-0.2037	0.0752	0.2262	-0.5057	-0.4700	-0.3983	0.2351	-0.4977	-0.2838	-0.2570	-0.5118	-0.6192	-0.3103	-0.3103	0.2319	1
	X17	-0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

	X1	X1.1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X14.1	X14.2	X14.3	X14.4	X14.5	X15	X16	X17
Corruption Perception Index	X1	1																					
Control of Corruption	X1.1	0.9708	1																				
Trade Openness	X2	0.2002	0.2512	1																			
Trade Freedom	X3	0.01	0.00																				
		0.4737	0.4959	0.4039	1																		
Financial Freedom	X4	0.00	0.00	0.00																			
		0.5294	0.5436	0.1795	0.3547	1																	
Total FDI	X5	0.1748	0.1888	0.7222	0.5167	0.2380	1																
Inward FDI	X6	0.01	0.02	0.00	0.00	0.00																	
Outward FDI	X7	0.07	0.13	0.00	0.00	0.00	0.00	0.00															
Portfolio Investment	X8	0.1505	0.1480	0.1926	0.1522	0.1365	0.2072	0.2359	0.1623	1													
		0.05	0.09	0.01	0.05	0.08	0.00	0.00	0.03														
Government Size	X9	0.1823	0.1610	-0.4690	-0.1056	-0.0047	-0.5632	-0.6017	-0.5247	-0.0916	1												
		0.01	0.05	0.00	0.15	0.95	0.00	0.00	0.00	0.00	0.22												
Government Effectiveness	X10	0.8653	0.8615	0.3647	0.5259	0.4004	0.2905	0.3355	0.2286	0.1528	0.0911	1											
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.28												
Regulatory Quality	X11	0.8039	0.8424	0.4965	0.6099	0.6341	0.4482	0.4932	0.3898	0.1436	-0.1933	0.7931	1										
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.02	0.00											
Property Rights	X12	0.5228	0.7109	0.1744	0.2075	0.4831	0.1912	0.2271	0.1423	0.1438	-0.1316	0.4908	0.6538	1									
		0.00	0.00	0.02	0.00	0.01	0.00	0.05	0.06	0.07	0.00	0.00											
Freedom Index	X13	0.0136	0.2004	0.6934	0.2983	-0.1055	0.3744	0.4327	0.3225	0.1451	-0.0663	0.3669	0.3410	0.0175	1								
		0.86	0.02	0.00	0.00	0.18	0.00	0.00	0.00	0.07	0.40	0.00	0.00	0.82									
Ease of Doing Business	X14	0.6456	0.3860	0.2255	0.3804	0.4275	0.3052	0.2828	0.3116	0.0165	-0.1993	0.7558	0.5841	0.4668	-0.1251	1							
		0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.86	0.03	0.00	0.00	0.16									
Starting a Business	X14.1	0.7201	0.7250	0.0393	0.5226	0.6258	0.2216	0.2170	0.2131	0.0456	-0.1140	0.6906	0.7413	0.6573	-0.3976	0.8105	1						
		0.00	0.00	0.68	0.00	0.00	0.02	0.02	0.02														

Table 6. Correlation Analysis for the APEC Developing Countries

	X1	X1.1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X15.1	X15.2	X15.3	X15.4	X15.5	X16	X17	X18
Corruption Perception Index	1																							
Control of Corruption	X1.1	0.8658	1																					
Trade Openness	X2	0.3356	0.4135	1																				
Trade Freedom	X3	0.1910	0.0352	0.1075	1																			
Financial Freedom	X4	0.3048	0.3546	-0.1698	0.1831	1																		
Total FDI	X5	0.4824	0.4618	0.3294	-0.0101	0.0235	1																	
Inward FDI	X6	0.3186	0.3632	0.2027	-0.1708	0.0125	0.8337	1																
Outward FDI	X7	0.3982	0.3077	0.2940	0.1995	-0.0016	0.6225	0.0401	1															
Portfolio Investment	X8	-0.1020	-0.1460	-0.0304	-0.0963	-0.1012	-0.0438	-0.0618	-0.0050	1														
Public-Private Partnership	X9	0.1059	0.2330	0.1939	-0.0922	0.1363	-0.0956	-0.0503	-0.1060	0.0273	1													
Government Size	X10	0.1475	-0.0445	-0.1589	-0.2201	0.0769	0.1145	-0.0607	0.2070	0.1471	-0.0792	1												
Government Effectiveness	X11	0.8261	0.8312	0.3169	0.2213	0.1533	0.4828	0.2012	0.5330	-0.1451	0.0683	0.0513	1											
Regulatory Quality	X12	0.7726	0.7958	0.1246	0.3161	0.6254	0.2982	0.1552	0.2862	-0.1237	0.2869	0.1316	0.7337	1										
Property Rights	X13	0.4202	0.3824	0.2427	0.0437	0.4350	-0.0423	-0.1139	0.0092	-0.0089	0.3337	0.2353	0.5294	0.7483	1									
Freedom Index	X14	-0.0112	-0.0807	0.1251	-0.4771	-0.5934	0.3017	0.2750	0.1913	0.0890	-0.2290	0.0882	0.0378	-0.3591	-0.5131	1								
Ease of Doing Business	X15	0.6858	0.6275	0.2620	0.3288	0.5070	0.3786	0.1810	0.3786	-0.0664	-0.0075	0.2991	0.5766	0.7174	0.6164	-0.0913	1							
Starting a Business	X15.1	0.2420	0.1450	0.2611	0.2614	0.2605	0.2385	0.0911	0.2567	-0.0348	0.0096	0.3690	0.2114	0.3000	0.3211	0.0324	0.7155	1						
Registering Property	X15.2	-0.1602	-0.2347	-0.1323	-0.2612	-0.1596	0.1233	0.3291	-0.2030	0.1346	0.0462	0.3297	-0.3924	-0.2538	-0.3964	0.5395	0.0453	0.1786	1					
Getting Credit	X15.3	0.7413	0.7526	0.2857	0.2639	0.3867	0.5090	0.3417	0.3885	-0.1667	-0.0059	0.0537	0.6311	0.6889	0.5772	-0.1244	0.7790	0.4277	-0.0775	1				
Enforcing Contracts	X15.4	0.4141	0.4452	0.2437	-0.4031	-0.0015	0.6072	0.4413	0.4256	0.0179	-0.1407	0.5485	0.5051	0.3832	0.1930	0.5854	0.4294	0.3616	0.3963	0.3845	1			
Resolving Insolvency	X15.5	0.4403	0.3610	-0.0838	0.0484	0.4376	0.1647	0.0011	0.2533	0.0368	-0.2727	0.5151	0.3898	0.5261	0.5536	-0.0163	0.6588	0.5546	-0.0720	0.4218	0.4291	1		
Level of Development	X16	0.000	0.000	0.39	0.61	0.00	0.07	0.99	0.01	0.69	0.00	0.00	0.00	0.00	0.86	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inflation	X17	-0.3829	-0.3551	-0.1140	-0.2094	-0.3188	-0.0971	-0.0213	0.1670	0.1217	-0.0671	0.1090	-0.3264	-0.2973	-0.0019	0.0538	-0.2917	-0.0436	0.1351	-0.2388	0.0219	-0.2325	-0.1262	1
Natural Resource Rents	X18	-0.2835	-0.5135	0.1813	-0.0179	-0.3856	-0.1216	-0.1284	-0.0461	0.1289	-0.0718	0.3375	-0.4394	-0.4568	-0.2355	-0.0773	-0.2208	0.1434	0.0666	-0.3166	-0.4861	-0.2104	-0.1756	0.1884

Generally, most of the correlation estimates were statistically significant at the .01 level. Regarding the correlation of neoliberal variables and corruption, most of the variables were significant at the .05 level, except for portfolio investment and the public-private partnership.

Regression Results and Discussion

In tables 7, 8, and 9, the panel data model selection tested for the APEC, APEC developed countries and APEC developing countries and reported that only the fixed-effect models were statistically significant at the 5 percent level.

Some important results arose from the panel data analysis, suggesting that the key neoliberal economic determinants of corruption, such as trade openness, decreased the level of corruption in the full sample estimation. A free market enhances competitiveness unbounded to domestic borders by integrating domestic economies into the global economy and by reducing rent seeking and corruption through free market mechanism (Bussmann, De Soysa & Oneal, 2005; De Soysa & Oneal, 1999; Firebaugh, 1992; Firebaugh & Goesling, 2004; Weede, 2004). Trade openness derived from the ratio of imports and exports to GDP remained effective, as a neoliberal economic policy to deter corruption in the APEC developed countries, while in the APEC developing countries trade openness signified no significance (Ades & Tella, 1995; Ades & Tella, 1997; Paldam, 1999).

An open-market country eagerly looks for outward investment, whereas a closed-market country is likely to support inward-looking businesses whose businesses are protected by state policies due to their close ties with government officials. Hence, a high level of financial freedom will invite an outward investment orientation, and will enhance links to the international economy and foreign business groups. Financial freedom, here, refers to the independency level from government control and involvement as well as its level of autonomy in supervising and regulating financial institutions. Without the institutional quality variables, financial freedom enlargements in the APEC developed countries decreased the level of corruption. Such effects appeared when the institutional quality variables were included. Financial liberalization allows for more productive project investment (Thacker, 2000). In the context of the APEC developed countries, effective promotion of financial freedom, referring to financial and capital market development regarding good-quality institutions, such as government effectiveness, improves the control level of corruption (Elliott, 1997).

Several studies have acknowledged the negative impact of corruption on the level of FDI, but only a few studies have found the reverse causality of such a relationship. In order to investigate the effect of FDI on corruption, this study constructed three specifications for three groups of samples. The FDI specifications were FDI inflows, FDI outflows, and total FDI. In the panel data estimations across all samples, FDI outflows were applied only in Models 5 and 7 because they were highly correlated with FDI inflows, which may cause bias in the estimations. Total FDI is placed alone in Model 5.1.

Attaining a one percent increase in the level of inward FDI, the APEC developing countries experience a 2.4296 increase in the control of corruption. Though FDI inflows showed no statistical significance in the models, the positive relations meant that higher FDI inflows led to a lower level of corruption (Voyer & Beamish, 2004; Wei, 2000). Both FDI volume and efficient investment were negatively related to the host countries' corruption level, and the costs of investment in host country with a relatively high corruption level were 20 percent higher in comparison to those with smaller levels of corruption. Secondly, larger FDI inflows decreased the level of corruption (Felipe & Jose, 2004; Habib & Zurawicki, 2002; Kaufmann & Wei, 1999; Lambsdorff, 2003). Additionally, the findings suggested that there was a statistical significance at the 5 percent level of an increase in FDI outflows, leading to higher corruption levels. This suggests that when APEC developing countries decide to invest outbound, there seems to be an increase in the corruption level.

Similarly, in the findings for the APEC countries, an increase in the level of FDI inflows led to a lower level of corruption, while FDI outflows led to a higher level of corruption. The APEC countries should carefully emphasize FDI outflows as a neoliberal policy because the statistical results suggest a higher incidence of corruption.

As for the APEC developed countries, both variable FDI inflows and outflows were negatively related to corruption, though it was not statistically significant. When the APEC developed countries decide to increase FDI outflows, there is an empirical link that will lead to greater corruption for its home country, according to the present study. This negative relationship was shown in the reverse causality format in a Rio de Janeiro study where the home country's corruption had a negative impact on the overall FDI outflows. For instance, the intervention of the United States government in the recovery of large multinational companies during the global financial crisis continuously supported the outflows of FDI indirectly (Bazuchi et al., 2013).

Table 7. Fixed Effect Estimations for the APEC Countries

Fixed Effect Estimations								
Dependent Variable: Corruption Perception Level, (high corruption) 0 and (low corruption) 10								
Variables	< 1 >	< 2 >	< 3 >	< 4 >	< 5 >	< 6 >	< 7 >	< 8 >
Trade Openness	0.3426 <0.3433>	0.6231 ** <0.3111>	0.1574 <0.3467>	-0.1390 <0.3276>	0.2056 <0.3316>	0.1735 <0.3412>	-0.1852 <0.3809>	-0.1940 <0.3772>
Trade Freedom	0.0022 <0.0063>	-0.0048 <0.0069>	-0.0040 <0.0087>	-0.0039 <0.0077>	-0.0035 <0.0090>	-0.0041 <0.0087>	-0.0051 <0.0082>	-0.0045 <0.0083>
Financial Freedom	0.0054 <0.0042>	0.0046 <0.0044>	0.0016 <0.0065>	-0.0032 <0.0058>	0.0013 <0.0068>	0.0016 <0.0065>	-0.0025 <0.0055>	-0.0028 <0.0056>
Inward FDI	-0.7130 <0.5227>	-1.1018 *** <0.3686>	-0.9554 ** <0.3941>	-0.5229 <0.4993>	0.1001 <1.0783>		-0.4492 <0.4899>	-0.6448 <0.8373>
Outward FDI					-1.3337 <1.1433>			0.2518 <0.8529>
Total FDI						-0.6046 ** <0.2179>		
Portfolio Investment	0.0035 <0.0028>	0.0036 <0.0028>	0.0029 <0.0032>	0.0027 <0.0034>	0.0028 <0.0032>	0.0027 <0.0032>	0.0026 <0.0038>	0.0027 <0.0038>
Government Size	0.1091 ** <0.0444>	0.0639 <0.0386>	0.0029 <0.0458>	-0.0296 <0.0468>	0.0091 <0.0457>	0.0052 <0.0451>	-0.0154 <0.0477>	-0.0178 <0.0503>
Government Effectiveness			0.5942 ** <0.2130>		0.6083 ** <0.2246>	0.6067 ** <0.2129>	0.3101 <0.2845>	0.3010 <0.2926>
Regulatory Quality			-0.4647 <0.3416>		-0.5116 <0.3233>	-0.4751 <0.3371>	-0.4303 <0.2853>	-0.4069 <0.2789>
Property Rights			0.0001 <0.0085>		0.0003 <0.0097>	-0.0001 <0.0084>	0.0028 <0.0085>	0.0040 <0.0091>
Freedom Rating			-0.1568 ** <0.0658>		-0.1554 ** <0.0661>	-0.1547 ** <0.0658>	-0.0927 <0.0668>	-0.0955 <0.0663>
Ease of Doing Business			0.0234 ** <0.0091>		0.0254 ** <0.0089>	0.0234 ** <0.0090>		
Starting a Business				0.0117 *** <0.0038>			0.0098 ** <0.0038>	0.0099 ** <0.0036>
Registering Property				0.0023 <0.0071>			0.0013 <0.0080>	0.0012 <0.0081>
Getting Credit				0.0071 *** <0.0022>			0.0074 *** <0.0025>	0.0078 ** <0.0027>
Enforcing Contracts				0.0112 <0.0137>			0.0322 <0.0295>	0.0335 <0.0317>
Resolving Insolvency				0.0169 *** <0.0029>			0.0143 *** <0.0029>	0.0143 *** <0.0030>
Level of Development		0.1981 <0.1553>	-0.0163 <0.1326>	-0.2067 <0.1670>	-0.0161 <0.1309>	-0.0088 <0.1336>	-0.1387 <0.1363>	-0.1437 <0.1380>
Inflation		-0.0075 <0.0070>	-0.0112 <0.0119>	-0.0136 <0.0079>	-0.0173 <0.0118>	0.0142 <0.0116>	-0.0136 <0.0097>	-0.0138 <0.0099>
Natural Resource Rents		-0.0316 ** <0.0140>	-0.0112 <0.0204>	0.0042 <0.0165>	-0.0043 <0.0219>	-0.0110 <0.0204>	0.0077 <0.0187>	0.0107 <0.0197>
Constant	2.1726 <1.4724>	0.5517 <1.6193>	4.0500 ** <1.7731>	5.6775 ** <2.1023>	3.5840 * <1.8422>	3.9031 ** <1.7590>	4.1788 * <2.2958>	4.0533 <2.4521>
Year Dummy	No	No	No	No	No	No	No	No
Observations	330	328	195	194	192	195	179	177
Number of Countries	18	18	18	18	18	18	18	18
F	10.21 ***	8.77 ***	3.45 ***	6.30 ***	3.23 ***	3.51	3.79 ***	3.45 ***
F Test for fixed effects	277.11 ***	207.04 ***	33.08 ***	141.9 ***	27.01 ***	34.08 ***	22.15 ***	19.76 ***
Heteroskedasticity (Chi2)	575.21 ***	435.05 ***	169.45 ***	56.71 ***	155.15 ***	170.89 ***	43.81 ***	38.94 ***
Adjusted R-square	98.03%	98.04%	98.88%	98.94%	98.80%	98.80.00%	98.97%	98.95%

Note: robust standard errors are in parentheses. The adjusted R-square was calculated from the regression using country dummies. Significant at .01***, at .05**, and at .1*

Another aspect of financial liberalization that plays a critical role in mitigating corruption is portfolio investment growth. Portfolio investment is a short-term investment of financial assets into a foreign country, particularly regarding equity and debt securities. The positive relation between corruption and PI growth means that investors and foreign financial institutions will keep reinvesting in the host countries where they feel it is relatively less risky given the same expected return. Without other institutional control variables, PI played a role in mitigating the corruption level in the APEC developed countries, while in the APEC developing countries, such effects remained when there were quality of institutions. However, in the full sample, the effects showed that there were positive relations in all models, though not statistically significant.

This study reported results that contradict previous studies—that there exists a positive relation between government size (as measured by general government final consumption expenditure) and the control of the corruption level (La Porta et al., 1999; Lapalombara, 1994). In the APEC developing countries' and the APEC countries' sample, bigger government size is associated with a lower level of corruption. One sound explanation is that a high government final consumption level means a strong government, which could handle social inequality problems more effectively than a weaker government (Uslaner, 2008). A strong government can redistribute public resources to the poor better and more efficiently, and may be better equipped with resources to fight corruption than a weak government (Quah, 2007). Such an effect remains valid in the APEC developed countries only without institutional quality variables.

The privatization of infrastructure projects related to water, electricity, transportations and telecommunications in the APEC developing countries had a positive relation with corruption level, and it was statistically significant. This indicates that an increase in public private partnership investment projects in the APEC developing countries led to higher corruption levels. This result is consistent with the work of Tanzi and Davoodi (1997), where it can be seen that a high level of corruption is related to large amounts of public investment, to less government revenue, to cuts in expenditures on operations and maintenances, and to the poor quality of public sector investment.

With the additional institutional quality variables in the model, government effectiveness, the freedom rating, as well as the ease of doing business reported significant results for the APEC countries. Once the institutional variables were separately analyzed,

the effects of the mentioned institutional quality remained. This implies that in order to decrease the level of corruption, the quality of government in terms of formulating and implementing effective public policy independently from political pressure plays a critical role. Though regulatory quality and property rights were not statistically significant, they had a positive sign as expected (Churchill, Agbodohu & Arhenful, 2013; Pellegrini & Gerlagh, 2008; Treisman, 2000). The freedom rating, on the other hand, had a negative sign for the CPI, as it showed that an increase in the freedom rating, led to a lower level of corruption because a lower score for the freedom rating meant high quality of both political rights and civil liberties. This research attempted to explain the aggregate effects of ease of doing business in relation to corruption by applying the five components of ease of doing business, which were starting a business, registering property, getting credit, enforcing contracts, and resolving insolvency. The report suggests that by improving three areas of EDBI (starting a business, getting credit, and resolving insolvency), the corruption level will be lower and all three are significant at least at the 5 percent level in the APEC countries.

For the APEC developed countries, government effectiveness and property rights had a positive impact on the control of corruption. Interestingly, regulatory quality, freedom rating, and ease of doing business had different signs as seen in the literature. Regulatory quality, moreover, was statistically significant across the full model at the one percent level in Models 3 and 5 and at the 5 percent level in Models 6 and 7. That is, by imposing a higher quality of regulatory quality and encouraging political rights and civil liberties as well as improving the ease of doing business, the corruption level seemed to increase in the APEC developed countries. These findings contradicted previous literature, and the rationale for this relation can be explained as follows.

Regardless how consistent regulations are, there exist complicated procedures and formalities, and abnormal requirements. In the political arena, regulated actors might allocate public budgets to certain agendas that directly benefit specific groups; that is political parties and big business groups. Such intuitive programs include the processes for public procurement, especially for large service contracts or big construction projects, or for the privatization of state-owned enterprises. Public officials and large firms are committed to some form of political corruption, such as bribery or embezzlement, for mutual benefit (Villarreal, 2012).

Table 8. Fixed-Effect Estimations for the APEC Developed Countries

Fixed Effect Estimations								
Dependent Variable: Corruption Perception Level, (high corruption) 0 and (low corruption) 10								
Variables	< 1 >	< 2 >	< 3 >	< 4 >	< 5 >	< 6 >	< 7 >	< 8 >
Trade Openness	1.3432 *** <0.2098>	1.9085 *** <0.3618>	0.8475 <0.5062>	-0.0286 <0.4901>	0.8692 <0.5082>	0.8638 <0.4965>	-0.2442 <0.6046>	-0.2345 <0.6312>
Trade Freedom	-0.0202 <0.0143>	-0.0212 <0.0247>	-0.0104 <0.0277>	-0.0215 <0.0158>	-0.0121 <0.0277>	-0.0116 <0.0273>	-0.0154 <0.0161>	-0.0164 <0.0159>
Financial Freedom	0.0064 <0.0050>	0.0053 <0.0052>	0.0157 ** <0.0052>	0.0033 <0.0079>	0.0150 ** <0.0055>	0.0155 ** <0.0053>	0.0091 <0.0054>	0.0089 <0.0054>
Inward FDI	-0.8948 * <0.4293>	-0.6498 <0.4203>	-0.5733 <0.5665>	-0.4157 <0.4588>	-0.1886 <0.6174>		-0.4326 <0.3907>	-0.2274 <0.9190>
Outward FDI					-0.4870 <0.4064>			-0.2430 <0.7281>
Total FDI						-0.3341 <0.2886>		
Portfolio Investment	0.0071 ** <0.0030>	0.0058 * <0.0031>	0.0001 <0.0028>	-0.0022 <0.0046>	-0.0001 <0.0030>	-0.0001 <0.0029>	-0.0048 <0.0046>	-0.0050 <0.0047>
Government Size	0.1160 * <0.0544>	0.0822 <0.0520>	-0.5733 <0.5665>	-0.0425 <0.0623>	0.0456 <0.0700>	0.0450 <0.0688>	-0.0702 <0.0695>	-0.0708 <0.0695>
Government Effectiveness			0.5045 <0.3391>		0.5384 <0.4371>	0.5259 <0.3270>	0.0312 <0.3460>	0.0442 <0.3560>
Regulatory Quality			-1.3389 *** <0.3205>		-1.3344 *** <0.3218>	-1.3358 *** <0.31189>	-0.9231 ** <0.2960>	-0.9125 ** <0.3139>
Property Rights			0.0079 <0.0121>		0.0075 <0.0118>	0.0077 <0.0119>	0.0094 <0.0057>	0.0093 <0.0058>
Freedom Rating			0.2299 <0.2591>		0.2545 <0.2662>	0.2449 <0.2554>	0.2108 <0.01757>	0.2210 <0.1807>
Ease of Doing Business			-0.0032 <0.0117>		-0.0035 <0.0118>	-0.0033 <0.0117>		
Starting a Business				0.0141 <0.0080>			0.0168 * <0.0117>	0.0160 * <0.0070>
Registering Property				-0.0115 <0.0184>			0.0411 <0.0253>	0.0085 <0.0191>
Getting Credit				-0.0076 <0.0089>			-0.0168 <0.0117>	-0.0170 <0.0122>
Enforcing Contracts				0.0202 <0.0013>			0.0411 <0.0253>	0.0412 <0.0254>
Resolving Insolvency				0.0207 ** <0.0074>			0.0165 <0.0044>	0.0166 <0.0095>
Level of Development		0.5582 <0.3960>	0.5812 <0.3341>	-0.6265 <0.3791>	0.6006 <0.3381>	0.5959 <0.3334>	-0.0372 <0.3139>	-0.0336 <0.3231>
Inflation		-0.0487 ** <0.0177>	-0.0376 <0.0276>	-0.0695 ** <0.0218>	-0.0381 <0.0276>	-0.0379 <0.0273>	-0.0359 <0.0341>	-0.0366 <0.0347>
Natural Resource Rents		-0.0233 <0.0212>	-0.0191 <0.0251>	0.0131 <0.0192>	-0.0185 <0.0250>	-0.0188 <0.0248>	-0.0123 <0.0172>	-0.0126 <0.0176>
Constant	1.6935 <2.4166>	-5.3616 <5.9519>	-2.1705 <5.1238>	13.7682 <4.6361>	-2.3795 <5.1140>	-2.3217 <5.0068>	6.0596 <4.3654>	6.0919 <4.2868>
Year Dummy	Yes ***	Yes ***	Yes ***	Yes **	Yes ***	Yes ***	Yes **	Yes **
Observations	168	168	98	98	98	98	90	90
Number of Countries	9	9	9	9	9	9	9	9
F	6.65 ***	6.92 ***	3.77 ***	4.20 ***	3.57 ***	3.78 ***	3.87 ***	3.67 ***
F Test for fixed effects	148.08 ***	143.91 ***	27.07 ***	34.19 ***	25.19 ***	27.71 ***	21.02 ***	20.41 ***
Heteroskedasticity (Chi2)	59.78 ***	84.55 ***	26.53 ***	25.76 ***	27.84 ***	27.36 ***	86.05 ***	91.65 ***
Adjusted R-square	95.53%	95.87%	96.86%	96.88%	96.82%	96.87%	97.38%	97.33%

Note: robust standard errors are in parentheses. The adjusted R-square was calculated from the regression using country dummies. Significant at .01***, at .05**, and at .1*

It was mentioned in a report by Transparency International, “not one single country, anywhere in the world, is corruption-free.” Such a negative relationship between institutional quality variables (regulatory quality, freedom rating and ease of doing business) and the control of corruption in the APEC developed countries can be explained in this way: they may want to maintain the level of institutional quality as it is, rather than increase to a point that is corruption free.

In the model of the APEC developing countries, the presence of institutional quality variables, the political and economic institutional variables, led to no statistical significance for any of the neoliberal variables, except for portfolio investment. However, such findings should not be interpreted in terms of there being no statistical evidence that neoliberal variables have impacts on corruption level. Rather, it should emphasize the importance of the quality of institutions. The report revealed a statistical significance for regulatory quality, freedom rating, and ease of doing business, all of which had a positive sign as expected (Churchill, Agbodohu & Arhenful, 2013; Pellegrini & Gerlagh, 2008; Treisman, 2000).

The improvement of higher-quality regulations and the effectiveness of the government in formulating and implementing policy are essential for improving governance outcomes, resulting in lower levels of corruption for the APEC developing countries (Churchill, Agbodohu & Arhenful, 2013). This means that improving the degree of freedom in electoral processes, encouraging citizen participation and the improved functioning of the government, and promoting the level of individual autonomy in terms of rights, expression and beliefs, as well as improving associational and organizational rights, will directly deter corruption (Rose-Ackerman, 1999). If a democracy is strong and the political environment is stable, including political rights and civil liberties, this will help to promote transparency in both the private and public sectors (La Porta et al., 1999; Shleifer & Vishny, 1993).

Nevertheless, a property rights-low investment trap causes developing or emerging countries to want to keep a low level of property rights enforcement by overlooking incidences of corruption. The current generations want to seek present benefits when higher enforcement in the future will bring about fewer benefits (Acemoglu, 1995; Acemoglu & Verdier, 2000; Tirole, 1996).

The APEC developing countries have implemented open economic strategies in order to create friendly business regulations and their enforcement for investors. The strategies, promoting a relatively friendly business environment, will ensure the creating of a business environment that is more healthy and friendly for both domestic and foreign stakeholders, resulting in higher scores on the EDBI as well as more transparency and low corruption environments (Mongay & Filipescu, 2012).

Table 9. Fixed-Effect Estimations for the APEC Developing Countries

Fixed Effect Estimations								
Dependent Variable: Corruption Perception Level, (high corruption) 0 and (low corruption) 10								
Variables	< 1 >	< 2 >	< 3 >	< 4 >	< 5 >	< 6 >	< 7 >	< 8 >
Trade Openness	-0.3458 <0.2778>	0.0816 <0.2656>	0.0153 <0.5023>	-0.2328 <0.4406>	0.0474 <0.4503>	0.0411 <0.5099>	-0.4269 <0.4715>	-0.4423 <0.3565>
Trade Freedom	0.0098 <0.0072>	0.0004 <0.0086>	-0.0077 <0.0083>	-0.0014 <0.0071>	-0.0022 <0.0083>	-0.0077 <0.0087>	0.0019 <0.0071>	0.0066 <0.0057>
Financial Freedom	0.0064 <0.0042>	0.0039 <0.0046>	-0.0129 <0.0070>	-0.0067 <0.0088>	-0.0103 <0.0079>	-0.0119 <0.0071>	-0.0133 * <0.0058>	-0.0116 <0.0063>
Inward FDI	2.4296 <4.1363>	2.9589 <3.6001>	0.1218 <2.7089>	2.3251 <2.5922>	2.6307 <2.4833>		0.4084 <2.4201>	2.5218 <2.7162>
Outward FDI					-7.4137 ** <2.5407>			-5.9124 <3.2360>
Total FDI						-1.5308 <1.3730>		-5.9124 <3.2360>
Portfolio Investment	0.0023 <0.0049>	0.0035 <0.0050>	0.0060 <0.0033>	0.0094 * <0.0043>	0.0065 * <0.0034>	0.0055 <0.0032>	0.0083 <0.0059>	0.0088 <0.0063>
Public-Private Partnership	0.8585 <1.8947>	0.4038 <1.7965>	-5.1834 <7.6549>	-7.1354 <6.9396>	-5.5610 <7.5033>	-6.0564 <7.5544>	-12.731 ** <4.8547>	-11.825 * <5.4861>
Government Size	0.0790 <0.0492>	0.0244 <0.0465>	0.0075 <0.0778>	-0.0358 <0.0813>	0.0313 <0.0766>	0.0095 <0.0783>	0.0049 <0.0739>	0.0299 <0.0707>
Government Effectiveness			0.0769 <0.4710>		0.1460 <0.5063>	0.0890 ** <0.4808>	-0.2879 <0.3706>	-0.1862 <0.4141>
Regulatory Quality			0.8880 ** <0.2873>		0.7221 * <0.3327>	0.9304 <0.3145>	1.3409 *** <0.2955>	1.3501 *** <0.2868>
Property Rights			-0.0132 <0.0142>		-0.0013 <0.0171>	-0.0118 <0.0176>	-0.0023 <0.0176>	0.0062 <0.0156>
Freedom Rating			-0.1468 * <0.0763>		-0.1620 * <0.0869>	-0.1475 * <0.0757>	-0.1348 * <0.0721>	-0.1483 * <0.0792>
Ease of Doing Business			0.0113 * <0.0056>		0.0133 * <0.0066>	0.0103 * <0.0052>		
Starting a Business				0.0087 <0.0050>			-0.0046 <0.0069>	-0.0057 <0.0060>
Registering Property				-0.0056 <0.0096>			-0.0171 <0.0143>	-0.0200 <0.0165>
Getting Credit				0.0010 <0.0032>			-0.0030 <0.0043>	-0.0017 <0.0045>
Enforcing Contracts				-0.0165 <0.0259>			-0.0075 <0.0540>	-0.0012 <0.0628>
Resolving Insolvency				0.0114 ** <0.0036>			0.0091 * <0.0045>	0.0084 * <0.0038>
Level of Development		0.2560 <0.1962>	0.2878 * <0.1319>	0.2296 <0.2097>	0.3221 * <0.1224>	0.3076 ** <0.1246>	0.5781 ** <0.1781>	0.6285 *** <0.1558>
Inflation		-0.0008 <0.0058>	-0.0134 <0.0168>	-0.0058 <0.0079>	-0.0182 <0.0150>	-0.0120 <0.0164>	-0.0092 <0.0256>	-0.0132 <0.0117>
Natural Resource Rents		-0.0481 * <0.0228>	-0.0237 <0.0292>	-0.0199 <0.0209>	0.0017 <0.0358>	-0.0201 <0.0302>	-0.0066 <0.0256>	0.0152 <0.0291>
Constant	2.7954 ** <1.0651>	0.6206 <1.5483>	2.5863 <2.6135>	3.6882 <2.0683>	0.7394 <2.2351>	2.3057 <2.6332>	3.4346 <2.6908>	1.8306 <2.7068>
Year Dummy	No	No	No	No	No	No	No	No
Observations	160	158	97	94	94	97	89	87
Number of Countries	9	9	9	9	9	9	9	9
F	5.27 ***	5.13 ***	4.37 ***	4.97 ***	4.36 ***	4.43 ***	4.77 ***	4.78 ***
F Test for fixed effects	61.29 ***	37.23 ***	5.77 ***	14.86 ***	4.41 ***	6.02 ***	4.81 ***	5.13 ***
Heteroskedasticity (Chi2)	427.03 ***	134.68 ***	224.26 ***	24.40 ***	104.42 ***	210.75 ***	11.78	38.94 **
Adjusted R-square	83.42%	84.25%	88.98%	88.15%	89.42%	89.06%	90.71%	91.16%

Note: robust standard errors are in parentheses. The adjusted R-square was calculated from the regression using country dummies. Significant at .01***, at .05**, and at .1*

According to the regression estimation results for the APEC developing countries, in order to effectively mitigate the corruption level, the importance of neoliberalization alone is not sufficient; the development of institutional quality (supported by neoliberalism theory, institutionalism theory, and institutional determinants of corruption theory) should be in place, along with public policy formulation and implementation.

Conclusion and Policy Recommendations

The findings presented in this research exhibit a consistent statistical correlation between neoliberalism (trade liberalization, financial liberalization, and privatization) and corruption across the APEC member countries. The crux of these relationships may be far more complex than simple inductive or deductive explanations, and the complexity and difficulties in comprehensively specifying the unobserved factors in these relationships and potential causalities that may exist in them call for further research. Nevertheless, the statistical relationships found in this research have reflected an underlying causality for the relationships given the varied institutional quality settings, meaning that there exists links between economic liberalization (trade liberalization, financial liberalization and privatization) and corruption.

At the policy level, decision makers should emphasize economic liberalization policies as well as improvement of institutional qualities. The implementation of neoliberal policies should vary according to the diverse institutional settings among the APEC developing and developed countries. For the APEC developing countries, financial liberalization policy, such as improving financial freedom from government sanctions and attracting more FDI inflows, discourages the level of corruption. The presence of institutional quality variables in models also reduces the level of corruption. The impacts of economic liberalization disappear once the institutional quality variables, such as regulatory quality, freedom rating, and ease of doing business, are included. Hence, the APEC developing countries' policymakers should not view economic neoliberal policies as only the means to the end of curbing corruption; rather, the importance of high-quality institutions should be strongly recognized.

The implementation of effective laws and regulations that promote private sector development, that is regulatory quality, could discourage corruption. Insuring political rights, following the democratic electoral process, and enhancing citizens' propensity to participate in the political process, are pathways to promote good governance,

thus reducing corruption. The level of corruption and its main causes vary for every APEC developing country; yet, all sectors in society must take mutual responsibility for fighting corruption.

For the APEC developed countries, the neoliberal policy that was seen empirically to impact corruption was trade openness (the ratio of exports and imports to GDP). The panel data estimations reported a strong robust relationship—that by encouraging the home country’s trade value of goods and services, it is statistically significant that the level of corruption will decrease. Policymakers might consider the comparative advantage of the strategies suggested by David Ricardo (1817)—that both economic and anti-corruption objectives can be achieved. For instance, the United States’ comparative advantage with China is specialization in technology and being labor intensive, while China’s comparative advantage is cheap labor. By specializing and engaging in international trade, both countries gain benefits.

Promoting financial liberalization policy and enhancing government effectiveness play significant roles in curbing corruption in the context of the APEC developed countries. Ensuring high-quality public services and sound policies, pursuing a high level of commitment to fulfilling such policies, supporting banking efficiency while lowering the government’s control over the financial sector, should encourage crucial developmental progresses while lowering the corruption level. According to the statistical evidence, the complicated procedures, burdensome formalities, and abnormal requirements have led to higher levels of corruption. Policymakers should consider reforming such burdensome regulations as well as not leaving room for public officials to commit corruption, and should promote public participation in such reform. Nevertheless, policymakers should carefully consider neoliberal policies and their potential deviating impacts in different contextual settings for effective neoliberal economic policy implementation in their countries.

Limitations and Future Research

There are a number of limitations in this study. One is that a bigger sample size is always more consistent than a smaller one. Though this study assesses both developing and developed countries in the APEC, the robust results of the panel data estimations should be increased along with a greater sample size.

Limitations may also lie in the methodology of this study which emphasize only economic and institutional variables. It is known that there are not only political and economic institutional variables, but also others, such as legal, cultural, and sociological institutional variables, might affect the level of corruption. Different institutional variables, different methodologies, and different techniques should be applied in future studies in order to confirm the reliability and validity of the results in this research.

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Appendix: Variables, Measures, and Sources

Dependent Variable

Control of Corruption Index: This index is determined by expert assessments and opinion surveys, generated by Kaufmann, Kraay, and Mastruzzi. A country having a score of 2.5 means that it is a corruption free country. A country with a score of -2.5 means an extremely corrupt country.

Corruption Perception Index (CPI): This index is determined by expert assessments and opinion surveys from various independent sources suggested by Transparency International. If countries receive a score of 10, it shows that they are very “clean” countries, and a 0 score indicates a highly-corrupt country.

Independent Variables

Dealing with Construction Permits: This index measures time, costs, and the number of procedures to formally build a warehouse as well as the efficiency and quality of building regulations.

Ease of Doing Business Index: This index provides an objective measure of how friendly business environments are in particular countries. This overall index covers 10 different quantitative data and perspectives on the ease of doing business—starting a business, dealing with construction permits, getting electricity, protecting minority investors, registering property, getting credit, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. The World Bank Group has generated these indexes.

Enforcing Contracts: This index measures the related time and costs for resolving commercial disputes through the application of the first instance court, as well as the juridical quality and efficiency of the court system.

Financial Freedom Index: This index measures how banking and financial sectors are regulated in general. The index also measures the independency level from government control and involvement as well as its level of autonomy in supervising and regulating financial institutions. The higher score means higher effectiveness of financial sectors. The Heritage Foundation and the Wall Street Journal have generated this index.

Freedom Rating: This index is a composition of the average rating between political rights and civil liberties indexes. Political rights refer to freedom in the electoral process, political pluralism, citizen participation as well as the functioning of the government.

On the other hand, civil liberties refer to the level of individual autonomy in terms of rights, expression, and beliefs as well as associational and organizational rights. The lowest score is 1, which means that a particular country is considered as “most free.” However, if a particular country receives a score of 7, it means that the country is the least free country. The Freedom House has generated the freedom rating.

Getting Credit: This index measures the efficiency and strength of legal rights and law in providing a favorable environment for lenders and borrowers as well as the transparency for the information.

Getting Electricity: This index records the efficiency of all related time, costs, and procedures in obtaining permanent electricity, as well as the reliability and transparency of the process.

Government Effectiveness Index: The Government Effectiveness Index describes the ability of governments to allocate and distribute public resources equally through the uses of public policy formulation and implementation as well as service quality and creditability regarding policy commitments. It also measures the level of independence from political pressure. The scores range from -2.5 to 2.5. A higher score indicates a higher level of government effectiveness. This index is generated from the work of Kaufmann, Kraay, and Mastruzzi.

Government Size: One of the measurements of government size is the size of government expenditure as a percentage of the GDP. The general government final consumption expenditure is the final value of purchasing goods and services that serve both individual and collective needs, from health and education expenditure to national defense expenditure, while excluding investments and transfer payments. The World Bank has generated this data.

Inflation Rate: This is the Consumer Price Index for the average of acquiring a basket of goods and services anticipated with the annual percentage change for a given base year. The International Monetary Fund and the World Bank has generated this data.

Inward Foreign Direct investment: This is the total of the inward FDI as a percentage of the GDP. It is the capital investment inflows to the home economy, and consist of equity capital, reinvestments of earning and other investment capital. The World Bank has generated this data.

Level of Development: GDP per capita, \ln is the natural log form of the gross domestic product value divided by the size of the entire population. The World Bank has generated this data.

National Resource Rents: This aggregate value is the total natural resource rents gathered by oil rents, natural gas rents, coal rents, mineral rents and forest rents as a percentage of the GDP. The World Bank has generated this data.

Outward Foreign Direct investment: This is the total of the outward FDI as a percentage of the GDP. It is the capital investment outflows from the domestic economy, and consist of equity capital, reinvestment of earnings and other investment capital. The World Bank has generated this data.

Paying Taxes: This index measures the related time, cost, and number of tax payments necessary for a medium-size company to pay all taxes as well as its post-filing processes and tax return time and processes.

Portfolio Investment: This aggregate index covers the change in total values of equity securities and debt securities as a percentage of the GDP compared to the previous year. The World Bank has generated this data.

Property Rights Index: This index measures a country's property rights laws and the effectiveness of the government's enforcement of such laws and protections. The score for each country ranges from 0 and 100, with 100 being the ideal case. The Heritage Foundation and the Wall Street Journal has generated this index.

Protecting Minority Investors: This index indicates how effective the laws and regulations are in protecting minority shareholders from conflicts of interest as well as the accessibility of annual financial disclosures and the company's useful information.

Public Private Partnership (PPP) Investment: This the total dollar-value investment with public-private participation in four major areas: energy, telecommunications, transportations, and water. The figure is as a percentage to the GDP. Any moveable asset or small project is not included. The accounted projects are based on major capital projects, greenfield projects, and divestitures. The investment value is counted when the projects have gone beyond budget approval and have received direct and indirect financial support. The World Bank has generated this data.

Registering Property: This index includes time, costs, and related procedures for the property transaction between buyers and sellers, as well as information, transparency, and accessibility provided by land administration.

Regulatory Quality Index: The Regulatory Quality Index measures the quality of sound policies and the ability of the government regarding policy formulations and implementations that are regulated to protect entrepreneurship and to promote the private sector. The scores range from -2.5 to 2.5. A higher score indicates a higher level of regulatory quality. This index is generated from the work of Kaufmann, Kraay, and Mastruzzi.

Resolving Insolvency: This index measures how efficient the insolvency system is for local business. It includes the recovery rate derived from related time, costs, and outcomes from the insolvency proceedings as well as the strength of the legal practices.

Starting a Business: This index measures the effectiveness in official business startup processes, including related time and costs to complete the process, as well as the paid in minimum capital requirement.

Total Foreign Direct Investment (Inflows and Outflows): This is the total of the inward FDI and outward FDI as a percentage of the GDP. It is the total value of the capital investment inflows into a home economy, and the capital investment outflows from the domestic economy. It consists of equity capital, reinvestment of earnings, and other investment capital. The World Bank has generated this data.

Trade Freedom Index: This index is derived from the degree to which a country's policies and institutions support trade freedom. The highest score of 100 means fewer tariff and non-tariff barriers imposed on trade. The Heritage Foundation and the Wall Street Journal have generated this index.

Trade Openness: This variable is the natural log of the ratio of imports plus exports to the GDP. It is generated by the World Bank.

Trading across Borders: This index measures the related processes and laws of importing and exporting goods at the borders as well as the time and costs.