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The Role of the State in International Trade Theory and Policy: Historical Evidence from South Korea and Brazil

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Since the early 1980s, the economic performance of individual countries has been increasingly dependent on global dynamics. Neoliberal policies, including free trade, have been fostered by the global community for both mature and developing economies, led by the view that free markets constitute the driving force of economic growth and development. Accordingly, the World Trade Organization (WTO), the International Monetary Fund (IMF) and the World Bank (WB) - in addition to the developments within mainstream economic theory - have contributed to portray the state as the carrier of inefficiencies and market distortions, which prevent the unfolding of economic freedom and profitable entrepreneurship. This thesis examines historical evidence in theory, policy and practice to investigate whether limited state intervention is indeed justified. It provides evidence to support the contention that the role of the state should not be abandoned in theory and policy because market forces alone cannot support long term development goals of a country.

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Finally, I would like to especially dedicate this thesis to all the women in my life.

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List of Abbreviations

BoP	Balance of Payments
EP	Export promotion
EPB	Economic Planning Board
EPZ	Export Processing Zones
FDI	Foreign Direct Investment
GATS	General Agreement on Trade in Services
GATT	General Agreement on Trade and Tariffs
GDP	Gross Domestic Product
HCI	Heavy Chemical Industry
IMF	International Monetary Fund
IPR	Intellectual Property Rights
ISI	Import Substitution
ITO	International Trade Organization
LDC	Less Developed Countries
NICs	Newly Industrializing Countries
PPP	Purchasing Power Parity
PWC	Post-Washington Consensus
R&D	Research and Development
S&T	Science and Technology
SME	Small and Medium Enterprises
SMI	Small and Medium Industries
TNCs	Transnational Corporations
TRIMs	Agreement on Trade-Related Investment Measures
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UK	United Kingdom
US	United States of America
WB	World Bank
WC	Washington Consensus
WTO	World Trade Organization

Chapter 1: Introduction

Since the early 1980s, the economic performance of individual countries has been increasingly dependent on global dynamics. Neoliberal policies, including free trade, have been advanced by the global community for both mature and developing economies. This has been predominantly led by the view that free markets constitute the driving force of economic growth and development. Accordingly, the World Trade Organization (WTO), the International Monetary Fund (IMF) and the World Bank (WB) – in addition to the developments within mainstream economic theory – have portrayed the state as the carrier of inefficiencies and market distortions, which prevent the unfolding of economic freedom and profitable entrepreneurship. This thesis examines historical evidence in theory, policy and practice, to investigate whether the reduced role of the state is indeed justified.[1]

Chapter 2 presents an overview of the historical evolution of international institutions, policies and practice to argue that the role of the state has been explained in a reductive manner, which fails to capture the essence of widespread state intervention over the course of the economic development in countries that are industrialized today. In this

[1] Practice refers to what has been done throughout history by countries that are industrialized today.

context, this chapter critically discusses the shift from Keynesianism to the Washington Consensus (WC) as an approach to development. Specifically, it points out the weaknesses of the WC and the onset of post-Washington Consensus (PWC) to claim that there has been little shift in policy prescriptions, especially in the context of development. It also illustrates the dynamics behind the establishment of the WTO, especially by illustrating the role of its predecessors General Agreement on Trade and Tariffs (GATT) and International Trade Organization (ITO). There is strong historical evidence from the development experiences of United States (US), United Kingdom (UK) as well as some of the Newly Industrialized Countries (NICs) to point out that the GATT and WTO had always put forth exactly the opposite of what had worked for developed economies of today. Therefore, this chapter concludes by emphasizing that the WC and the WTO ignore the historical evidence of development and lacks propositions to help poorer countries to catch up. This is largely due to their ardent support for free trade, and the vehement pursuit of minimizing the size and role of the government, based on neoliberal principles.

Chapter 3 demonstrates the theoretical underpinnings of free trade in neoclassical trade theory. First it briefly reviews the theoretical frameworks in the old trade theory through the contributions of the theories of absolute advantage by Smith, and comparative advantage by Ricardo and Heckscher-Ohlin-Samuelson. Then, it discusses their flaws, which make them inadequate and incomplete to understand international trade and development under the current global economy. This chapter then moves on to the new trade theory, which effectively departs from several crucial assumptions of old

trade theory. More importantly, it provides an apt theoretical basis for state intervention in international trade to construct strategic trade policies. However, despite theoretical rationale, the academic discipline by and large follows the recommendations of the old trade theory: smaller role of the government and unfettered trade across borders.

Chapter 4 presents a regional comparison between East Asia and Latin America, with a special focus on South Korea and Brazil. Specifically, it looks at trade and corresponding domestic policies in the two countries from the pre-1960's to the recent years. For both countries, the analysis includes the trade orientation and industrial policy up till the liberalization period after the second oil crisis in 1979, where after the growth of the two countries substantially diverged. It further discusses the underlying factors that led to the markedly different outcomes in the two countries and how the mainstream story has inadequately captured their performances in terms of a largely polarized debate between import substitution (ISI) and export promotion (EP) policies.

Chapter 5 concludes with a policy discussion. In the historical experience of both South Korea and Brazil, the role of the state has been strong and significant. In fact, both countries have carried out similar development strategies, such as a mix of import substitution and export promotion policies together with a focus on heavy industries. Therefore, the thesis argues that the divergence in their growth and development cannot be constricted to justify curtailment of the role of the state. The theoretical advancements coupled with international trade policies advanced by the WTO provide ample evidence for the underlying inconsistencies and weak foundation against state intervention. In addition, the different outcomes of state intervention in Brazil and South Korea do not

provide sufficient evidence that successful state intervention is an exception, and that international trade and development debates should be geared towards minimizing the role of the state. Rather, the development experiences of Brazil and South Korea clearly indicate that the quality and implementation of state intervention has been the main driver of the divergence of growth in the two countries. The two countries, in fact, used similar strategies and have successfully diversified their industrial structure. The concluding chapter also indicates that there is a greater role of the state beyond coordinating trade and domestic development policies, which is to pay attention to some of the hazards of globalization, such as poor labor standards, high inequality, and environmental degradation. In the context of the current global challenges, the state plays an increasingly critical role to ensure sustainable development and an equitable distribution of resources.

Chapter 2: Background, Context and Relevance

2.1 Introduction

This chapter reviews the developments in theory, policy and practice within a historical purview. It demonstrates that standard economic theory presents the role of the state in a reductive manner, which fails to capture the extensive state intervention observed over the course of the economic development in countries that are industrialized today. The first section sheds light on a paradigm shift from Keynesianism to neoliberalism in the 1980's. In this context, this chapter critically discusses the rise of Washington Consensus (WC), as an approach to development. It also points out the weaknesses of the WC and the onset of PWC, which is nonetheless associated with shift in policy prescriptions. The second section illustrates the dynamics behind the establishment of the WTO. The core of the analysis on the institutional development of its predecessors GATT and the ITO is to point out three key ideas. First, the ITO had clauses pertaining to economic development, employment, restrictive business practices, etc. and created space for war-affected countries and developing countries to improve

their balance of payment (BoP) conditions after the Second World War.[2] However, the US did not ratify it because it would have acted against the fast accruing power of major American corporations, who played a key political role to stop US from participating. Second, the lone survivor of the ITO was the chapter on commercial policy, which became the basis of GATT, which advocated for free market principles, trade liberalization and reduction of barriers to trade. Due to lax enforcements of policies, many countries such as some of the NICs thrived during the reign of GATT using activist policies. Third, the WTO actively limits the policy space for developing countries because through various agreements it prohibits policies that currently industrialized countries used in their early phases of industrial development. More importantly, it ignores labor and environmental exploitation, which has been fostered by free trade between rich and poor countries. This chapter concludes by emphasizing that the WC and the WTO ignore historical evidence of development and lacks propositions to help poorer countries catch up due to their commitment to free trade, and the vehement pursuit of minimizing the size and role of the government, based on neoliberal principles. Universal policies should be avoided to allow developing countries to identify and implement domestic policies that align trade policies with their development objectives, for which the state plays a key role.

[2] The ITO was the first concerted action to form an international regulatory system for trade and was initiated by the US in 1945. The negotiations continued for three years till the US Congress revoked US participation in 1948.

2.2 From Keynesianism to Neoliberalism

In the post-World War II era, the dominant theoretical doctrine was Keynesianism, which was then displaced by neoliberalism in the 1980's. The Keynesian doctrine focused on aggregate demand as the driver of income growth; to support economic growth and full employment, under Keynesianism it was believed that monetary and (especially) fiscal policies were critical. Additionally, there was advocacy for labor unions and social protection programs (Palley 2005). Keynes rejected some key assumptions of orthodox economic theory to demonstrate why markets typically fail to generate equilibrium in correspondence of full employment. First, Keynesianism rejected Say's Law, which claims that supply creates its own demand; in this view, the Say's Law overlooks the possibility of a capitalist crisis from production surplus and therefore, excess supply, which in turn, can lead to unemployment (Lapavitsas 2005). Instead, Keynes focused on aggregate demand to counter such a crisis. Second, Keynes also rejected the Quantity Theory of Money, which asserts that the level of prices is determined by the quantity of money. In turn, he suggested that when the market does not clear and the economy is not operating under full employment, as evidenced by the rejection of Say's law, capitalists will hoard money, which can be explained by the theory of liquidity preference (Snowdon & Vane 2005). Third, Keynes also incorporated a time dimension in his theory to claim that economic activity can change based on future expectations of profitability of capitalists (Peterson & Estenson 1996). Following these tenets, Keynes engendered the need for active state intervention to carry out demand-side reforms and reduce unemployment, especially using fiscal and monetary policies

(Lapavitsas 2005). Indeed, the economic boom after World War II in developed economies, known as the Golden Age of Capitalism, coincided with an active role of the government (MacGregor 2005). The Keynesian era pertained to "large growth rates, sustained technological change, an increase in purchasing power and the development of a welfare system (concerning in particular, health and retirement) and low unemployment rates" (Duménil and Lévy 2005, 9, Lapavitsas 2005).

Keynes also argued against Classical prescriptions of free trade, and trade patterns based on differences in climate, natural endowment, etc. and their associated costs (Davidson 2007). He rejected the assumption of immobile factors of production in classical trade theory and pointed out that given the advent of Transnational Corporations (TNCs) and technology transfer across borders, trades patterns trickle down to nominal differences in wage, working conditions and so on.[3] Also, if the capital immobility assumption in the classical trade theory is dropped, under free trade, producers will outsource their production and investments to countries where their costs are minimized. Keynes further argued that free capital mobility in a free trade environment will signal cost minimizing producers to shift production to countries with absolute advantage in low wage workers. Furthermore, Keynes' rejection of Say's Law implies a rejection of the idea that a laissez-faire approach could accrue gains to all trading countries, at least once the implausible assumption of full employment in all the countries is dropped. This

[3] In other words, "Keynes was arguing, and today's facts tend to demonstrate that, given the existence of multinational firms and the ease with which they can transfer technology internationally, any differences in relative costs of production in any particular industry are more likely to reflect national differences in money wages (per same hour of "real" human labor)" (Davidson 2007, 131).

consequently meant that there would be excess global supply as well as unemployment, as in the case of the national economy. Keynes (1933) wrote:

> A considerable degree of international specialization is necessary in a rational world in all cases where it is dictated by wide differences of climate, natural resources, native aptitudes, level of culture and density of population. But over an increasingly wide range of industrial products, and perhaps of agricultural products also, I have become doubtful whether the economic loss of national self-sufficiency is great enough to outweigh the other advantages of gradually bringing the product and the consumer within the ambit of the same national, economic, and financial organization. Experience accumulates to prove that most modern processes of mass production can be performed in most countries and climates with almost equal efficiency. Moreover, with greater wealth, both primary and manufactured products play a smaller relative part in the national economy compared with houses, personal services, and local amenities, which are not equally available for international exchange; with the result that a moderate increase in the real cost of primary and manufactured products consequent on greater national self-sufficiency may cease to be of serious consequence when weighed in the balance against advantages of a different kind. National self-sufficiency, in short, though it costs something, may be becoming a luxury which we can afford, if we happen to want it (182).

Under the observation that capital mobility leads to outsourcing for cheap labor and that in reality full employment conditions are rare, the prescriptions of the theory of comparative advantage will limit production in developed economies to services, nontradeables and, for political reasons, defense (Davidson 2007). Based on the Keynesian approach, the state has an indispensable role to carry out demand side policies targeted at full employment; the alternative would be wages in mature economies being dragged down to levels that would prevail in developing countries with abundant supply of labor. Keynes' focus on the importance of pursuing full employment in the national economy also translated into import substitution as the dominant strategy for

development; the use of tariffs was supported alongside employment and economic planning policies (Eichengreen 1984).

Classical trade theory also claims that BoP deficits can be countered automatically by allowing exchange rate to follow the free market mechanism. However, Keynes argues against this mechanism, even if it corrects the balance of payment conditions, because of its social impact. He contended that allowing the devaluation of the exchange rate can effectively erode the income of the residents, partly due to higher prices of imports. Keynes also argued that following a trade imbalance, expectations of further deterioration would curb net exports and generate further imbalance. In addition, a devaluation strategy *alone* would not work, especially so long as it undermines the income effect on BoP (Cammarosano 2013, Davidson 2007).

The Keynesian era was weakened and in fact, reversed by the era of stagflation in the 1970's and the havoc caused by the oil shocks.[4] This was because the Keynesian framework did not hold in the context of inflation and unemployment rising together.[5] This was the entry point for an attack on Keynesianism and the rise of neoliberalism, which emphasized the importance of free market mechanisms to determine prices and wages, and challenged Keynesian ideas, such as the presence of labor unions and government intervention (Saad-Filho 2005, Palley 2005). The pathway for this paradigm

[4] Historically, even during the Keynesian era, international negotiations for free trade, at least in the manufacturing sector, had started to take place among Western countries. This was led by the US, and this is evident in the international trade policy negotiations under the ITO, discussed in the next section.

[5] Rather, a fall in unemployment was seen to correspond with a higher bargaining power of labor for higher wages, which firms would then translate into higher prices for consumers. Therefore, the stagflation of 1970's contradicted this tradeoff between low unemployment and low inflation and weakened the case for Keynesian policies.

shift was particularly paved by the inability of Keynesian policies to counter the global inflationary shock from the oil crisis.

The neoliberal doctrine identified that there can be market failures that necessitate state intervention, but notably argued that the repercussions of a government failure are far greater. This argument is also bolstered by the theory of second best, which asserts that given multiple prevailing market distortions and imperfections, "intervention to counteract the effects of a market distortion will have ambiguous effects in the presence of other market distortions" (Evans 1991, 50). Furthermore, such arguments are also supported by the contention that governments do not have perfect information, and therefore an "imperfect market solution may be much better than imperfect government intervention" (Evans 1991, 51). Moreover, state intervention is also opposed on the grounds of rent-seeking, which is seen to be an additional cost of state intervention (Bhagwati 1982, Krueger 1974, Shapiro 1994). Finally, neoliberals often advance biased and overemphasized criticisms of the public sector, mostly based on price distortions and inefficiencies (Streeten 1993, Fine 2006 and Saad-Filho 2005). Very few, one of which is Streeten (1993), question why the role of state is outright rejected instead of furthering theoretical contributions, such as the theory of a nonmaximizing state, whereby the state neither maximizes public welfare nor self-interest, but "compromises, attempts to resolve conflicts, manages bargaining between groups, and occasionally leads" (1290).[6]

[6] Others who point out theoretical pitfall underlying the neoliberal paradigm are Stiglitz (1986), Streeten (1993) and Lall (2005).

Unlike Keynesian prescriptions, neoliberal policies advocated for trade liberalization and devaluation of exchange rate, based on the theories of perfect competition and comparative advantage (Saad-Filho 2005). In addition, they supported widespread privatization and deregulation of the market, under the belief that market forces alone can ensure allocative efficiency and the "right" prices. Liberalization was also advised to be carried out in financial markets and capital account to complement domestic savings and investment. Furthermore, in the façade of increasing employment and labor productivity, the paradigm recommended deregulation of the labor market and the curbing of labor unions. Saad-Filho (2005) wrote:

> This combination of policies, regulations and incentives is designed to reduce the economic role of the state. In doing so, it transfers to the (financial) markets the ability to determine the pattern of international specialization and the capacity to determine the pattern of international specialization and the capacity to determine the economic priorities, both inter-temporally (levels of investment and consumption) and inter-sectorally (allocation of investment funds and determination of the composition of output and employment). (114).

Following the rise of neoliberalism and stagflation of the 1970's, the WC became the dominant approach to development in response to the financial troubles of developing countries. Many developing countries were substantially affected by the oil shock and the rising debt crisis. For example, Mexico as well as other Latin American countries, relying on ISI strategies and loans for domestic economic development, faced rising debt services when the US raised interest rates in 1979. The WC was then advanced as a crisis reform package with ten main policies by the WB, IMF and the United States Department of the Treasury (Williamson 1990). Its core prescriptions include deregulation, smaller government, capital mobility, export-led growth and free trade. The Bretton Woods

institutions, the WB and the IMF were at the forefront to advance free market mechanisms and in "the context of growth, the emphasis is on capital shortage as the main constraint" (Van Waeyenberge 2006, 27). The neoliberal policies embedded in the WC were widely accepted by developing countries in debt crisis at that time because financial help from the Bretton Woods institutions were conditional on liberalization and deregulation (Faucher 2018).

The WC has been criticized on several grounds for its inability to foster high growth rates and development in poor countries (Stiglitz 2004, Johnston 2005). Stiglitz (1989) pointed out that the nature of market failures is different in less developed countries than in developed countries, because they are characterized by missing markets and imperfect information, and therefore, can do very little under the WC. Additionally, while neoliberal policies curtailed the welfare state advanced by Keynesianism in developed economies, there are some developing countries where social policies have not even been placed and following the neoliberal propositions further diminished the possibility of the state participating in these areas (Saad-Filho 2005).[7]

Although the prescriptions of the WC were vehemently advocated alongside the neoliberal paradigm, empirical evidence in the 1990's largely attested against the promised gains from trade liberalization (Öniş and Şenses 2005). Neoliberals have tried to explain the development trajectories of NICs to claim that their development can only be attributed to an open and market-led economy and have often used these countries to

[7] There are also many pitfalls in the theoretical basis of the Washington Consensus and the Bretton Woods institutions, but these will be addressed in detail in Chapter 3.

provide empirical support for their claim. However, it is very difficult to overlook the central role of the state in the development process of these countries, which by itself undermined the neoliberal claims. Furthermore, many Latin American and African countries have experienced low rates of growth and deindustrialization under the neoliberal regime (Öniş and Şenses 2005).[8] This was exacerbated by the financial crisis in Asia in 1997 which further showed the limitations of the WC due to "perceived mishandling of the East Asian crisis by the Bretton Woods institutions" (Beeson and Islam 2005, 199). Following these experiences, the WC was replaced by the PWC at the end of the twentieth century.

The post-Washington consensus (PWC):

> shifts the analytical focus away from the neoclassical emphasis on competition and markets, and towards the implications of market failure, the institutional setting of economic activity, and the potential outcomes of differences or changes in institutions… For example, development is no longer simply the process of increasing per capita GDP or consumption levels, as in neoclassical theory. It now… can offer positive guidelines for state intervention, including not only changes to economic policy, but also detailed recommendations for legal and judicial changes (primarily in order to protect property rights and secure the profitability of enterprise), the development of market-friendly civil society institutions, financial reforms beyond the privatization of state-owned banks, anti-corruption programmes, democratic political reforms (not primarily because of concerns with freedom and human rights, but in order to dilute state power and reduce its capacity to influence economic outcomes… (Saad-Filho 2005, 117).

The PWC identified the role of state but did so on narrow considerations of information imperfections and includes cautious and minor shifts from the WC (Fine 2003). For example, while the WC argued against state intervention as opposed to the

[8] Although neoliberal policies may have aggravated their conditions, it is important to note that many of the Latin American and African countries who experienced stagnated growth after the neoliberal regime, have had low economic performances even before the regime.

PWC, the latter introduced only a minor shift. It carefully outlined permissible intervention and instructed exactly what is to be done by the state. The focus was now on correcting market failures and improving institutional setting for a better functioning market, and to incorporate newer aspects into the umbrella of development considerations, such as property rights, and other legal and judicial changes (Saad-Filho 2005). Therefore, the PWC included a supporting role to the state but failed to provide a policy shift that would have satisfied the criticisms and tackled the ineffectiveness of the WC (Fine 2003, Öniş and Şenses 2005). Van Waeyenberge (2006) wrote:

> …compared to the 'rolling back to the state' – a precept of the Washington Consensus – some progress seems to have been made with the post-Washington Consensus, with its stronger recognition of the state for a sound working of the economy. The role of the latter, however, essentially remains confined to the creation of a conducive environment in which private agents steer their interaction in socially desirable directions (now beyond the market and in response to incentives other than just prices). The abiding legacy of the new political economy, with its normative presumptions regarding the public sector, implies a persistent (underlying) bias against direct management of economic resources by the state: the market… remains superior. (37).

Therefore, the focus on market efficiency and trade liberalization are retained from the WC, and the state is advised to regulate financial markets, promote education, reduce poverty, etc. Furthermore, competition is still considered vital and the state is encouraged to compete with the private sector to be more efficient and also debunk the rent-seeking and inefficiency related criticisms of the state that had prevailed under the neoliberal principles in the WC (Öniş and Şenses 2005). Following the lessons from the East Asian miracle, the importance of the state and effective institutions is also emphasized in the PWC to target broader social indicators and income distribution

considerations. However, this shift is incongruent with the neoliberal policy prescriptions in both GATT and WTO, which is discussed in the next section. Additionally, the PWC points out the importance of a public-private cooperation in targeting development objectives, but it fails to point out how it can be achieved (Öniş and Şenses 2005).

Even if we assume the changes from WC to PWC to be radical and major, the support for free trade has indisputably remained unchallenged, even in poor countries. At best, some state intervention is permissible, but strictly along the lines of market failure or to promote institutional effectiveness, without much flexibility and policy space for development (Deraniyagala 2005). The world trading system has also evolved, as discussed in the following section, to incorporate legal, institutional and political considerations through the different agreements by the WTO, but the core proposition remained, that free trade and undeterred global integration is the optimal solution for development.

2.3 ITO, GATT and WTO

The evolution of the institutions that overlook the world trading system has been noteworthy. This section briefly overviews how the various trade arrangements under such institutions have systematically perpetuated global inequality and widening gap between the rich and poor countries. This claim is primarily articulated by demonstrating that these institutions have consistently neglected ambiguous and implausible

assumptions underlying the theoretical basis of trade theory, as well as the development experience of countries that are developed and industrialized today.[9]

The ITO was initially drafted and proposed by the US to promote liberalization of economies after the World War II so that affected countries could rebuild themselves, but the developing countries opposed it on several grounds (Scott 2010). First, global events such as the two World Wars and the Great Depression had proven to greatly destabilize markets in developing countries that rely on export primary commodities. Second, the developing countries under previous colonial rule had faced trade regimes that were forced by colonial rulers to be able to import cheap raw material and foster their own manufacturing industries. In that regard, the export-led growth argument to promote free trade could have only helped countries like the US and the UK to procure raw materials, but not the developing countries. Third, there was skepticism around post-war trade liberalization alongside evidence to indicate that Latin American countries with higher levels of protectionism experienced higher growth rates, in the nineteenth and first half of the twentieth century.

When the ITO Charter started including more countries to participate in its negotiations for the final charter, several concerns were deliberated by the developing countries. The less developed countries asked for infant industry protection primarily through quantitative restrictions, but the US opposed it and only agreed on protection in the form of subsidies to domestic producers. The developing countries pointed out that the US had used such measures in the past, to which the US responded that just because

[9] The implausible assumptions in international trade theories are covered in Chapter 3.

poor economic policies were used in the past, it does not justify using them in the future (Diebold 1952). On the other hand, developing countries requested a complete ban on export subsidies in the Charter, as not all of them could provide it and compete with the industrialized countries of that time. However, export subsidies were not banned because the US insisted to include it in the Charter, so that they could subsidize their agricultural sector (Scott 2010). Furthermore, investment laws, anti-trust laws, etc. that were part of the ITO were opposed by the US under the claim that it would harm their private sector (Wood 1994, Batlu 2000).

Diebold (1952) delineated that the US corporate community did not feel that the Charter went a great length in effectively reducing international trade barriers and might have even strengthened them for some foreign countries. The US corporations also argued that the Charter made way for greater role of government intervention to promote national development over the commitment to this international treaty and that would hurt US private enterprise. The US business community felt that the escape clauses that were laid out in the Charter to support countries with BoP difficulties held little commitment to trade liberalization. For instance, the Charter included an escape clause that no country would be required to alter policies that were targeted at economic development and employment, which meant that they could maintain their import quotas. This meant that the US businesses were not ensured full and indiscriminate market access elsewhere, which was their primary goal for advocating free trade. Furthermore, the business groups were also concerned that in time for recessions in the US, foreign countries would be relieved of some of their obligations in the agreement, making it

harder for the US economy to recover (Wilcox 1949). Due to the addition of many similar clauses for broad development implications and inclusion of considerations of employment, economic activity, economic development and reconstruction, restrictive trade practices and agreements on primary products, the US did not ratify the ITO Charter as the clauses went against the best interests of its business community (Demaret 1996, Diebold 1952).

Chang (2002a) argues that history of capitalism tells a very different story in regard to free trade policies and laissez-faire domestic industrial policy. It is believed that the US and Britain had become economic superpowers using laissez-faire policies and, on this basis, they advocated for the same in the ITO charter. However, this is a crucial misconception because these countries are often used to support current policies under international trade policy establishments in the neoliberal regime. Chang (2002b) outlines the history of protectionist trade policies in Britain, such as the ban on import of woolen cloth to promote domestic manufacturing. In fact, most post-1721 policies were aimed at exporting manufactured goods and importing raw material. Like South Korea, Britain had also used a mix of policies, whereby tariff and duties on import goods used in manufacturing were lowered, export duties on manufactured goods were reduced, tariffs on manufactured import goods were significantly raised, export subsidies were introduced in new sectors and new regulations were introduced for quality control. The brief period of free trade policies following the repeal of the Corn Laws in 1846 is highlighted as historical evidence of laissez-faire policies in Britain. However, the real

historical account focused on fostering technological capabilities behind high protection, both before and after the period of liberalization.[10]

Despite such evidence, ITO failed to be established due to lack of political consensus and only the chapter on commercial policies survived as the General Agreement on Trade and Tariffs (GATT) established in 1947. GATT had omitted the ambitious clauses of the ITO, specifically on restrictive business practices, international commodity agreements and ignored considerations of employment, labor standards and economic development, and other equity and outcome related concerns (Narlikar 2006). GATT ensured process-based equity that safeguarded provisions along the lines of equal treatment for all members but failed to recognize equal outcomes for all members, the way the ITO would have.

The Uruguay Round, spanning from 1986 to 1994, marked the birth of the WTO, which replaced the GATT.[11] DiCaprio, Alisa, and Gallagher (2006) do not highlight trade regulations under GATT because developing countries at that time did not incorporate said regulations in their respective economies due to weak enforcement efforts from

[10] The Corn Laws were tariffs and other import restrictions on food and grain, exercised in Britain from 1815 to 1846 to favor domestic producers in agriculture (Bairoch 1995). Chang (2003) points out that the repeal of the Corn Laws in 1846 was in fact due to the attempt to provide incentives to other countries to remain focused on agriculture rather than industrialization, by enlarging the market for agriculture. Chang (2003) further argues that other industrialized countries have followed a similar path for industrial promotion. Although examples include Germany, France, Switzerland and other small European countries, US has been the most ardent user of protectionist policies to support industrialization before it was a developed economy. Therefore, it is rather ironic that US and Britain have been at the forefront to promote free trade.

[11] The negotiations started in Uruguay in 1986 and included eight rounds of multilateral trade negotiations, ending in 1994 in Marrakech, which led to the creation of the WTO. It also marked the inclusion of developing countries in free trade negotiations as well as the expansion and application of policies from manufacturing to other sectors (Preeg 2012).

GATT. However, they emphasized that many of the industrialized countries of today, such as Hong Kong, Singapore, Taiwan and South Korea, had thrived during the reign of GATT and had exercised policies and strategies that developing countries are banned from doing post-Uruguay Round. This is very crucial to this thesis as the regulations set by the WTO have strong influences on how developing countries today strive, given the stronger capability of the WTO to ensure compliance, as opposed to GATT. The new WTO agreements - namely, Trade Related Investment Measures (TRIMs), Trade Related Aspects of Intellectual Property Rights (TRIPs) and General Agreement to Trade in Services (GATS) - introduce new areas of negotiations in the world trading system and is indispensable to the nature of economic development and growth of the global economy today. However, some aspects of these agreements concurrently also imply an erosion of policy space for developing countries. Development considerations instead need to be included in trade negotiations to expedite the catching up process for poorer countries.

The first trade agreement from the Uruguay Round, which was finalized in 1994, is the Trade Related Investment Measures (Trebilcock 2013). To foster inflow of Foreign Direct Investment (FDI) and eliminate potential hindrances, TRIMs restrict governments from exercising local content requirements and trade balancing requirements, among other similar policies (Hoekman & Mavroidis 2007).[12] Many developing countries struggle to gather the investment and re-investment of their surplus budget to foster

[12] Local content requirements are policies set forth by the national government that ensures local procurement of input goods and services for production processes taking place within national borders. Trade balancing requirements are policies that ensure that imports are funded through export earnings (WTO Glossary).

overall growth in the economy. As a result, the literature and policies advocated by influential international organizations almost always prescribe developing countries to attract FDI and this has indeed been the driving force of economic development in several countries, most notably China (Zhang and Felmingham 2002). FDI is portrayed as an undisputedly good instrument for developing countries because it not only provides inflows of capital investment, but it provides some of the skills and technology of advanced countries through the foreign owned or affiliated establishments.

Many of the countries that are developed today carefully identified which FDI were allowed into their country and evaluated whether their activities would truly improve domestic productive capacities and consequently whether the technology transfer would successfully fuel economic growth. Chang (2008) provide numerous examples of countries who have managed to reap commendable benefits from opening up to FDI, including Taiwan, South Korea, and Singapore – the Asian Tigers (Chang 2008). However, he cautions that FDI in these countries were by no means unregulated. In Taiwan and South Korea, FDI were largely allowed in their Export Processing Zones (EPZ), but with limits on ownership shares and strict policies on how much of the inputs in production were to be obtained locally.[13] Furthermore, both countries regulated FDI inflows strategically and had different policies in place for different industries. For example, they were more liberal in labor-intensive industries, but much more careful

[13] Export processing zones (EPZs) are "areas within developing countries that offer incentives and a barrier-free environment to promote economic growth by attracting foreign investment for export-oriented production" (Papadopoulos and Malhotra 2007, 148).

about more technologically advanced industries. Both countries intervened to make sure they successfully augment their own technological capabilities through FDI in capital-intensive industries by employing restrictions and policies that allowed substantial technological learning and absorption (Chang & Green 2003). Even post-World War II, the UK posed strict local content requirements and FDI inflows from Japan and America were heavily restricted and regulated in order to establish advanced domestic industries (Chang 2008). Therefore, the core problem of TRIMs, and its associate bans on local content requirements and other regulations is self-evident. As Chang (2008) indicates, this agreement lacks the basis of historical foundation, because it goes against the industrialization process and strategies of the countries that are developed today.

Another interesting argument often used to justify the TRIMs agreement is that it does not erode the freedom of choice of the countries involved because they are free to refrain from letting FDI in, and it is only when they do participate that they have to follow these rules (Chang and Green 2003). This fails to address the problem that developing countries are not getting a level playing field as the developed ones of today, and this is widening the gap between rich and the poor on a global scale. Given that countries compete to attract FDI globally, restricting FDI altogether is an incoherent suggestion. Proponents of the TRIMs agreement argue that it protects investors and gives them more certainty and protection when they invest in developing countries, but it certainly does not stand for the protection of cheap labor and other forms of exploitation in poor countries.

The second agreement is the Trade Related Aspects of Intellectual Property Rights, which incentivizes innovation and ideas by ensuring rightful protection (Trebilcock 2013). A WB Review by Finger & Schuler (1999) estimated that the implementation costs of the agreements of the Uruguay Round can add up to the annual development budget of the least developed countries. Of course, the WTO agreements did acknowledge that many of the developing countries did not have the means of implementation and incorporated this into their agreement. For instance, below is one of the articles of the TRIPS agreement:

> In order to facilitate the Implementation of this Agreement, developed country Members shall provide, on request and on mutually agreed terms and conditions, technical and financial cooperation in favor of developing and least-developed country Members. Such cooperation shall include assistance in the preparation of laws and regulations on the protection and Enforcement of intellectual property rights as well as on the prevention of their abuse, and shall include support regarding the establishment or reinforcement of domestic offices and agencies relevant to these matters, including the training of personnel (Finger, 2001, p. 1102).

However, as Finger (2001) aptly points out, the assistance by developed countries in the establishment and process of implementation is not obligatory whereas the commitment to carry it out on the part of the developing countries is binding. Specifically, with regard to TRIPs, Chang (2001) points out how the agreement impedes developing countries to learn and adopt technological capabilities in the manner that was available to advanced countries when they were developing (Chang 2001).

Building technological capabilities is at the core of development today, especially in light of global competition. Similar to FDI and its related policies mentioned in the

previous section, the developed countries of today, who are advocating for strict IPR policies by the WTO, themselves had been subject to lax IPR policies during their period of industrialization. Kumar and Gallagher (2007, 21) delineate this through several examples:

> ...Between 1790 and 1836, as a net importer of technology, the US restricted the issue of patents to its own citizens and residents. Even in 1836, patents fees for foreigners were fixed at ten times the rate for US citizens. Similarly, in Switzerland in the 1880s, industrialists did not want a patent law because they wished to continue to use the inventions of foreign competitors. When Switzerland did eventually adopt a patent law under intense pressure from Germany, it did so with various exclusions and safeguards such as compulsory working and compulsory licensing which enabled the government to enforce production in Switzerland by one means or another, if it so desired.

Cimoli et al. (2009) also resonate aforementioned arguments and agree that some of the most renowned drug multinationals, in the 1800s, came from developing countries, such as Switzerland and Italy, and they could participate in imitative activities and therefore thrive when the global enforcement of IPR was much weaker. However, conditions have "dramatically changed since, with the current scene featuring both TRIPs international agreements and an unexpected novel aggressiveness of US and European companies in their IPR protection even against seemingly marginal infringements" (Cimoli et al., 2009, p. 9).

Additionally, as Cimoli et al. (2009) argue, "most often the accumulation of technological and managerial capabilities has historically occurred within domestic firms rather than within subsidiaries of foreign owned firms" (p.34). The authors explained that this has been the more common scenario because even though foreign owned firms are an

important source of investment, they do not ensure technology transfer given that most of their Research and Development (R&D) activities take place at home and that is where they retain their tacit knowledge. In light of strict IPR laws and the low technological capabilities of some of the developing countries today, this makes it difficult for them to foster economic growth through technology in their respective economies. Last, Finger (2001) asserts that local problems in developing countries should be identified and taken care of with customized plans, which are arguably heterogenous among all the countries in the developing category and is not commanded by a one size fits all kind of an agreement of the WTO.

The third agreement is the GATS, and it pertains to liberalization of trade in services and encourages it by ensuring local market access for foreign firms and a level playing field for them in the local economy. The GATS is the expansion of WTO negotiations beyond the trade in products to the trade in services, which has been an important consideration in recent international trade agreements. Wade (2003) sheds light on the breadth of sectors that falls under the umbrella of services, such as health, tourism, sanitation and even rubbish collection and other informal sectors and also classifies as an investment agreement because it includes the provision of services by foreign firms on domestic grounds. He further wrote:

> Foreign investment in services accounts for roughly half of world foreign direct investment, and developing countries have been assured that complying with GATS commitments will boost FDI inflows…The articles of the agreement are a list of ways in which governments should not interfere in the market, should not place barriers in the way of service trade between countries; and should not regulate the behaviour of multinational corporations operating in their country (p. 628).

The two most important aspects of GATS are the "most favored nation" principle, which requires governments to treat all WTO members equally, and national treatment which requires governments to treat foreign owned companies and subsidiaries like domestic ones (Wade 2003). This, consistent with the impact of TRIMs and TRIPs, makes the role of governments imperative to comply with WTO rules even if it goes against national interests, but at the same time restricts their capacity to regulate foreign owned or affiliated firms. The liberalization of services, in particular, is a cause of concern for developing countries for three primary reasons.

First, they might not benefit from liberalization given their limited competitiveness in providing services despite low wages and other available cost cutting methods (Whalley 2004). Therefore, while developed countries may gain better access to markets in the developing countries, the opposite, although desired, will not happen unless developing countries produce higher quality and advanced services, which is clearly unlikely.

Second, the size and form of adjustments required by domestic economies if they participate in service liberalization is another cause of concern and it entails the possibility of majority foreign ownership and labor market adjustments or both (Whalley, 2004). This is because a widespread access and ownership of foreign entities in local markets will potentially lead to unlimited access to confidential information, such as bank records, to foreign companies. Alternatively, it may introduce organizational changes that do not align to relevant cultural values or even displace local employees. Furthermore, given that the uneven competitiveness in particular service industries between developed

and developing countries, providing access to the former, in developing countries is also likely to drive out local companies (Francois and Hoekman 2010).

Last, it is important to recognize that liberalization of services is significantly different from the liberalization of physical products and consequently it cannot be measured using the commonplace tools of "ad valorem tariff-like restrictions" (Whalley, 2004, 1226). This is additionally tricky because it is particularly difficult to come to conclusions pertinent to relative factor endowments and comparative advantage when it comes to the broad range of activities that services entail. This also automatically sets the precedent for questioning the validity of many studies which model trade in services in the same way as trade in goods and conclude that global welfare increases due to liberalization in services. Due to considerable issues in modelling trade in services and the consequent wide range of results that different studies construe, services should be modelled differently and doing so does confer different results and implications for trade liberalization in services that it would do for goods (Bhattarai & Whalley 1998).

Therefore, at least two key points are evident. Gains from liberalization of trade in services are not definite and remains to be studied well. Under current implications of the agreements under GATS, there is very little government interventions and policies can do to make sure that potential gains are maximized. Francois et al. (2003) even claim that GATS confuses migration and FDI with international trade of services. This is evident in bleak attempts in the literature, at quantifying services like that of foreign service providers in local markets, local consumers in foreign markets, etc., just like goods. This circumvents the distinction between trade in goods and services that is requisite in

studying trade and globalization. The methodological issues embedded in the assessment of the impact of GATS and the liberalization of trade in services is, therefore, very problematic considering how conclusive the literature seems to be about the gains from it (Greg 2002, Mattoo, Aaditya, Subramanian, and Rathindran 1999). However, the more important source of contention is that the agreement needs to be revisited to allow for government intervention. The room for policy will also tackle the two aforementioned problems: differences in capabilities between countries involved in some form of service trade as well as the lack of control of domestic governments over foreign ownership and operations in the local economy.

2.4 Conclusion

Almost all the developed countries today have exercised rigorous policies and regulations throughout their development trajectories and dictated their own terms in their participation in trade liberalization. The three agreements discussed in this chapter are relevant to the markets and technologies of advanced countries, but effectively erode the policy space of countries that are now trying to catch up. Chang & Green (2003) provide a further contention that even:

> if strictly regulating foreign investment is likely to bring about 'wrong' outcomes - which we do not accept - countries should be allowed 'the right to be wrong', if one is a consistent free-market economist who wants to preserve freedom of choice and who does not believe in top-down intervention (39).

This aptly resonates the argument that developing countries in the current global economy and their respective governments should be allowed the right to exercise

strategies that ensures comparable gains from participating in TRIMs, TRIPs and GATS. The purpose of this thesis is neither to bash free trade under the neoliberal paradigm, nor to cast doubt on the importance of the new realms of globalization that each of these agreements intend to tackle. Rather, the objective of this thesis is to point out that WTO agreements are limiting the policy space for developing countries to be able to construct tailored development objectives to imitate technology, attract and utilize FDI for development, all of which the developed countries of today have done in the past. Chapter 3 elaborates on the theoretical counterpart underlying neoliberal principles, WC, PWC, and the WTO, and will specifically focus on the lack of advancement in identifying the role of the state in development. Despite well-established critique of the theory of free trade, mainstream theory consistently rejects the case for state intervention.

Chapter 3: Evolution of International Trade Theory: A Developmentalist Critique

3.1 Introduction

This chapter presents the theoretical underpinnings of free trade in neoclassical trade theory. First it briefly reviews the theoretical frameworks in the old trade theory through the contributions of the theories of absolute advantage by Smith, and comparative advantage by Ricardo and Heckscher-Ohlin-Samuelson. Then, it discusses their flaws, which make them inadequate and incomplete to understand international trade and development under the current global economy. This chapter then moves on to the new trade theory (NTT), which effectively departs from several crucial assumptions of old trade theory. More importantly, it provides an apt theoretical basis for state intervention in international trade to construct strategic trade policies. Last, the chapter also presents a brief overview of the role of the state in structuralist thinking and development economics, specifically through the works of Rosenstein-Rodan, Gunnar Myrdal and Albert Hirschman. The conclusive section emphasizes that despite theoretical rationale and advancements, the academic discipline by and large follows the

recommendations of the old trade theory: smaller role of the government and unfettered trade across borders.

3.2 Old Trade Theory

This section demonstrates the theoretical framework for three primary models in the old trade theory: absolute advantage by Smith, comparative advantage by Ricardo and the Heckscher-Ohlin-Samuelson model.

3.2.1 Adam Smith: Absolute Advantage and Universal Opulence

Adam Smith was the father of laissez-faire economics, which contends that self-interested individuals under intense competition, will lead the market to generate an efficient equilibrium, in turn supporting productivity growth and wealth accumulation. In the *Wealth of Nations*, Smith (1776) asserts that the division of labor begets the "greatest improvement in the productive powers of labor" (3). He then delineates this through different examples throughout the first chapter of his first book, to be applied both at the workhouse level and the economy level.[14] The former is best explained through his pin factory example and the latter, through his woolen coat example. In both cases, he asserts

[14] Workhouse level: 'those employed in every different branch of the work … collected into the same workhouse, and placed at once under the view of the spectator', like the pin-factory, which is an example of a 'trifling manufacture' (Smith 1776, I.i.2 and I.i.3).
Economy level: 'every different branch of the work employs so great a number of workmen, that it is impossible to collect them all into the same workhouse.' 'We can seldom see more, at one time, than those employed in one single branch.' Consequently, 'the division [of labour in such manufactures] is not near so obvious, and has accordingly been much less observed', e.g., the production of a woolen coat, which is an example of a 'great manufacture' (Smith 1776,*W* I.i.2 and I.i.11).

that when one is involved in a fairly narrow part of the broader method of production, one is likely to discover more efficient ways to do it, to the extent that it facilitates the advent of the inventions of new machineries and mechanical methods to replace these simplified operations. Whether at the level of the factory or the economy, Smith is largely hinting at the division of production operations such that wherever applied, this division would significantly augment the productive powers of labor utilized, and create an abundance, or "universal opulence which extends itself to the lowest ranks of the people" (Smith 1887, 11). This idea is typically illustrated through case of a pin factory, where the number of pins produced increases to the thousands a day when each worker is involved in different simplified operations as opposed to producing hardly one pin a day when each of them were to make the whole pin by themselves.[15]

Smith further developed this theory in the context of global production and contended that countries should specialize in the production of goods that they are capable of producing more efficiently than other countries (Appleyard & Field 2006). Trade on the basis of the theory of absolute advantage is driven by comparing the

[15] Smith had also introduced the seeds of the labor theory of value, which is especially compelling given the exploitation of labor under neoliberalism. As Bharadwaj (1979) delineates, Smith had talked about both use value and exchanged value through labor commanded and labor embodied ideas which Classical and Neoclassical economists have used in their formulations in different ways. Smith had proposed labor embodied considerations for the early and rude state of society. Then, he had moved on to propose the formulation in value through the adding up theory that essentially added the cost of production of a commodity through the additional of costs of all the components that are involved in the production process. Then Classical economists, like Ricardo, acknowledged use value as an intrinsic quality of the commodities while focusing primarily on the exchange value and tied the labor theory of value to the existing cost of production formulation such as to claim that the value of a commodity lay in the quantity of labor embodied or required to produce it, including the intermediary tools to make the commodity itself. This formulation faced considerable backlash due to measurement problems that stemmed from the need of a numeraire but later, Sraffa's work on developing a standard commodity was seen as the revival of the labor theory of value.

absolute labor required per unit such that each country would produce and export goods that require less resources and import goods that can be produced more efficiently abroad.

To demonstrate the concept of absolute advantage, consider two countries, A and B, producing two commodities, C and D. Country A can produce 4 units of C and 1 unit of D with the same amount of labor and country B can produce 1.5 units of C and 1 unit of D with the same resources. This delineates that the opportunity cost of producing 1 unit of D is 4 units of C in country A and 1.5 units of C in country B. Therefore, country A produces commodity C with the least amount of resources and therefore, more efficiently, and country B produces commodity D which underlies its absolute advantage (Appleyard & Field, 2006).

Similar to the innovative benefits at the firm level, international specialization in the production of goods would also lead to technological progress in the long run as countries continuously strive to improve their production methods. These improvements would follow further reductions in production costs and contribute to increase production that would in turn expand available goods for consumption. A rise in productivity and greater production resulting from the division of production operations is an important basis for the support of free trade, because, opening borders for trade will deliver the market needed for the augmented production from the division of production operations (Appleyard & Field 2006).

3.2.2 David Ricardo and the Theory of Comparative Advantage

Ricardo (1817) further developed on the theory of international trade by extending Smith's idea into the concept of comparative advantage. Ricardo asserts that countries can exchange goods even beyond the constraints of the theory of absolute advantage, which implies that trade patterns should adhere strictly to comparing absolute value of labor required per unit (Irwin 2015). The basis of the Ricardian model does not stand on the absolute cost, but rather the opportunity costs of production, and prescribes countries to produce the good that it has a relative productive advantage in. Consistent with Smith's argument, the end goal of international trade is to increase efficiency in the use of resources, and in turn raising global consumption (Patnaik 2005). However, the theory of comparative advantage recommends that even if a country is more efficient in producing all the goods than its rival country, it should not produce all of them. Rather, it should evaluate to see which good it can produce *most* efficiently amongst all the goods and allocate its resources to product that good.

The following example illustrates the idea of comparative advantage. Assume two countries, A and B, can produce two commodities, C and D; country A has higher labor requirements than country B for both commodities.[16] Assume country A needs 100 units of labor to produce 1 unit of C, while country B needs 90 units. Additionally, country A needs 120 units of labor to produce 1 unit of D, whereas it takes country B only 80 units. Clearly country A is at an absolute disadvantage in the production of both

[16] Labor requirement is the number of laborers needed to produce one unit of a specific good and is used in this model to standardize the comparison of production structure of the two countries.

commodities because it requires more laborers to produce a unit of both C and D. The Ricardian model looks at the relative efficiency for both countries. Country A has a smaller disadvantage in producing commodity C and country B is relatively more efficient in producing commodity D than C.[17] Moreover, using the same amount of resources, country A receives 9/8 units of commodity D instead of 5/6 units if it produces it at home, and country B receives 6/5 units of commodity C instead of 8/9 units, if it produces it at home. On the contrary, it is also evident that each country specializes by lowering its opportunity cost. Country A produces commodity C as the opportunity cost is 5/6 units of commodity D, and therefore refrains from producing commodity D which has higher opportunity costs, i.e., 6/5 units of commodity C, and the same logic applies to country B. In either scenario, both countries gain from opening up their markets and specializing in their production activities according to their comparative advantage (Appleyard & Field 2016, 29).

The Ricardian model stands on several important assumptions that are required to validate the model. First, the factors of production are perfectly mobile between alternate uses within the same country, and this also effectively implies that the prices of factors of production are the same across different industries under constant returns to scale. However, the factors of production are perfectly immobile across countries, such that these factors of production do not move to whichever country can use it most efficiently. All commodities, their efficiencies and opportunity costs are expressed strictly in terms

[17] This gives both countries to trade, and this generates an equilibrium price in international markets, such that the two countries have the incentive to specialize based on their comparative advantage

of labor content and any other inputs used in the production process is also subsequently measured in terms of the labor embodied in its production. Additionally, the level of technology is fixed for respective countries while the levels may be different between them. There are no internal or external externalities to trade between countries. Last, the model assumes full employment and other typical assumptions of perfectly competitive markets, such as: all consumers and producers are price-takers and have full information about the market, there is free entry and exit in the market (Appleyard & Field 2016). Beyond correcting market failures, the government also plays a particularly important role in reducing trade barriers through national policies to ensure unfettered exchange of goods across borders. To summarize, the Ricardian model was built on differences in technology, i.e., different production methods in each country such that each method uses different units of labor to produce the same commodity.

3.2.3 Heckscher-Ohlin Model and Stolper-Samuelson Theorem

The Heckscher-Ohlin model was developed in the early twentieth century to address the role of differences in factors endowments across countries on international trade. It stands on the assumption that the level of technology is identical in trading countries and each country has fixed level of factor endowments in any of the two factors of production in the simplified model: between land, labor and capital. The Heckscher-Ohlin model delineates the underlying inter-country differences that motivate trade through variations in relative factor endowments between the two countries, in either

labor or capital, the two factors of production in the model that will be used in this example.

If country A is endowed with more capital, strictly in quantitative terms, this means that country A is capital-abundant, and if country B is endowed with labor, it is labor-abundant. One important point to note here is that when the relative factor endowment between the two countries are compared, if one is capital-abundant, the other has to be labor-abundant because abundance is measured in relative terms. This is also evident when we look at differences in factor prices to determine relative factor endowments in each country. If country A is capital-abundant relative to country B, then by the law of supply, it can be demonstrated that the rental price of capital in country A is lower relative to that of country B. Similarly, if country B is labor abundant relative to country A, wages in country B are lower relative to country A. Furthermore, the two goods produced in the model have varying factor intensities, such that the good is either capital intensive, i.e., it uses more capital in their production method than labor, or it is labor-intensive, i.e., it uses more labor than capital. The conclusion of the model states that each country will export the commodity that is intensive in the factor of production that is abundant in that economy and import the product that uses less of the factor of product that is scarce, or more expensive relative to the other country. Unlike the Ricardian model, there is no full specialization in the H-O model and both countries produce both products even after they open up their economies for trade.

The conclusions of the H-O model are strengthened by two assumptions (Jones 2002). First, as mentioned above, the technology is identical in both countries, such that

the production methods for each commodity is the same, regardless of the country of origin. This assumption strengthens the conclusion of this model because decisions to import or export a commodity is purely dependent on the relative factor endowments in each country and are not volatile based on changing technological capabilities in either country or changing technologies used up in the production processes, either of which could potentially flip or even equalize the relative factor endowments and hinder the incentives to trade. The second crucial assumption in the model is that the tastes and preferences are the same in both countries in the model. This assumption is imperative to the conclusion of the model because tastes and preferences drive the final demand for the commodities in the model, which influences the factor prices just as much as supply-side concept of the relative abundance of the factors of production. Based on equal and constant demand in both countries, the relative factor endowments will only be determined by the relative abundance of the factor of production and the factor prices. Therefore, the conclusion of the model will not be inconsistent because the demand for the commodities will not differ or change in either country, and therefore will not disturb the trade prescriptions of the model (Appleyard & Field 2016).

The Heckscher-Ohlin model is complemented by an important theorem, namely, the factor equalization theorem developed by Stolper and Samuelson. Assume country A is capital-abundant and trade pattern supported by the Heckscher-Ohlin theorem suggest that country A should produce the good that uses more capital than labor, i.e., the good that is capital-intensive. In this model, the supply of the inputs, labor and capital, is fixed in both countries. Moreover, when country A specializes in the capital-intensive good,

this poses an upward pressure on the factor price of capital in the country. This is because the higher demand for capital to produce more of the capital-intensive good is not readily met by excess supply because producing less of the labor-intensive product frees up units of labor, and not capital. Moreover, the demand for labor will drop concurrently as the country benefits from importing the good that uses more of its relatively scarce factor of production, i.e., the labor-intensive good. Consequently, the price of the scarce factor of production, labor in this case, will also drop and therefore country A will see a decline in wage rates.[18] A similar adjustment happens in country B, but in this case, there is an upward pressure on the price of the relatively abundant factor of production, labor, and the reverse with the price of capital, or rent. Given the assumptions of perfect competition, this adjustment leads to the conclusion of the theorem. As the factor prices adjust and equalize between the two trading countries, the cost of production of both goods, and effectively the price of the final goods, will also equalize across the countries (Ethier 1995). This indeed supports the conclusion of the Heckscher-Ohlin Theorem that countries will export the product that uses intensively the abundant factor of production and the factor equalization theorem further strengthens this conclusion because it supports the assumption that factors of production are immobile internationally and effectively dismantles the motivation for these factors to migrate to find higher wages or returns to capital (Ethier 1995, Appleyard & Field 2016, 132).

[18] Wages and other types of factor compensation are considered in real terms, and not in nominal terms. Therefore, the theorem tells us how the purchasing power of factors of production changes in the context of international trade.

This theorem allows the model to evaluate the distributive impact of trade, and effectively delineate that there are both, winners and losers from trade. Following the factor price equalization theorem, it is evident that the price of the abundant factor of production in a country increases while that of the scarce factor decreases. Consequently, the nominal income associated with either factors of production will also change depending on the direction of change in price. However, the purchasing power is not determined solely by nominal income, but also by the prices of the final goods.

To demonstrate, workers in the labor-abundant country are better off when they consume cheap imports of the capital-intensive good with their higher wages. However, it is trickier when these workers consume the labor-intensive good that their country produces, and this is because while their wages increase, the price of the abundant factor of production, labor, also increases, and nothing definite can be said without concrete evidence about the magnitude of change in either wages or the price of the labor-intensive product. Based on the assumptions of the equilibrium conditions in a competitive factor market, it can be affirmed that the wage rate in a labor-abundant country and consequently the real income of the workers in said country, will rise relatively more than the price of the labor-intensive product that is exported. This is conditional on the fact that marginal product of labor, through which wage is determined in perfectly competitive markets, is rising more than the price of the good. Alternatively, the real income of the owners of the scarce factor of production, i.e., capital, in the labor-abundant country decreases because the rent on capital decreases, but in equilibrium, it falls at a relatively lower rate than the price of imported capital-intensive product. This

follows to show that the real income of capital owners decreases. Therefore, following the assumption of full employment in both countries, opening the market to trade implies that the real income of the owners of the abundant factor of production increases while the real income of the owners of the scarce factor of production decreases. This proposition is crucial to understand why, despite the benefits of greater production and consumption, some stakeholders may oppose unfettered free trade (Appleyard & Field 2016). Since the real income of the abundant factor increases and the real income of the scarce factor decreases, ideally, income can be redistributed to the scarce factor owners and the owners of the abundant factor would still gain from free trade. However, such redistribution is implausible in the free market. This sets the precedent for the role of the government in introducing redistributive programs so that nobody is worse off after trade (Ethier 1995). Lee and Vivarelli (2006) also point out that this theorem was particularly deemed applicable to explain how free trade can help reduce income inequality within developing countries. The contention is that as the demand for low skilled labor, the comparative advantage in most developing countries, increases, and concurrently with the income from labor, it has implications for an equal income distribution in developing countries.

3.3 Old Trade Theory and A Development Perspective

This section tackles each of the three frameworks of Smith, Ricardo and Heckscher-Ohlin, discussed above and provides a critical analysis in terms of

development considerations. It also points out several implausible assumptions in each of them, to evaluate their applicability in the real world.

3.3.1 Does Smith's "Universal Opulence" Truly Apply to the Least Developed Countries?

Assume that nations that practice division of labor in their own economies also reap benefits from participation, as claimed by the theory of absolute advantage. Some of these countries may also have the technology and resources to employ learning by doing, as advocated by Smith. Therefore, they enjoy the opulence from the division of production operations and are simultaneously active in the advancement of their production methods, tools, etc. In such an event, what are the chances that some of the less developed countries will experience such great universal opulence simply by grace of the invisible hand? If we simply consider the aspect of technological progress, learning by doing, etc., maybe not very much or not at least as much. This thesis will delineate this stance through two considerations; one where the least developed countries are part of the division of production operations by supplying primary goods and raw materials, and one where they are part of it only in low technology industries.

The reliance on exports of food and raw materials by the developing countries had confined them into activities "offering less scope for technological progress, internal and … withheld from the course of their economic history a central factor of dynamic radiation which has revolutionized society in the industrialized countries" (Singer 1950, 477). The participation of underdeveloped countries in such lower value operations surely

fits into the whole absolute advantage picture delineated above because they do have the market for the final products to cater to, and surely contribute to the universal opulence through the global division of production operations. However, their market access, coupled with their capacities, are only limited to those of primary goods or raw materials. Also, they can only go so far when it comes to the advancement and improvement of their tools and methods of production when it comes to supplying raw materials, especially when it is further limited by non-renewable resources, for example. Smith has explicitly hinted in his first chapter that what one produces matters, and that the agricultural sector offers less opportunities than the manufacturing one.

There are also less developed countries who are part of the division of production operations chain with low technology industries. They could possibly be trapped in low income generating activities that some of the structuralist development economists feared. Supplying low-tech inputs to the global division of operations may not be as advantageous as being in a higher position of a value chain. Additionally, if the underdeveloped countries participate in the division of production operations and this translates to importing the capacities, such as machineries, tools, etc., to do so, the end result can be considerably harmful to the BoP. History delineates that "no matter how free their markets, the Third World originally had no state of the art innovations" and free markets "simply meant deadly competition from experienced foreign firms, before local enterprises had enough oxygen to compete at international prices" and even in the most "labor intensive manufacturing industries, low wages were no match for the know-how of advanced countries" because without "an industrial policy to overwrite free trade theory,

these countries were doomed to export products with lowest skills" (Amsden 2008, 96-97).

Therefore, when the underdeveloped countries are equipped to reap the benefits with a stronger domestic market, manufactures to trade, technological advances and so on, they can indeed contribute to division of production operations as well as enjoy its universal opulence, but not so much when they are in the low-technology parts of the chain and definitely not when they are only supplying primary goods, according to their absolute advantage.[19] The concept of absolute advantage has been brought back in heterodox economics to understand trade in a competitive advantage framework. The framework effectively shows that trade based on absolute costs will ultimately help the technologically advanced developed economies and induce developing countries into falling back in the ladder to provide cheap labor and raw materials (Shaikh 2003).

3.3.2 What does the Theory of Comparative Advantage Mean for Developing Countries?

The theory of comparative advantage has several questionable assumptions that make it difficult for it to be applicable to the real world (Fletcher 2010). The first problematic assumption is that of perfect mobility of factors of production between industries to readily take on activities that are prescribed by the law of comparative advantage (Prasch 1969). This assumption is far-fetched because even the basic factors of

[19] The arguments in this section, against trade based on absolute advantage, are also applicable to the theory of comparative advantage.

production that are used in the model, land, labor and capital cannot effortlessly be shifted over to other production activities. For instance, laborers belonging to a specific industry cannot readily move to another without proper training and relocation subsidies. Additionally, in developing countries, if existing industries are wiped out by imports because the law of comparative advantage deems it beneficial to import the respective product while exporting a different product that offers a lower opportunity cost, there is a strong possibility that the outflow of workers from the dying industry will be absorbed in the informal sector. This is problematic on many fronts because it leads to misconstrued statistics of unemployment, specifically to delineate the gains or losses to the labor market from trade liberalization. Also, the transfer of a large number of workers into the informal sector will indefinitely take a toll on their standard of living and overall well-being. Moreover, workers themselves may also have a number of limitations that can potentially impede a smooth mobility from one industry to another. One, the new industry may require workers to accrue skills that are beyond their existing capabilities. Second, workers may be close to their retirement age, in which case, they just do not find it feasible to retrain in new trades and they may trickle to the unemployed or discouraged worker group in the economy. Third, workers may be geographically bound for a wide range of social and cultural reasons and therefore be unable to relocate to other industries and jobs. Each of these issues of worker immobility has high economic costs if the potential of human capital is not realized elsewhere, for any of the aforementioned reasons (Fletcher 2010, 107)

Second, the theory of comparative advantage assumes that the factors of production are immobile across borders (Fletcher 2010, Schumacher 2013). This is an important assumption to support the stance of the theory itself because if it fails to hold, which is does in the current international setting, the gains of trade to all participating countries is nullified (Ruffin 2002). To elaborate, when capital is mobile, and its usage is based on the evaluation of lowest opportunity costs in various uses, it may turn out that production is most profitable in another country. In essence, another country may have the favorable conditions for the best utilization of the capital resources in the production of all the goods in question and therefore have an absolute advantage in producing all the goods. There will indefinitely be an overall gain in the global economy from augmented production using the most efficient method and resources. However, the gain to all trading countries in the theory of comparative advantage no longer holds. Moreover, this is exactly what has happened in the evolution of the global production system and it is the basis of exploitation of cheap labor, environmental degradation and other negative effects of globalization.

Furthermore, the theory of comparative advantage does not presume full specialization between trading countries but does assume that both countries produce both goods. However, this assumption is improbable in the real world. For instance, goods that are very typical to its climatic conditions, such as tropical, cannot be produced in a country with temperate climate (Patnaik 2005). Similarly, developed and developing countries have different production structures and for trade to be mutually benefit according to the law of comparative advantage, *comparable* cost and production frontiers

need to exist in the first place. Additionally, the supply of primary commodities and the its processing is also not distinguished in the theory of comparative advantage. Again, this disables a *comparable* transformation frontier between two trading countries unless both countries produce the raw material which is to be processed (Patnaik 2005). To illustrate, in the famous wool-wine example in the Ricardian model, Portugal could produce both wool and grapes, and therefore produce both cloth and wine. However, England could only produce wool and thereby, only produce cloth. Therefore, the conclusions of the model based on the congruency between production and transformation structures is fallacious.

By far the most concerning pitfall of Ricardo's comparative advantage lies in its static, short-term gains that focuses on productive efficiency that is characteristic of different economies in the current period but overlooks both the means and the need to improve on the productive capacity of the factors of production for long term benefits. This is evident in Ricardo's own example, where England has a comparative advantage in textile which has generated technological advancements in improving the production method of textile as well as other related industries such as locomotives and steamships. This was motivated by opportunities to improve productivity and technological capacity across the economy because advancements in each of these industries would help the other improve its productivity margin (Fletcher 2010, 113). However, on the other hand, Portugal, who has a comparative advantage in producing wine had used the same tools and mechanism to produce it over decades and centuries, because it simply did not

provide the same avenues for improvements to the overall productivity and technological capabilities of the economy, as the textile manufacturing industry did in England.

Additionally, the production of wine was also bounded by a land constraint (Patnaik 2005). If the farfetched assumption of full employment is ignored, it is evident that Britain can both boost its manufacturing output, access foreign market for it and increase its consumption bundle by importing wine. However, in Portugal, the output is confined to its land endowment, there are displaced workers from the cloth industry who are now unemployed and cannot be absorbed by the wine industry due to prohibited expansion (Patnaik 2005). In reality, this was a huge setback to the Portuguese economy because the influx of cheap English textile wiped out its existing textile industry and locked it in a low productive activity with little possibility of dynamic gains and linkages (Fletcher 2010, 114). This acts against both the implausible assumption of full employment and that trade is always balanced between exchanging countries (Prasch 1969). This is representative of the exact pitfall that the theory of comparative advantage poses for developing countries even today because it encourages them to trade according to their static comparative advantage and may potentially lock them in an activity that has little avenue to increase productivity and perpetually incapacitate them from catching up to the richer countries.

3.3.3 The H-O-S Model and Economic Development

The Heckscher-Ohlin model stands entirely on the assumption that tastes and preferences in trading countries, i.e., the demand side, is fixed for both countries (Blecker 2005). This is despite the theoretical thrust that consumer preferences can influence the prices for factors as well as final goods (Sen 2005). From a developmentalist perspective, Nurske (1958) has written that the demand for export products of less developed countries are "much less than in proportion to the production and incomes of the advanced countries" (245). At the time that he wrote, there was inadequate expansion in the demand for exports from the less developed countries from the industrial ones, and therefore, there was negligible growth induced by trade. Nurske (1958) shows that only "10% of the total are exports of the less developed countries to each other, even though the more than a hundred countries in this group contain two thirds of the total population" (246) because they cannot afford to trade with each other due to low purchasing power and income. Nurske (1958) questions whether a country can sustain "*continued* further growth"(253) by relying solely on trade, especially when the demand for export products is "generally inelastic with respect to price" and "shows only a sluggish rate of increase in total volume" (253). Rather, he wrote that "the diversity and hence complementarity of consumers' wants, shows how a number of industries advancing simultaneously can create markets for each other's products" (254). In the case of Latin America, Prebisch (1962) argues that exports for primary commodities grow much slower compared to imports of industrial products, for similar growth in income between advanced and developing countries. This is due to the differences in the income elasticity of demand for

the exports of the primary commodities produced by Latin American countries against the income elasticity of demand of the imports to Latin America of the industrial products of advanced economies. The Heckscher-Ohlin model therefore, fails to address that less developed countries should generate a diversified demand in their own economy by fostering diversified industries and enjoying the fruits of higher economic output and activity, for development.

Second, the basis of the theorem of factor price equalization fails to recognize that there are many factors that influence factor prices in countries, as well as commodity prices. Moreover, the conceptualization of capital is also debatable because the model does not incorporate produced means of capital and therefore, heterogeneity of capital and its associated variable returns as well as prices are not captured. This is fundamental to model international trade of goods, and Steedman (1979) shows that when the model does incorporate this heterogeneity, the conclusions of the equalization theorem no longer hold. Once again, the model fails to incorporate the effect of uneven terms of trade between industrial countries and developing countries that export primary commodities by superficially postulating that the real incomes will equalize.

To illustrate, since underdeveloped countries are dependent on for productivity in agriculture and primary production, Singer (1950) contends that their improvements in the standard of living is less than that of industrialized countries that rely on manufacturing, which engenders “growing points for increased technical knowledge, urban education, the dynamism and resilience that goes with urban civilization” (476). The underdeveloped countries are at a disadvantageous position for reasons the

industrialized countries are at an advantage: "the falling long-term trend of prices of primary products in terms of manufactures" (Singer 1950, 479). Moreover, technological progress induces higher demand for manufactured products through rise in incomes, which in turn does not have a significant effect on food and raw materials because the demand for these are not very receptive to changes in income.[20] The Stolper-Samuelson theorem exacerbates this problem because it posits that less developed countries should trade according to their factor endowment, which is labor. Ironically, the theorem itself partly explains why it is detrimental to development because it already states that the owners of the scarce factor of production, which is mostly capital for less developed countries, will lose out from foreign competition. And without specializing and developing industries in manufacturing, the income inequality between rich and poor countries will widen due to terms of trade.

Finally, another assumption in the model that limits development considerations is that of equal and fixed level of technology and a related one is that of zero externalities. This is a common criticism of both classical and neoclassical trade theories of comparative advantage, especially from a developmentalist perspective because technological progress is closely tied to economic growth and development, both

[20] There has been considerable criticism of the terms of trade hypothesis, especially based on statistical evaluation of the claims and critique of the measurement methods used (Baldwin 1955, Ellsworth 1956). Critics argued that the time span (marked by the depression in 1930s) caused biased results, and moreover, could be a Britain-specific experience, and should not be generalized to other industrialized countries (Sarkar 1986). Some also argue that due to the differences in the valuation of exports and imports, and the concurrent decline in transportation costs, the statistical results have shown a favorable term of trade for manufactured goods (Hadass & Jeffrey 2003). While these criticisms carry considerable weight, the main idea underlying the term of trade should still be revisited today. This is because, in the current context of global production operations, developing countries as suppliers of raw materials, for instance, inarguably face deteriorating terms of trade from being lower in the value chain.

theoretically and empirically. However, the static model does not posit any considerations of growth through technology or the expansion of output (Steedman 1979). Positive externalities through technological and knowledge spillovers are the key drivers for widespread innovation and technological progress. Developmentalists, like Singer mentioned above, recognized this as a problem for trade through development because specializing according to factor endowments was becoming a threat for the less developed countries who were endowed with labor, which had lower positive externality across the industry and economy, relative to manufacturing. Additionally, the model cannot accommodate environmental considerations either, and strictly assume that externalities are "evenly dispersed so that the model 'works' in a manner that is consistent with the assumption that all costs, including pollution damage, are borne by the actual producers of commodities with their explicit knowledge and consent" (Prasch 1969, 40).

3.4 New Trade Theory

The inability of old trade theory to explain global inequality and uneven development has led to the advent of regional models, some of which pose fundamentally different outcomes from foreign trade (Darrity & Davis 2005). Finlay (1984) asserts, "I use the term "North-South" model to refer to any model in which there is some basic asymmetry related to the stage of development between the two regions" (222). Here, it is important to note that Northern and Southern economies will differ in both macroeconomic construction as well as microeconomic features such as returns to scale

and elasticities of demand (Darrity & Davis 2005). These models are particularly an attempt to revive an integrated vision of trade, growth and development that is absent in neoclassical theories. However, the role of state intervention is largely overlooked and Darrity & Davis (2005) further question:

> If we believe these processes operate and perpetuate international inequality, precisely how do we reverse them? Via industrial policy, South-South trade, South-South finance, autarky? Rarely does the formal literature on North-South trade and growth answer the question of how the world should be changed (154).

While many other models with both minor and major ramifications have been put forth since the advent of the theory of comparative advantage and the Heckscher-Ohlin Model, the NTT gained prominence since the 1980's and replaced three contentious assumptions in the former models, that of perfect competition, constant returns to scale, and homogenous goods. The NTT aimed to overcome some of the widespread discontents with former models of international trade, and more importantly, cater to the complexities of trade in the real world. One of these complexities presented itself as a sizeable increase in intra-industry trade and differentiated products (Jones and Neary 1984). This coincided with popularity of the concept that increasing returns to scale can also motivate trade through specialization.[21] While theorists tried very hard to retain the assumption of perfect competition, Krugman (1987) writes that increasing returns will inevitably lead to imperfect competition unless the economies of scale are realized strictly external to firms.

[21] Ethier 1995, Chapter 2 gives an adequate explanation for increasing returns to scale as a basis for trade, independent of comparative advantage.

Krugman (1987) developed a key model in new trade theory (Appleyard & Field 2016, 182). In the simplified version of this model, labor is the only factor of production and it varies with the level of output due to internal, firm-level economies of scale. The second characteristic of this model is that of monopolistic competition in the market, where some of the propositions of perfect competition, such as zero profits, large number of firms and free entry and exit from the market, are carried forward. Unlike a homogenous good in the perfectly competitive market, the market now has different firms producing differentiated versions of the same good. The sources of these differentiations are numerous and can come from output variations from brand, quality, style, etc., that creates some perception of distinction between products that provide the same basic function or usage for consumers.

Applying these characteristics to a two-country two-firm international trade situation, the model assumes identical, tastes and preferences (demand functions), technology and factors of production. When the two countries, A and B, open their markets to trade in differentiated products, each firm now has access to a larger market, which is inherently beneficial because the firms can enjoy economies of scale from expanding their production. On the other hand, consumers in say, country A, have both products in their consumption bundle and with a fixed level of output for both firms, the per capita consumption of each product will decrease because consumers now spread out their consumption over both available goods. However, the Krugman model delineates that the decline in per capita consumption is smaller than the expansion of consumption in the new market. The overall consumption for the product of said firm increases and

due to economies of scale, the firm can reduce its unit costs and thereby the price. As the model utilizes the price-wage ratio which decreases due to trade, it is reciprocally evident that wage-price ratio has increased, and this effectively means that the real income of the workers has risen, and this happens in both countries by the same mechanism. The conclusion of the model supports trade on the basis that consumers have access to both foreign and local products and enjoy both variety and reduced prices. Moreover, workers in both countries enjoy a rise in real income and firms enjoy the fruits of economies of scale from an expansion of output (Appleyard & Field 2016).

While the market structure of monopolistic competition is considered to be inferior to perfectly competitive one, Krugman (1987) argues that one of the implications of the model is that larger markets can rectify some of the distortions that would stem from imperfect competition in a closed economy. Krugman (1981) uses a two-region model to delineate that given external economies of scale, one region takes lead in the production and export of manufactures, and consequently displaces and stunts the growth of industrial sectors in the other region. The story in the model assumes that external economies of scale exist only in the manufacturing sector and not the agricultural sector and therefore, the region producing more manufactured products and thereby accumulating more capital stock, will also earn higher profits and grow faster relative to the agriculture producing one (Krugman 1981). The new trade theory shares the typical view that trade openness is usually good but admits that trade liberalization is not always optimal. Therefore, “the focus shifts to identifying particular conditions under which trade can produce real gains and act as an engine of growth” (Shaikh 2003). This model,

although debatable on its own rights, at least surpasses the Heckscher-Ohlin model in incorporating variable external economies of scale in different activities and the possibility of the advent of global inequality from trade.[22]

3.4.1 The Roles of the Government under New Trade Theory

The new trade theory dismantled the early neoclassical assumptions of perfect competition, absence of economies of scale and homogenous products, which made it remarkably more relevant and applicable to the real world (Sen 2005). International trade theories have come a long way to incorporate the intricacies of trade in the real world. Theoretically, the new trade theory has made a huge leap in also prescribing ways for development through public intervention.

Krugman (1987) identifies two key government interventions which can increase welfare, and these interventions are labelled as strategic trade policy. The first suggests that countries can employ trade tools and policies, such that their industries can earn higher returns in the international market and increase national income. By virtue of imperfect competition in the model, monopolistic or supernormal profits are not unusual, and given government support through export subsidies, import restrictions and other tools that can prove to be detrimental to foreign competitors, domestic firms can drive out competition and enjoy higher shares of the global market. The policies do not even have to be as aggressive, and can also include support to the firm itself, in areas such as R&D.

[22] Martin and Sunley (1996) provide an extensive critique of the new trade model to point out some of its limitations.

The main contention here is that government intervention to promote certain firms can raise national welfare by securing some of the proceeds that would otherwise go to competing countries. The case for government intervention also lies in promoting industries that appropriate high positive externalities. This means governments should target industries that induce very high positive externalities in the economy, such as knowledge and technology spillovers. While these spillovers cannot be modelled in conventional models, they have important ramifications in the economy which helps associated industries and firms to develop in the national economy (Krugman 1987).

Although the space for state intervention provided in the new trade theory is commendable, it is merely the “question of handling particular instances in which free trade fails to perform as it should” (Shaikh 2003). Fine and Deraniyagala (2001) contend that the “models involved in the new trade theory, even with a few factors, are extremely complicated in terms of their outcomes - potentially generating multiple equilibria and complex patterns of adjustment to or around them" (11). The authors further argue that the theory provides "few unambiguous conclusions" (4). More importantly, the theoretical developments are rejected on political economy arguments, primarily, rent seeking, and a general consensus the government is incapable of successful selective intervention, which is why strategic trade policy did not translate into an actual trade policy shift away from free trade.

3.5 The Role of the State and Standard Theory: A Developmentalist View

Developmentalists have long argued for public intervention to counter uneven development. Myrdal 1(956) introduced the idea of cumulative causation which stated that poor countries face a downward spiral because the "inequality of opportunities has contributed to preserving a low 'quality' of their factors of production and a low 'effectiveness' of their productive efforts, and this has hampered their economic development" (51). Myrdal (1956) talks about the backwash effects of trade which comprise of the imbalanced terms of trade with the rich countries at an advantage at the expense and exploitation of the poorer ones (53). In such scenario, Myrdal (1956) contends that poor countries should "increase productivity, incomes and living standards in the larger agricultural subsistence sectors, so as to raise the supply price of labour, and in manufacturing industry" (53). He criticizes the free market system and contends:

> It should be clear…that, if an underdeveloped country really succeeds in starting and sustaining by its policy interferences an upward cumulative process of economic development, this will provide more and not less space for what private enterprise such a country possesses or is able to foster. And the central planning will constantly have to aim at breaking the rigidities, which are the mark of underdevelopment, and to seek to establish greater flexibility in the entire economic and social fabric (82).

Myrdal (1956) evidently urges for serious state planning to promote "national integration toward greater social mobility and regional economic equality" for "rapid and sustained economic growth in the country as a whole" (83). State intervention is to be carefully planned and implemented to foster a "cumulative process of economic development" that is upward and not reliant on "things to take their natural course" (Myrdal 1956, 87). This approach to development is notably different form static

equilibrium framework in neoclassical theory because it provides a dynamic upshot of the development process (Ho, 2018).

Rosenstein-Rodan (1943) also calls for state intervention to carry out structural reforms for internally depressed areas because similar to Myrdal, he is not convinced that countries with lower levels of development can rely on the free market mechanism for economic advancement or recovery from the obstruction caused by exporting agrarian products with lower terms of trade. He contends that the primary goals for the governments in these countries should be to provide productive employment for the "agrarian excess population" (207) and build domestic markets which will establish multifold benefits for economic development. The goals should be actualized along the lines of a large-scaled planned industrialization of a market of complementary goods so that there is market for each other, and the advent of new employment opportunities will raise the purchasing power of the people to enjoy a better domestic market and the interconnected processes can feed into each other (Rosenstein-Rodan 1943). Rosenstein-Rodan (1943) further argues that the state has an eminent role to play in the process of industrialization to appropriate external economies of scale, which cannot be done through the free market mechanism. His arguments are not limited to the internal economies of scale of the firm but primarily rely on external economies between industries. To illustrate, the advent of production of electric power can generate spillovers in the economy such that it paves the way for the initiation of an electrical equipment industry. However, this process of complementary industrialization cannot happen with an invisible force but requires heavy-handed intervention for several reasons. First,

individual entrepreneurs face imperfect information and knowledge and consequently, considerable risk in participating in the market. Therefore, private enterprises cannot be expected to promote investments which "are profitable in terms of 'social marginal net product' but do not appear profitable in terms of 'private marginal net product"(Rosenstein-Rodan, 206). Second, private enterprises do not have the incentives to train labor, or even carry out other structural reforms, to cater to a range of complementary industries because they are simply not equipped to envision the broader development goals of the whole economy. The argument for a planned and complementary industrialization process is the central focus of Hirschman (1958) also, who further accentuates the role of the government to coordinate this process such that existing industries can strike forward and backward linkages to promote related activities. Rodan (1943) and Hirschman (1958) both contend that this is improbable in the development of these countries, without state intervention.

3.6 Conclusion

Despite theoretical justifications for state intervention from both developmentalist perspectives and the new trade theory, neoclassicals support undeterred free trade. Many still argue that selective intervention is a hindrance to industrial development, while other moderate arguments only deem it irrelevant (Moreira, 1995). Chang (2003) divides neoclassical disapproval for state intervention into two strands. The first is the creation of allocative efficiencies, which is a weak one because it can be countered on several grounds. Chang (2003) writes that, "there is no theoretical reason for a more liberalized

economy to achieve higher allocative efficiency unless price liberalization is total…,and there is no theoretical reason why an economy with greater allocative efficiencies should grow faster"(47). Therefore, the second argument has gained more popularity and it stands on the grounds that government is inherently inefficient due to rent-seeking. However, it is rather weak to presume that rent-seeking is strictly related to trade and protectionist policies.

Chang (2003) further argues that the fundamental proposition in neoliberal political economy to shun state intervention, that markets are or can be "depoliticized"(51), is flawed. This is because the market itself can very well be argued to be a political construct and this can be delineated through several examples. First, "the establishment and distribution of property rights and other entitlements that define the "endowments" possessed by market participants, which neoliberal economists take as given, is a highly political exercise" (Chang 2003, 51).[23] Second, virtually all prices are politically determined. For instance, wages and interest rates, two of the most important prices in the economy, are subject to various regulations and controls and further supports the stance that neither product nor factor markets can be entirely depoliticized.

The new trade theory, justifications for state intervention as well as the weaknesses of neoclassical disapproval for state intervention, are all rather inconsistent with what is prescribed through policies and trade regimes in the real world today. Trade

[23] More "recent struggles regarding rights in areas such as the environment, equal treatments across sexes or ethnicities, and consumer protection are reminders that the political struggles surrounding the establishment, sustenance and modification of the rights-obligations structures underlying markets will never end" (Chang 2003, 51).

liberalization is prescribed to developing countries, based on a neoclassical model of free trade despite theoretical developments based on its pitfall. The same benefits of augmented consumption and universal opulence are promised, despite decades of debate and debunking of the implausible assumptions these are based on. Sen (2005) aptly points out that:

> …industrialized countries of today, conveniently prescribe free trade for development but for their home economies, however, the prevalence of unemployment and low growth are taken seriously, and a remedy is sought through strategic trade of the NTT variant. Such arguments permeate the policy moves of the advanced countries, not only at the level of inter-governmental trade deals, but through multilateral trading institutions such as the WTO where these nations often reign supreme (1023).

The overview of the evolution of trade theory in this section and its critical analysis is aimed at presenting a very simple argument. The global trading system is a complex and it is characterized by asymmetries and heterogeneity in factors of production, levels of technology and development within trading partners, and virtually every other contributing aspect. In this regard, in order to put the best foot forward (internationally), countries need to recognize its strengths and weaknesses and exercise comprehensive and integrated policies to steer their nation towards economic advancement. Given the strong forces of advanced nations as well as international trade regulations that are wholeheartedly devoted to limit the policy space of developing countries, it is becoming exceedingly difficult for developing countries to do so.

Chapter 4: Trade Orientation, Economic Development and the State: The Cases of South Korea & Brazil

4.1 Introduction

In the latter half of the twentieth century, many developing countries actively directed their economic efforts towards catching up to the advanced industrialized countries by growing beyond their reliance on production and export promotion of primary products (Stallings 1998). These efforts ranged from protectionist policies to providing incentives to advance domestic technological capabilities. Amongst the developing countries, many Latin American and East Asian countries stood out in their strides towards industrial and technological advancement (Lin & Jingyuan 1989). However, towards the end of the century, East Asia persistently projected strong and positive growth, whereas Latin America stagnated into what was "characterized by falling per capita income along with high deficits and inflation rates" (Stallings 1998, 53). It is important to understand the factors that contributed to the exceptional growth of Asian countries and the underperformance of Latin American countries, in order to draw lessons for the future (Naya et. al. 1989).

The term "newly industrializing countries" (NICs) was coined in the 1950's for a group of Latin American countries, such as Brazil, Argentina, Mexico and Venezuela, on the basis of their industrial progress and high per capita incomes. At that time, these countries were particularly promising and were expected to achieve long-term economic growth and success. The overtaking of Asian NICs as well as the concurrent stagnation in the Latin American countries set the precedent for a worthwhile comparative study. It has been argued in the economic literature that the Asian success has largely due to greater emphasis on the market, private entrepreneurship, macroeconomic stability and outward-looking trade policies. On the other hand, Latin America had faced declining terms of trade and low-income elasticity of demand for its primary commodities during its outward-orientation phase before the Great Depression in the 1930's. This prompted for a shift to inward-oriented policies in Latin America and the region has thereafter been heavily criticized for its protectionist policies (Prebisch 1962).

The economic growth of the two regions have been evaluated through distinct viewpoints and consequently, both interpretations and development policy prescriptions have also been different for each region. In two prominent WB reports on the regions, *East Asian Miracle: Economic Growth and Public Policy* and the *Crisis and Reform in Latin America: From Despair to Hope*, some of these distinctions are evident, even though both reports pertain to neoclassical thinking (Edwards 1995, Birdsall et.al. 1993, Hosono 1998). First, in both cases an outward-orientation through exports has been lauded in these reports, but it had taken the form of export promotion in East Asia and import liberalization in Latin America. This is because it is convenient to discuss the East

Asian success in terms of outward-looking strategies without dwelling on the protectionist or industrial policies used in practice, and even easier to denounce the failure of Latin American countries on inward-looking strategies. Second, the relevance of effective institutions has been more heavily commended in East Asia, especially a more efficient bureaucracy to complement the market economy. On the other hand, privatization and deregulation have been associated positively with development in Latin America. Hosono (1998) aptly articulates how neoclassical interpretations largely rely on selective evidence to provide uncontested support for free trade. This is relevant to the contentions of this thesis, which is that neoclassicals recommend that state intervention should be eliminated altogether, without any middle ground consideration or recommendation of how to improve such intervention to align with development.

While studying these regions provide a broader frame of reference, it is just as important to bear in mind that countries within each region are not generalizable (Naya et. al. 1989). This chapter studies South Korea and Brazil, and both countries share important similarities as well as differences (Saavedra-Rivano, 1998). They have both achieved a diversified industrial structure accompanied by rapid economic growth, with the help of heavy state intervention, an important part of which has been periods of military regime. On the other hand, an important difference is their initial factor endowments and comparative advantage which had been land and natural resources for Brazil, and labor for South Korea, at least with respect to the post-war period studied in this paper. Both countries had started their post-war industrialization trajectory in the 1950's and their initial conditions based on the impact of the war had been quite diverse.

Brazil and South Korea have both been exemplary performers in the process of industrialization, but Lim 1989 aptly states:

> The question that arises is, what happened to each country? Both are highly indebted, with relatively sophisticated industrial bases. And in both countries, governments have intervened to control credit allocation in investment and imports. Why and how has Korea continued to increase exports of manufactured goods, service its debt, and grow quickly with little inflation, whereas Brazil has experienced a well-publicized debt-service moratorium, rapid inflation, and faltering growth? (93).

The answer to these questions is multifaceted and this chapter delineates the intertwined policies implemented in the two countries that ultimately drove the divergence between these economies.[24] The timeframe chosen in this study also has a particular significance, as even among different policies put forward by the state, both countries have been close competitors in economic growth rates. Additionally, the second oil shock in 1979 and the divergent performance in tackling the debt crisis by South Korea and Brazil set the stage for the evaluation of the quality of state intervention in these economies (Sridharan 1996, Evans 1995, Lin & Jingyuan 1989).[25] The contention of this study is that there is a crucial commonality in both countries, wherein industrial and technological capabilities, in whichever scale, has largely been fostered through state intervention.

[24] Figure 5 depicts the trade orientation, state policies and economic development by time period in both Brazil and South Korea.

[25] This divergence is evident in Figure 1 that includes GDP per capita, with constant purchasing power parity (PPP).

4.2 South Korea

4.2.1 Pre-1960s

The miraculous growth of South Korea at the end of the twentieth century owes lineage to the Japanese colonial influence from 1905 to 1945, which differed remarkably from European colonialism elsewhere. Due to geographical proximity and similarities in racial and cultural traits, the Japanese were directly invested in developing Korea into an industrialized economy, which would later be part of an "expanded Japan" (Kohli 2004, 32).[26] The Japanese advanced several state-led reforms that were primarily informed by the success in their own domestic economy and transformed Korea into a manufacturing base from a predominantly "corrupt and ineffective agrarian bureaucracy" (Kohli 2004, 27). To clarify, like other colonial powers, Japan did carry out economically oppressive strategies to maintain agricultural production in Korea and restrict industrialization. However, in the wake of the Great Depression, the Japanese found it in their best interests to "create a protected, high-growth economy on an empire-wide scale" and exercise import substitution strategies within this empire (Kohli 2004, 42).

The oppressive forces and hard-and-fast policies during the Japanese rule were vigorously directed at economic development; building a competent bureaucracy was one of the key agents to carry out such plans.[27] Due to its own shortage of agricultural production, especially rice, the Japanese stimulated the agricultural sector of Korea

[26] Hereinafter, South Korea refers to the country after independence and separation from North Korea, and Korea refers to the country before the independence and separation.

[27] For example, since the Japanese had to pay for any governmental deficits, the Korean subsidiary government and bureaucracy was under constant pressure to increase cost efficiency and effectiveness and that eradicated much of the corruption and incompetence that was present before (Kohli 2004).

though subsidies, and land reforms, especially in the better suited southern half of the country, while the northern half was preferred for industrial activities (Kohli 2004).

Furthermore, the government incentivized big businesses and conglomerates in Japan to expand in Korea and boosted medium-and large manufacturing firms in Korea through diverse investment drives by the public Industrial Bank. The colonial power meticulously regulated and disciplined the industrialization process in South Korea. For example, the Japanese even participated in the relocation of workers from the labor-abundant south to the growing industries in the north. Also, they encouraged large firms and monopolies and enforced restrictive business practices from very early on, especially through high taxes on monopoly profits and incentives to reinvest (Kohli 1994).

South Korea lost most of the industrial base generated by Japanese imperialism to North Korea in the Korean War and this wreaked havoc at the industrialization fostered under the imperial rule. The reign of Syngman Rhee in South Korea, from 1953 to 1960, promoted ISI strategies but generally focused more on maintaining political power than advancing economic development (Kohli 1994, Cole & Lyman 1971). Manufacturing in South Korea had dwindled from pre-war levels and increased imports were funded by foreign aid. Moreover, Japan's economic strategy to protect the empire through trade within meant that the market for exports were heavily disrupted from the withdrawal of Japan.

While many Korean entrepreneurs retained their businesses, many of the Japanese ones from previous colonial rule were now available and this created illicit activities between some elites and the authorities to gain ownership, and indeed many of the these

were sold at less than bargain prices by the government to gain political approval (Kohli 2004). Moreira (1995) writes that government orientation, intent and desire for political survival led further to: "selective allocation of aid funds and materials…,privileged access to cheap loans…, [and] non-competitive award of government and US military contracts for reconstruction services" (35).

Therefore, the set of policies forwarded under the regime in the post-war era up to 1960's was largely uncoordinated and aimed at reconstruction of the economy contingent on foreign aid rather than domestic development. South Korea's light industry was heavily protected but the protection itself was poorly structured and failed to ensure high performance for the most part, except for efforts to unravel skill shortage by promoting education (Moreira 1995). The administration failed to maintain the export performance observed under the colonial rule, and economic growth was neglected in the façade of reconstruction and BoP adjustments. At the end of the regime, South Korea was poorer than many sub-Saharan African countries, let alone countries like Argentina and Mexico, which were much richer (Rodrik 1995).

Neoclassicals argue that the 1960's was a period of heightened corruption and rent-seeking attributable to the ISI strategies. Corruption, however, stemmed from activities unrelated to ISI policies such as "bargain price acquisition of former Japanese properties, non-competitive award of government and US military contracts for reconstruction services", etc. (Moreira 1995, 35). The only notable corrupt activity that was actually related to ISI strategies is "noncompetitive allocation of import quotas and licenses" (Moreira 1995, 35).

4.2.2 "Neutral" Outward Oriented Strategy: 1960 – 1972

Following the highly inefficient and rather stunted growth patterns of the previous regime, the military government took over in 1960 and restored the process of industrialization in South Korea. This was primarily attributed an outward-oriented trade strategy (Moreira 1995). However, Rodrik (1995) delineates the policy mix of export promotion and import substitution during this era. Exporters were exempted from taxes on commodity, business activity as well as income. In addition, they were incentivized through cash grants, and import licenses for automatic imports of raw materials and intermediate goods (Rodrik 1995). Wages were contained through the prohibition of labor unions, which further increased the profitability of exports (Stern et. al. 1995). Moreira 1995 writes:

> On exports, the emphasis was on increasing credit and tax incentives. The preferential real rate on export credits turned clearly negative… and the types and volume of preferential loans for export increased significantly. In addition, the government aiming at mitigating the perverse effect of duty-free inputs on intermediate goods producers, gave them access to export incentives through local letters of credit. As for tax incentives, accelerated depreciation was granted to exporters in 1966 and in the early 1970's, two duty-free export zones were set up (39)

The import strategies transitioned from a positive list, i.e., a list comprising of goods and their associated import conditions, during the beginning of the era to a negative list comprising only of items that are banned to enter (Rodrik 1995). It was only after the improved balance of payment conditions that the government felt confident about relaxing import restrictions and lowering tariff rates. This relaxation was only

achieved in 1967, after which the "neutral" (Moreira 1995, 42) outward-oriented strategy was established in its (neoclassical) true sense.

Another force in the economy steered by the military government was entrepreneurship, and this was done in two key ways. First, under the Japanese colonial rule, manufacturing industries were restricted which instead induced small household businesses in Korea. Moreover, the Japanese themselves had helped build larger capital-intensive industries later on in Korea. This was part of substantial efforts by the Japanese to improve the domestic market in Korea so that Japan could trade within its empire and reduce reliance elsewhere. Second, after the Korean war, under the regime of Rhee, the majority of the successful businesses owned by Japanese or North Koreans were sold at unbelievably meager prices to attain political approbation. This entrepreneurial groundwork was then utilized by the government to promote big businesses to exploit economies of scale, and economies of scope (Amsden 1989). Economies of scope acquired greater relevance following the commitment to industrial diversification stated by the Korean government.[28] The concept of economies of scope can be delineated through an example pertaining to wool and mutton:

> In this case, once it is decided to raise sheep, it is generally less costly to use the same sheep to provide both products rather than to raise two sets of sheep, one group of which solely provides mutton while the other group solely provides wool. Even though fibers and meat are not normally considered to be related products in other circumstances (e.g., cotton versus beef), the shared factor, sheep, does confer an economy of scope on the joint production of wool and mutton. This economy of scope exists even when there are constant unit costs in all stages of production (such as shearing, butchering and raising sheep) so that scale economies are lacking (Bailey 1982, 1026).

[28] On the other hand, economies of scale are the reduction in costs from a larger scale of production (Chamberlin 1948)

Horizontal diversification was thus a distinct characteristic of these Korean large businesses. This meant that each business had a wide range of fairly unrelated products in disparate sectors; in turn, technology, capital, and other resources were relatively mobile between subsidiaries (Kim & Kim 1997).

The big businesses had another distinct feature, which was that of commendable coordination within the different business activities under one company. This was achieved through a central team of skilled workers in managerial and other high-level positions, in charge of supervising the operations (Sherer & Ross 1990). Unlike the collusive approach used by the government in the former regime, the public-private partnership for these big businesses were "formal and institutionalized," which fostered an accountable and cooperative relationship between the two parties and consequently made it easier for the government to implement its development plans in the product markets (Kim & Kim 1997, 111). The state created a sound environment for businesses and directed development towards targeted industries, and the conglomerates focused their investing capabilities and entrepreneurship skills along those lines. This strategy was crucial to the fast-paced growth of industries in consequent time periods, which would not have been achieved through the traditional small-and-medium enterprises (SMEs) However, these SMEs were not neglected but also steered by the state to participate in activities that would support the conglomerates (Kim & Kim 1997).

The partnership delineated above stemmed from a very important leverage that the government had over foreign capital. The government avoided FDI which would leave decision-making power to foreign ownership, especially due to nationalistic

sentiment that was widespread in the economy under years of colonialism and a war with North Korea (Haggard 2004, Moreira 1995). In contrast, the government pursued foreign loan capital, which gave the country substantial autonomy over its operations and dissemination. The state was actively involved in the distribution and procurement of these loans, which can be broadly categorized into two types: public (given to the state) and commercial (given to private enterprises). The public loans were steered by the state towards industries that were neglected by the private sect: infrastructure and state-owned enterprises. However, the government was equally involved in commercial loans:

> [D]ue to the state's determination to control foreign capital and due to the relative inexperience of the private sector, the EPB [Economic Planning Board] was active in procuring and distributing commercial loans as well. The government provided government guaranteed repayment in 90 percent of all commercial loans. Forty percent of commercial loans between 1959 and 1968 had government guaranteed repayment and 50 percent had state owned local bank – guaranteed repayment. In only 10 percent of commercial loans were the private recipients responsible for repayment. Without this government backing, it would have been impossible for South Korean companies to receive any foreign commercial loans, and the distribution of commercial loans strongly suggests the government's control of their distribution process. Between 1959 and 1979, about 45 percent of all commercial loans were invested in six target industries designated by the state for promotion and growth. These included iron and steel, nonferrous metal, machinery, shipbuilding, electrical appliances and electronics, and petrochemicals (Kim & Kim 1997, 110)

The aforementioned controls on foreign capital loans intensified following the nationalization of banks in 1961, which gave the government unprecedented authority over loanable funds (Moreira 1995). These public banks offered loans to private enterprises at very low interests, given they were operating in sectors that the government favored. Therefore, through both of the above policies, the government had a clear list of target industries and used these tools relentlessly to achieve them by forcing capital into

the economy and almost compelling capital accumulation through incentives and risk-minimization on the part of private enterprises (Haggard 2004, Moreira 1995).

Last, but not the least, state intervention in South Korea in foreign policy, product market as well as financial market was also accompanied by a renewed interest in skill formation through promotion of primary education and vocation training in technical industries (Moreira 1995). Although the literacy rates in South Korea were astonishingly high (relative to countries with similar or higher per capita income), the state recognized the importance of an educated labor force.

The government went beyond the correction of market failure or matching supply and demand of skilled labor, as it played an important coordinating role in other facets of the economy also. Since the government could forecast the demand for skilled labor from its investment policies in target industries, it could also foresee the dire need to further develop the human capital (Green et. al. 1999). This was in addition to all the aforementioned policies, which illustrates how the state tried to harmonize every strand of the market.

Neoclassicals argue that hands off approach in this era helped foster economic growth (Birdsall et. al 1993). However, there was evidently heavy government intervention. The export promotion strategies were industry neutral; in contrast, protectionist policies were used towards domestic industries. Additionally, despite the economic deficiencies in both policies and outcome in the former time period, the protectionist policies used in the light industry significantly contributed to boost its competitiveness and helped improve the BoP in the long-term.

4.2.3 Heavy Chemical Industry Building Period: 1973 – 1979

The end of the previous time-period was a cause of concern to South Korea, specifically in military terms. The US, in fact, had started withdrawing its troops starting in 1971. Threatened by North Korea, South Korea had urgent concerns regarding safety and defense, for which it relied heavily on the US. This sentiment, coupled with the desire to maintain a self-reliant economy, were some of the stepping stones of the Heavy Chemical Industry (HCI) program. The program was analyzed thoroughly before deciding whether to carry it forward. Emphasis was given to evaluate whether the country was economically staged in its development trajectory to undertake such a program and whether it would contribute to long-term development goals. The strategic military component, although at backstage, was undoubtedly under consideration; it was evident that petrochemicals could be used for explosives, machineries for canons and rifles, and so on (Stern et. al. 1995).

The nature of government support resembled that given to infant industries in the previous time period; evidently, however, it was more intense and targeted. The companies selected to carry out the HCI program were devoutly protected, both from foreign and domestic markets. Their start-up capital was made highly affordable through low interest rates; in addition, they had access to favorable taxes, duty free imports of intermediate goods and even subsidized utilities such as electric power. Furthermore, the government distinctively looked over any obstacles, even if it was bureaucratic, and provided special assistance to resolve it. Therefore, the definitive change in government

orientation in the industrialization process came about through the ferocious targeting of HCI industries instead of a more across the board export support and promotion in the 1960's (Stern et. al 1995).

The support and establishment of conglomerates in the previous period provided strong foundation for the HCI program; the companies that participated were already taking advantage of economies of scale and economies of scope. Furthermore, restrictive policies against allowing control of foreign firms through shares, and partial ownership, and similar threats were severely discouraged by controls on FDI, which offered further protection to domestic industries (Moreira 1995). In line with the human capital and Science & Technology (S&T)'s efforts that were enacted in the previous time period, in the 1970's, the state built "R&D institutions and the development of indigenous R&D capabilities through the adaptation and improvement of imported advanced technology" (Lee et al. 1991, 1422).

Moreira (1995) writes that some scholars claim that policies of this time period are largely a sharp shift to inward-looking policies from the liberalization policies of the former era. However, empirical evidence shows that the policies during the "neutral" regime of 1960-72 were not at all as passive and market-oriented as many claims. Therefore, the HCI drive was rather a continuation of the same interventionist policies; it simply provided a greater focus on HCI. Additionally, alongside protection for HCI, credit allocations continued to favor exports, despite neoclassical criticisms pertaining to export growth. Admittedly, the bias towards HCI was aggressive, but neoclassical arguments have little success in proving that better outcomes would have been warranted

if strictly outward-oriented policies and hands-off approach were pursued (Moreira 1995).

4.2.4 Liberalization: 1980-1990

The assassination of President Park, the leader of the military regime, the macroeconomic instability associated with the second oil shock in 1979 and the HCI drive put the economy in a vulnerable position. The bearing of the new government led to the period of liberalization through a myriad of trade and financial reforms starting in 1980 (Moreira 1995). The government "committed itself to increasing the liberalization ratio, from about 69% in 1980 to 95% in 1988" and "lowered the average legal tariff rate by approximately one third and committed itself to further reductions between 1984 and 1988" (World Bank 1987, 49). South Korea's import restrictions have always been a mix of both tariffs and quantitative restrictions. The import tariffs were liberalized through the Tariff Reform act established in 1984 which planned to reduce imports incrementally for the following years. Quantitative import controls, on which the country was reluctant to compromise even in the neutral outward-oriented period of the 1960's, were finally dropped by expanding the list of goods to be automatically approved for import coupled with tariff reduction (Wade 1993, World Bank 1987).

Liberalization process in export industries was characterized by neutrality towards export industries and was carried out through several financial reforms during this period. First, the public banks were sold over to private shareholders and thereby also restricted single shareholder ownership. This was an important alignment to the business reforms,

such that, the banking industry would not monopolize or controlled by large industries. Moreover, deregulation was accompanied by various other relaxations and new policies to foster competition between banks in the financial market. For example:

> To promote competition among banks, two new nationwide commercial banks, joint ventures with foreign banks, were authorized ... The restrictions on chartering of non-bank financial institutions (NBFI), in particular short-term finance companies and mutual savings companies, were also relaxed in July of 1985. At the same time the paid-in capital of the existing city banks as well as special banks was increased to enable them to better compete with other financial institutions, including new entrants. To encourage competition among financial institutions allowed commercial banks and NBFIs to engage in new activities which had previously been prohibited to them, removing artificial barriers to competition between financial institutions through the deregulation of financial services (World bank 1987, 80)

During the liberalization period, the government also loosened restrictions on the operations of local branches of foreign banks and allowed them to compete with domestic banks in providing various financial services that they were formerly not allowed (Moreira 1995, Wade 1993, World bank 1987).

In addition to the banking reforms, there was also a substantial restructuring in the interest rates. The preferential lending rates that were adopted by the government in the earlier time periods to promote industrialization were banned in 1982; in turn, private banks unified interest rates. The new reform was a major shift away from the export promotion policies of the former time periods which greatly benefitted from preferential credit allocation. It was also an important step towards deregulation in the banking sector, as the government allowed for private discretion in credit allocation (Wade 1993, World Bank 1987).

Industrial structure in South Korea before the liberalization of 1980's was largely and consistently favorable to conglomerates on the basis of economies of scale and economies of scope. However, this orientation was altered to favor small and medium industries (SMI) in the liberalization period. As mentioned above, the abolition of the preferential credit allocation was a setback for conglomerates, and it was intensified to help SMIs by policies that restricted exploitation or misconduct by the existing larger industries. Besides strides to foster competitive environment in the financial market between banking institutions, the government also passed the Fair-Trade Law in 1981 against restrictive business and trade practices by the conglomerates. In 1984, the restrictions on FDI were receded; for the first-time foreign capital (in the form of both foreign ownership and management) was allowed into the borders of the country (Kwon 2004). This was also effectively directed towards fostering a competitive market, for both SMIs and the conglomerates.

Last, the government continued its earlier efforts to promote human capital and S&T by boosting investment in education and technological capability building. Since "the 1980s, in accord with the growing needs of high-technology development, the government has strengthened its strategies to develop future-oriented, long-term, large-scale research and development projects" (Lee et al. 1422). Moreover,

> Intervention in technology promotion has stressed the establishment of institutions to train scientists and engineers and conduct basic and applied research. Under the Fifth Five Year Plan, national science and technology investment was to be increased from 0.9% of GNP in 1980 to 2% in 1986; the Sixth Plan aimed for a 2.5% ratio, roughly equal to OECD spending, by 1990. The public budget (roughly 40Z of Korean R&D spending) has supported general research and scientific training, as well as special research centers for energy and

> resources, machinery, electronics, telecommunications, chemicals, and tobacco. In addition, a National Project for Research and Development (1982) was established to fund public as well as public-private "joint" R&D projects in the high-technology fields of electronics, fine chemistry, and engineering. With the help of these programs, and new tax incentives under the Technology Development Promotion Act (enacted in 1973 and strengthened in 1981), private research and development expenditures expanded rapidly; for example, the number of private research centers doubled between 1982 and 1984 (World Bank 1987, 51).

The liberalization process in the 1980's in South Korea had a few noteworthy features. First, the process of adopting widespread liberalization has actually been very gradual and coordinated, and the state intervened just as vigorously as before. Owing to policies to strengthen domestic markets in the previous time periods, the liberalization process did not lead to major dislocations of factors of production or resources (World Bank 1987). Moreover, import liberalization did not hurt the balance of payment conditions as much because majority of the imported items were natural resources that Korea did not have and would have imported anyway (Moreira 1995).

It is evident from the policy used from the pre-1960s up till liberalization in 1980's, that the success of the export-led growth followed decades of government protection for domestic industries and government incentives and performance conditions on export industries. The coherence of these policies through state reforms in the financial market, investment in human capital and S&T and infrastructure, and capital procurement and allocation compounded to build a strong economy, which proved to be relatively immune economy to the perils of the second oil shock in 1979.

4.3 Brazil

4.3.1 Pre-1956: Unintentional Industrialization

Brazil, a Portuguese colony, underwent repressed growth from forced imports of manufactures, while only exporting primary products till its independence in 1822 (Baer 1965). Even after liberation, Brazil was by and large a producer of primary products, with nonexistent efforts or intent to industrialize. It was the external shocks from the First World War and the Great Depression, mainly in the form of a declining market for Brazil's primary commodity exports and disruption of imports that led to the formation of a small industrial base in the country. In fact, during World War I, infant industries sprung up in the Brazilian economy to overcome the supply shortage not internally, but also overseas. These industries included food, beverages, tobacco, textile; Baer (1965) emphasizes that despite the overall progress, this did not transform the economy because the nature of industrial boom did not tap into the heavy industry and relied on importing capital. The industrial boom of the First World War was short-lived and met its demise through free foreign competition from American and European competitors right after the war. Moreover, state policies barely addressed this downfall in industry, and were more concerned to protect the coffee exports, their natural endowment, and gambled all their protective capabilities into the primary sector.

The Great Depression in the 1930s and the consequent disruption to economic growth from exporting coffee was one of the primary drivers of Brazil's industrialization (Gordon and Grommers 1962, Clements 1988, Baer 1965). The sectoral structure had evolved over 1919-1939 with an increasing presence of industrial and manufacturing

sectors, and a concurrent shift away from producing nondurables (Clements 1988). However, industrialization during this term has been referred to as "unintentional" by many economists such as Gordon and Grommers (1962), Clements (1988) and Moreira (1995), despite a considerable industrial base in Brazil, and some of the reasons behind that reference are delineated below.

First, tariffs were aimed at revenue generation rather than protection of infant industries or promotion of domestic manufacturing base. Second, while the state did carry out "exchange rate devaluations and income maintenance programs" (Clements 1988, 9), these measures were directed at the coffee industry and their impact on the overall industrialization in the economy was unplanned and fortuitous. The impact of the Great Depression was intensified by World War II; policies at that time were exercised for "deliberate overvaluation in the immediate post-war era (with a view to dampening inflationary pressures) caused a surge in imports and a concomitant balance-of-payments problem" (Clements 1988, 9). This eventually led to a system of import control and licensing to limit the inflow of imports and adverse balance of payment condition, which, again, unintentionally assisted the domestic industry (Clements 1988). Furthermore, Furtado (1963) pointed out that since:

> expansion of industrial production could not take place through an increase in the importation of machinery, because of the foreign exchange shortage and the higher price of imports resulting from the depreciated currency, the initial phase of industrial expansion in the early thirties was marked by the increased utilization of idle capacity (24).

However, even the stimulus of the Great Depression on industrialization did not produce any significant changes in the structure of the economy and the dominant industries

continued to be food products and textile, like that after World War I (Baer 1965, Gordon and Grommers 1962)

It was the industrialization stride after World War II that led to a rise in the production of capital and manufactured goods. Consequently, there was also an increase in the share of income accrued from industries, although agricultural was still the dominant sector (Baer 1965). The economy was also performing well because of the foreign reserves (resulting from increased exports), which were practically absent during World War I and the Great Depression. Therefore, industrial goods from Brazil were in high demand in the domestic market, but also benefitted from an external market. It was due to this addition of industrial goods, such as cement, iron and steel, to the export list, that the government finally paid attention to industrialization because exporting them was evidently profitable. Besides the establishment of new industries, existing industries that sprung up as a result of World War I and the Great Depression, especially the textile industry, also thrived in the global arena (Baer 1965).

One of the tools to promote postwar industrialization in Brazil was exchange controls. Its use intensified from 1947 to 1953 (Baer 1965). Due to an increase in imports resulting from a currency overvaluation, an import licensing system was introduced during this time period to control demand for imports of manufactured goods (Baer 2014). Although such tight exchange controls did eventually equilibrate the BoP, its implementation had two very important shortfalls. First, it did not take into consideration the special needs of the new industries, especially the ones that relied on foreign imports to even successfully launch themselves. Second, this led to rent-seeking and eventually a

corrupt system of granting licenses, and consequently some industries secured high profits while many others also resorted to smuggling (Baer 2014).[29] Additionally, in the time period between 1953-1957, a multiple exchange rate system was introduced, which also positively contributed to industrialization by restricting the use of foreign exchange so that the country can import needed inputs, such as equipment, petroleum, etc. (Gomes 1986). In sum, the government advanced protectionist policies which was guided by BoP considerations and therefore, domestic industries were not adequately ushered towards the path of industrial sophistication. Finally, insufficient and incoherent policies on infrastructure, S&T, education, financial markets, etc. further aggravated the situation (Moreira 1995).

4.3.2 1956-1964: Heavy Industries "At All Costs"

As delineated in the pre-1956 time-period, the industrialization process in Brazil had not only been unintentional, but also incoherent and lacked guidance. However, beginning mid-1950's, the government had taken charge and planned to pursue targeted policies in infrastructure, heavy industry, human capital, etc. ISI strategies were even more diligently pursued, with special emphasis on durable-consumer, capital and intermediate goods sectors. The government made major investments in transportation, food, education and others. Additionally, trade and exchange rate policies continued to be directed at improving the BoP, primarily though ISI strategies, and additional strategies to promote the heavy industry. Selective policies were pursued by reforming custom and

[29] However, the net result of exchange controls during this time period had a positive impact on industrialization (Gomes 1986).

ad valorem tariffs, and other tools (Moreira 1995). One of these interesting protectionist policies was the Law of Similars which stated that producers in Brazil "could apply for the registration of the goods they were producing or intended to produce…[and] the registration of a product as a similar became the basis for tariff protection" (Baer 2014, 60). This policy was a major tool in the heavy industry drive because it encouraged vertical integration of production within the country as well as individual firms because it incentivized new ventures in the economy.

Brazil in the late 1950's and early 1960s, did not have the capital and technological capacity to initiate the government plans of a full-blown heavy industry drive, let alone sustain it and this set the precedent for the advent of foreign capital in the Brazilian economy. During this period, the government actively advocated for foreign capital and provided lucrative incentives in selected industries, allowed to operate with little regulation from the state, except local content requirements. While not flawless, the aforementioned strategies by the state did play a major role in procuring investments, such as in the steel industry, in which private firms did not show interest despite favorable conditions and investment in place. Despite these policies, effectiveness of credit allocation, especially for long-term financing, was absent and at best, poorly coordinated, especially with macroeconomic indicators (Moreira 1995). Moreover, the last few years of this time period - specifically 1961-1964 - underwent poor policy and economic management due to political turbulence from a change in leader (Baer 2014). Therefore, both macroeconomic and political instability resulted in an unsuccessful heavy industry drive.

4.3.3 1964-1973: Pragmatic "Miracle"

In 1964, the military took over the Quadro regime, which was characterized by poor policies and an unstable economy (Baer 2014). The military regime determined that:

> The path to economic recovery lay in control of inflation, elimination of accumulated price distortions, modernization of capital markets, creation of a system of incentives to direct investments into sectors deemed essential by the government, attraction of foreign investments to expand the country's productive capacity, and expansion of public investments in infrastructure projects and heavy industries (Baer 2014, 73).

In former time periods, the apt policy mix was to target a declining import share of Gross Domestic Product (GDP) through ISI strategies. On the other hand, from the mid-1960's, export promotion was revitalized to improve foreign exchange reserves and in fact, "reducing the import bill was no longer to be a goal of economic policy, as imports were seen as a source of cheap and efficient inputs that would enhance aggregate economic performance" (Clements 1988, 13). Furthermore, various policies were directed at incentivizing exports through increased profitability in export industries. For instance, from 1964, exporting industries were exempt from import tariffs, industrial product tax, income tax (on export profits) and for manufactured exports, the state value added tax was also exempt (Bacha and Malan 1984, Clements 1988, Silber 2018). Furthermore, starting in1969 export industries in the manufacturing sector were also granted tax credit premium to lower their overhead social costs (Clements 1988).

Exporting industries also received financial incentives such as subsidized loans, which allowed exporting industries to both maintain production at lower costs than the domestic market to lure more industries to export, and also fund long-term projects of

existing exporting industries (Moreira 1995). These efforts intensified in 1972, when special programs were carried out by the new Commission for the Concession of Fiscal Incentives (BEFIEX) primarily to process import tax exemption requests by exporting industries. These incentives, especially to manufacturing industries, increased throughout that decade and led to a substantial growth in exports (Bacha and Malan 1984). This translated into an economic boom from 1968-1973, which came to be referred to as a "miracle" (Clements 1988, 16) period, (Bacha and Malan 1984).

In this time period, export promotion strategies were also accompanied by import liberalization policies, which led to a considerable hike in imports, the majority of which were capital imports (Clements 1988). This surge was supported by the tariff reform and exemptions from both tariff as well as nontariff restrictions (Silber 2018).

4.3.4 1974-79: Heavy Industry Revisited / Neo ISI Strategies

The increase in import share of GDP from the import liberalization drive in the previous period, along with the first oil shock, aggravated the BoP and eventually led to a renewed epoch of import substitution (Clements 1988). These strategies were primarily aimed at replacing the "major components of the import bill – namely, capital goods, intermediate goods, and raw materials" (Clements 1988, 19). However, this was not accompanied by an indifference to exports like in previous periods of import substitution; during this policy reversal to import substitution, in fact, there was stable growth in exports. Owing to a substantial protection to domestic industries, the inclination towards production for the internal market was also natural due to increased profitability and

incentives, and unlike previous efforts at ISI strategies, this time it actually led to a positive impact on the domestic market (Clements 1988).

The first oil shock in 1973 and the unsustainable success of the pragmatic period pointed at policy adjustments in this time period. In the face of high rates of inflation and alarming balance of payment difficulties, ISI strategies for structural adjustments and growth were revisited. However, this time, policies were aimed beyond narrow considerations of infant industry protection and FDI and took into consideration the relevance of export promotion and development of the domestic market to effectively compete in international market (Moreira 1995). In order to carry out aforementioned agenda, heavy import controls were revived with many of the former tools: high tariff, law of similar, etc. Additionally, export incentives were passed through to domestic firms that engaged in making input and capital goods for the export industries. Furthermore, export industries were encouraged through low but positive interest rates, despite alarming rates of inflation during that time, and through other incentives such as fiscal subsidies. Furthermore, as opposed to former periods of deregulated FDI openness, new regulations were applied to foreign owned firms, such as long-term export commitments for exemption from import tariffs. In fact, in some sectors such as micro and mini computers, foreign firms were banned. Furthermore, regulations were introduced to limit total foreign ownership of companies, and FDI was instead directed towards joint-ventures and met with conditions such as export requirements and in-house R&D (Moreira 1995).

Domestic industries were also encouraged through financial incentives and policies – during this period, manufacturing industries rapidly accumulated loans, with a special focus on the heavy industry. Furthermore, the financial incentives were much more coherent and competitive finance was made available. This was conditional on local procurement of capital goods for twofold benefits in both strengthening the capital base of export firms and paving avenue for business for the local protected capital goods and basic input sectors (Moreira 1995). The FDI openness from former time periods continued and had now also included portfolio investments.[30] Besides FDI, private conglomerates were also encouraged alongside stable market structures and advanced technological capabilities, which was a progress from former time periods when the bulk of the investments and business activity took place within state-owned enterprises and foreign owned firms. Furthermore, state investments in S&T were heightened, especially in higher education and both basic and scientific research. Technological capabilities were strengthened through financing programs for R&D in private firms, technology imports conditional on absorption by importing firms. Furthermore, various institutions and agencies were introduced to coordinate the technology absorption and promotion, through research institutes, local procurement of capital goods, etc. (Moreira 1995).

Overall, there was now growth in exports from the success in the heavy industry, due to selective state intervention. Furthermore, decades of domestic protection also concurrently reduced reliance on imported capital for industrialization, and therefore also improved balance of payment conditions.

[30] However, this also led to a hike in external debt.

4.3.5 1980's: Dismal Decade

The aftermath of the second oil shock in 1979 coincided with a frail macroeconomic climate in Brazil, wherein "a huge external debt had been accumulated, inflation was high and reinforced by widespread indexation, and oil made up more than one third of imports" (Moreira 1995, 124). The macroeconomic instability was first dealt with orthodox balance of payment adjustment scheme and later, in the face of hyperinflation, was tackled with heterodox stabilization plans. Under orthodox adjustment scheme, policies were put forward to dampen demand and exercise stricter import controls and intensify efforts in export promotion. Moreira 1995 summarizes these policies under the orthodox program:

> On the demand side, fiscal policy was tightened, wages partially de-indexed, quantitative credit controls imposed and interest rate ceilings removed. On trade policy, fiscal subsidies to exports were reinstated and export credits expanded. Moreover new [non-tariff barriers] were introduced including import surcharges, mandatory import programs for major importers, and an expanded list of prohibited imports (125).

While the current account eventually improved, the domestic market suffered severely from depressed investments, and economic activity and output in general deteriorated. The manufacturing industry was also adversely affected, as the decline in investments in the heavy industries worsened the demand for capital and other intermediate goods from these local industries. Furthermore, exports, especially in manufacturing, during the reign of these policies did increase, but was disappointing in volume considering the number of subsidies and export incentives. Moreira (1995) further argues that even external world demand cannot be blamed because countries like

South Korea boosted manufacturing exports during these years. Unlike South Korea, decades of inward-oriented policies in Brazil did not breed local industries capable of thriving in the face of fierce international competition.

In 1986, a heterodox stabilization plan was established comprising of a frozen price wage and the abandonment of monetary correction; the first phase of this plan, however, did little more than a temporary reduction in the rate of inflation. Even then, two modifications of this plan were also pursued in 1987 and 1989. All of these eventually led to fiscal deficits and high inflation, despite short-lived initial successes in reducing inflation rates. Under these stabilization plans, exports, and particularly manufacturing exports, were substantially hurt. Additionally, due to government deficits, export subsidies and other incentive tools shrunk and did not coincide with a concurrent reduction in import controls so that cheaper inputs at international prices could be procured. The subordination of export performance to macroeconomic fluctuations and lack of long-term public financing boost receded long-term investments in the private sector in general, but more importantly, in the export industries. In fact, it was the long-term financing plans in select export industries that were indeed forced to export even during this dismal decade and prevented a further stagnation of growth in the economy.

Investments in S&T were also depressed during this time, further hindering the accumulation of technological capabilities; human capital indicators also hardly improved over the decade. Moreira (1995) sums up the policies and their consequent results over the economy:

> In sum, the impact of external shocks magnified by previous misguided intervention in the product (trade bias) and financial markets (indexation), largely reduced government action over the 1980's to a series of unsuccessful adjustment and stabilization attempts. Facing a highly unstable environment, industry fell into a vicious circle of falling output, investments, and productivity, which coupled with a higher trade bias, produced declining market shares abroad. This decline in competitiveness, however, cannot be dissociated from the industry's structural weaknesses fostered by decades of an ill-conceived approach to market failures. That is, its fragmented and excessively integrated structure, its sub-optimal plants, its weak local private sector, the lack of long-term financing, the limited and isolated S&T infrastructure, and the poor human capital endowment (131).

The trade policy mix used in Brazil from the 1950's to liberalization in the 1980's has largely been inward-looking and highly protectionist, with a general bias and/or neglect of exports (Silber 2018). Despite macroeconomic mismanagement in the face of external shocks from the world economy, average yearly growth of industry from the 1930's to the 1980's has been 8.1% (Silber 2018). The first oil shock in 1973 heavily impacted the Brazilian economy because it imported 80% of its total oil consumption (Baer 2018). To maintain high growth rates from the pragmatic "miracle" time period, Brazil pursued industrialization aggressively but accumulated massive foreign debt in the process (Baer 2018). Despite the foreign debt, the state pursued the heavy industry drive and also made substantial investments in infrastructure. This stride to transition into new comparative advantages could not have been achieved with private capital alone (Baer 2018). The plan at that time was to pursue such investment programs along the lines of ISI and EP in new industrial industries under the expectation that eventually foreign reserves could be built up and trade deficits addressed. However, this plan was defeated by the severe macroeconomic consequences of the second oil shock. Therefore, instead, the economy had to adopt a set of policies at the end of the dismal decade that fit the

neoliberal prescriptions to gain approval of the IMF (Faucher 2018). It is noteworthy to mention that the state policies in Brazil over time were not completely inadequate and flawed, and the policies did help the balance of payment situation in the economy. However, the incoherence of policies in the product, factor and financial markets as well as between the ISI and EP strategies, led to the eventual downfall. However, it cannot be denied that the overall industrialization process in Brazil over the last half of the twentieth century took place under the auspices of state-led, or dependent development (Evans 1979). The gradual construction of new industries and the overall advancement of industrial activities have followed a typical suit of protectionism, state investment as well as state-owned enterprises and regulations to enact selective intervention to promote select industries (Faucher 2018).

4.4 Discussion: Lessons and Competing Views

There is no theoretical evidence that free market forces can modify natural endowment and comparative advantage from primary commodities and labor-intensive goods to capital-intensive and high-tech ones. Despite that, successful state intervention in South Korea is either ruled out as an exception or not given enough credit in the face of market forces, and Brazil is often used as an example to bolster the failure of the government (Lall 2013).[31] Both countries had faced political turmoil after the Second World War, which were successfully barred by a military regime characterized with high

[31] External shocks such as lack of available imports and augmented external demand for exports during World War I and World War II, had compelled the industrialization process in Brazil. Whereas, the Korean War had almost destroyed what remained of industrialization during the Japanese colonial period.

economic growth, which was in turn followed by a heavy industry drive in both countries. It is primarily the external shock from the second oil crisis and the consequent macroeconomic stabilization performance of these countries that led to a distinctively divergent path of economic achievements henceforth (Saavedra-Rivano 1998).[32]

A number of global economic events, such as the inadequacy of Keynesian policies during the stagflation of the 1970's, poor economic performance in socialist closed economies starting in the 1970's and the relatively better economic outcomes in countries that followed export-led growth strategies instead of ISI, swayed the pendulum towards liberal policies and free market doctrines of trade and development (Sridharan 1996). In fact, neoclassical contributions, such as by Krueger (1978) and Westphal (1978), have extensively argued that the success of export-led growth, especially in some of the East Asian countries has largely been based on specialization according to comparative advantage. The primary criticism of ISI strategies is that they created massive misallocation of resources and a troubling path against the tide of their labor-abundant factor endowment. Sridharan (1996) summarizes the critique of ISI strategies as follows:

> Inappropriate investments in capital-intensive industries and technologies followed [inefficiencies and misallocation of resources], resulting in slow employment growth. Underutilization of capacity often emerged because of the narrowness of the home market for the "high-income characteristic" goods produced. Agriculture was neglected due to industrial protection shifting the terms of trade against it, biasing the direction of investment in favor of industry. A bias against exports also prevailed from the maintenance of a higher exchange rate than would have been the case under a free-trade regime. Combined with the import-intensity of ISI, that is, import of capital and intermediate goods, this led

[32] This divergence is evidenced in Figure 1 that includes GDP per capita, with constant purchasing power parity (PPP).

> to persistent trade and balance of payments deficits, often inviting IMF-imposed stabilization policies. Growth tended to peter out after a brief boom. This was referred to as the exhaustion of ISI (4).

Shapiro (1994) points out that the neoclassical and alternative evaluations of economic development increasingly prefer to polarize between the role of market and the role of state, without paying attention to combination and coordination between the state and the market successfully adopted by South Korea and attempted by Brazil. The role of the state is not to be led by the market, to merely correct failures where evident and applicable. The crucial differences in the policies employed by Brazil and South Korea, at least in the context and scope of this thesis, pertains to their transition out of import substitution, relevance of export-promotion, foreign capital and FDI. These differences are sufficient to argue that future development policy prescriptions should not be based on government failure but should incorporate ways to rectify government mistakes.

Much of the neoclassical literature that attempts to explain the success of East Asian countries and failure of Latin American countries, conveniently categorize the success stories as the basis for supporting outward-oriented or export promotion strategies and condemn import-substitution strategies (Moreira 1995, Haggard 1990). However, the overview of the policy mixes used by South Korea and Brazil indicates, at the least, that none of the policies in practice in either of these economies have strictly adhered to either category. Furthermore, to the extent that these countries do align strongly to either category of policies, it is evident that neoclassical explanations whitewash the effects of preceding or concurrent import substitution policies that have supported the success of exports and the process of industrialization by strengthening the

domestic market for international competition. Wade (1989) aptly writes that non-neoclassical aspects of the industrialization in East Asian countries, especially through state intervention, needed to be acknowledged, studied and incorporated into theory instead of reducing the role of the government to fit the neoclassical story.

Export promotion strategies are lauded by the neoclassical literature, and almost often at the expense of ISI. ISI policies are repudiated because it is deemed invaluable to have inputs for exporting industries at internationally competitive prices with no restrictions for local procurement. Moreover, compared to ISI, the applicability of EP is deemed to be industry-neutral and therefore, free of the discretion of the government. This is in line with the minimal state intervention that is allowed for in the neoclassical theories, and those minimum efforts should be directed at infrastructure, human capital, etc. and not to hamper with the static comparative advantage of the economy, based on its factor endowments. Moreira (1995) argues that the success of East Asian countries are often explained under the auspices of free trade arguments and its corollaries, and this:

> is based on the belief that the structure of incentives under the EP regime, for being industry and trade neutral, and because of fiscal constraints (need for tariff revenue), would have been a sort of second-best solution to free trade, emulating its resource allocation. Its adoption, therefore, would have brought efficiency, higher incomes and greater consumption possibilities, as indicated by trade theory (8).

Many development theorists had denied dynamic gains under free trade, to which Krueger (1984) had asserted that from “a theory without any evidence in the early 1960s suggesting departures from free trade for dynamic reasons, the tables are turned:

empirical evidence strongly suggests dynamic factors that may be associated with export-led growth" (139) and free trade.

A common neoclassical argument for export-led growth is that the shift from ISI to EP trade strategies has been associated with high growth rates in output and total factor productivity.[33] While it is recognized that some of these successful countries have used protectionist policies before liberalizing, they gained from realizing their comparative advantage and shifting their foreign trade policies outward (Krueger 1990). Krueger (1990) further delineates the states had a major role to play, especially in the East Asian countries, but they have pursued domestic policies in infrastructure, import regime, human capital, all within the scope of the export drive. One of the contributing factors to said export success is claimed to be the fact that export industries were exempt from import restrictions and tariffs and this effectively minimized the role of government to exercise import controls. Another contention is that export incentives have been uniform, especially in the early stages of the export drive and that anybody who wanted to export was encouraged to do so, and this has been generally industry-neutral.

Krueger (1990) also refers to the South Korean Heavy Industry Drive in the 1970's as the mistake of picking winners. However, the literature overlooks the role of government for even the outward-looking industrialized countries to build a sophisticated industrial base under a neoliberal globalized economy. In the case of South Korea, neoclassicals in US aid administrations have criticized the ISI strategies of the pre-1960's

[33] Total Factor Productivity (TFP) is the "portion of output not explained by the amount of inputs used in production. As such, its level is determined by how efficiently and intensely the inputs are utilized in production" (Comin 2017).

and lauded the transition to a more open economy (Amsden 1989). In fact, their aid had been a major contributor to the advancement of the cotton and textile industry in the post-war South Korea. However, Amsden (1989) points out that the US aid administration, under the US Agriculture Trade Development and Assistant Act, limited the use of aid in agricultural commodities (in supplying raw cotton) to use in and by the *domestic* economy. This effectively restricted exports in the textile industry of South Korea, among other impediments such as weak markets from Japanese withdrawal, old and worn out machineries and so on. Jones & Sakong (1980) further confirm aforementioned contentions by adding that the American aid was actively devoted to raising consumption in the economy and fostering consumption goods for the domestic market, and not at all concerned about building productive and technological capabilities or competitive export industries. Clearly, if left to market forces and international institutions that operate under the auspices of neoliberalism, South Korea would not have industrialized in the manner that it did. Furthermore, while neoclassicals overstate the gains from the export promotion strategies pursued in Brazil during the pragmatic miracle period in the late 1960's, Clements (1988) point out that the domestic market continued to be the main source of demand for Brazilian products and exports were modest shared of total output, and therefore liberalization, did not associate largely with the access and utilization of a broader global market in this case either.[34]

[34] This is largely because Brazilian export industries were not internationally competitive and therefore, it is an additional indication to the role of the government in promoting competitiveness in domestic industries, like in South Korea, and not an indication to let market forces take over, which is otherwise argued.

On the other hand, ISI strategies have been relentlessly scrutinized in the neoclassical literature. First and most importantly, it is seen to be particularly detrimental to export industries that endure tariff as well as non-tariff costs to procure raw material, intermediate goods, etc., needed for production. This is further hurtful for their competition against international markets, due to higher production costs, and would eventually also lead to crisis in the BoP structure. Second, the neoclassical view predicts that there will be efficiency loss as profit-maximizing firms will be disincentivized to reduce production costs and rely instead on public sanctions. Finally, the major downside of import substitution is the inevitable presence of the government, that is condemned in the neoclassical literature, for both import substitution and really any other intervention. This condemnation is primarily based on the allegations that government is inherently inadequate to allocate resources efficiently, and instead, create inefficiencies though rent-seeking behavior (Bhagwati 1982, Krueger 1974, Shapiro 1994). Additionally, the neoclassical critique claims that ISI strategies initially causes a temporary boom in the economy which gets exhausted soon enough, and then it leads to a persisting bust, is true, but not universal (Sridharan 1996). For example, in the case of Brazil in ISI policies in1964, growth stagnated for nondurable goods such as textiles, but continued for many other capital and technology-intensive sectors such as steel. Even more prominent is the case of Korea, where ISI became selective and more limited, but not absent when outward-oriented policies were adopted and contributed to overall economic growth from both industries in both export and domestic sales.

Lim (1989) provides evidence showing that while import protection and substitution was increasingly evident in Brazil, South Korea had predominantly used both import substitution and export promotion. Overall, Brazil has evidently had stricter import controls than South Korea, but more importantly, their transition to import liberalization and exposing their domestic industries to foreign competition has also been notably different.[35] South Korea had carried out their import liberalization as a gradual process and the state had used incremental tariff reductions and import surveillance. Most notably, they have done so through their preannouncements whereby the state broadcasted changes in tariff structures ahead of time to signal the relevant industries and to give them preparation time to embrace foreign competition (World Bank 1987). On the other hand, whether due to crisis in the balance of payment or due to intent to strengthen domestic industries, Brazil has by and large shied away from import liberalization and rather strengthened it over the years, which increased inefficiencies in such industries and resulted in unintended disincentivizing for higher performance.

Lim (1989) also points out that alongside the widely believed EP strategy in South Korea, the government had concurrently carried out ISI strategies. In fact, the state had used a calculated mix of these strategies such that exporting industries were exempt from the tariffs and other protectionist measures that were used for domestic industries (Westphal 1990). In fact, about thirty-eight schemes were established during 1960's and 70's to negate the constraints imposed by trade protection on exporting industries.

[35] Figure 3 compares the Tariff rate, applied, weighted mean, on manufactured products (%) for both countries to show that although there has been a decline on tariff rates in both countries since the 1980's, Brazil has had consistently higher tariff rates on manufactured products than Korea, even up till 2017.

Furthermore, South Korea had used additional policies to ensure that industries are internationally competitive by not only exposing them to global markets, but also making the export incentives conditional on performance. Additionally, the export incentives and performance constraints were by and large industry-neutral with higher performance in export markets rewarded with automatic access to credit at lower than market interest rates. In contrast, Brazil had fostered an industrial base heavily reliant on public funding and no constraints on performance. The incentive system was much more selective than in South Korea, where almost 3000 firms benefitted from export incentives whereas about a hundred did so in Brazil in 1980. In fact, exemptions from tariff and non-tariff trade barriers in Brazil were directed more towards industries pertaining to domestic sales than ones engaged in exports (Moreira 1995).

The neoclassical evaluation of the Brazilian case, largely reliant on export pessimism and unconditional import substitution clearly has merit. Indeed, excessive protectionism from international competition has resulted in a weak domestic market and even weaker domestic industries. Where efforts were made for building and absorbing technological capabilities, incentives were inadequate to force domestic firms to cooperate and pursue improvements in the technological processes, largely due to excessive protection. Furthermore, distrust in opening the economy limited the market access of domestic industries and denied them the opportunity to grow, utilize economies of scale, etc. On the other hand, successfully and effectively opening the market economy in South Korea gradually has triggered a persistent and positive growth trend. Moreover, due to long-standing disapproval of FDI, the share of economic activity from TNCs were

remarkably lower in South Korea than Brazil (Lim 1989). This proved to be a more effective strategy for technological capacity building and long-term growth. Therefore, despite somewhat similar industrial and protectionist policies, the two countries faced divergent development outcomes due to differences in implementation and sequencing of the policies.

Due to heavy state intervention in both Brazil and South Korea, and the noteworthy and diverse impact on economic performances, industrial and trade policies have received critical scrutiny in the literature (Saavedra-Rivano, 1998). Although it brought about positive consequences in South Korea, the role of government and industrial policies have been whitewashed in the bulk of the neoclassical literature on this topic and replaced with the benefits of opening the economy to the world market (Birdsall et. al 1993). In contrast, state intervention has been vehemently criticized and belittled in the case of Brazil (Edwards 1995). The industrialization trajectory in South Korea moved from emphasis on light manufacturing to heavy industries and chemicals, and finally to technology-intensive industries. This strategy was extensively controlled by the government, at least till the 1980's, in terms of credit allocation by nationalized banks, incentives for export promotion as well as protection for selected domestic industries.

On the other hand, Brazil had advocated for heavy industries immediately following the decades of import substitution, somewhat prematurely, insofar human capital and technological base is concerned. The heavy industry drive in Brazil was primarily fed by FDI through foreign capital and technology, and this was one of the

major differences with the experience of South Korea, which had either restricted or regulated FDI to serve the overall development of the country.[36] This level of FDI inflow led to industrialization in heavy industries that accrued majority profits to foreign companies in Germany, USA, etc. Even in industries where FDI had been regulated, such as in the case of microcomputers, firms were not adequately incentivized to be internationally competitive. Compared to South Korea, Brazil had taken on FDI much sooner and in greater volume to complement industrial policies and South Korea had been very selective and heavily regulated the inflow of foreign capital to foster domestic linkages. Moreover, this was done after the domestic industries had somewhat matured. In contrast, FDI in Brazil was used as an inception of industrialization and technological capacity building. Due to strict restrictions on foreign ownership, management penetration and so on, South Korea had carefully controlled the engagement of FDI in the economy, whereas Brazil had been more accessible to unregulated FDI. Consequently, the presence of multinationals in the Brazilian economy has been much more substantial, especially in export industries, than in South Korea. The big private conglomerates in South Korea grew independent of foreign capital and created a diversified production base that helped achieve economies of scale and scope, and therefore, sustained growth. This effectively refutes the neoliberal policy prescription that FDI should be unregulated for the best interests of recipient countries.

[36] The difference in level of inward FDI between the two countries is evident Figure 4 which comprises of data for the net inflows of foreign direct investment, as a percentage of GDP, from 1975 to 2017. With respect to the time frame discussed in this thesis, the gap has been the most prominent from 1975 to 1987.

The case of South Korea shows two key lessons. First, FDI is not a necessity for export promotion and advancement of domestic industry. Second, if FDI is allowed in the economy, it should be carefully regulated to ensure positive spillovers and positive linkages throughout the economy. Sridharan (1996) writes that:

> the 'deepening' of the industrial structure [in South Korea] into heavy, chemical, and capital goods industries and electronic components (as against assembly of imported ones) after 1973 was carried out by state enterprise (steel, heavy machinery, shipbuilding) and by the [conglomerates] (electronics, electrical machinery, engineering, transport equipment) with state-backing (15).

Therefore, technology accretion has been entirely a fruition of an effective public-private partnership, and not FDI at all.

This ties back to another difference in the industrial policies in both countries. South Korea focused on supporting export industries to be competitive in international markets whereas in Brazil, the overbearing concern was in domestic market considerations, based on domestic demand, rather than exports. Moreover, even in the domestic market, foreign owned firms held prices above international prices but still enjoyed huge profit margins through import protection policies. This has been further aggravated to widen the gap in industrial capacity in the two countries, as FDI and its alliance and support with public investments had crowded out domestic private firms in the Brazilian economy. The inconsistencies in policy-making in Brazil had led to the precarious industrial structure in Brazil, but there is very little evidence that its absence would have done much good. It is evident that the institutional setting in South Korea was much more coherent and organized, with economic development at highest priority, despite changes in political regimes and even trade orientation and policies. On the other

hand, Brazilian shifts in political parties and bureaucratic structure overpowered its developmental efforts. Consequently, it failed to tackle external macroeconomic shocks in conjunction with trade and other policies, to achieve economic development. Some neoclassicals, therefore, argue against state intervention even to tackle market failures, on the basis that failure in the bureaucratic structure can be much worse than a market failure (Lal 2000). However, from the experience of South Korea, it is evident that a well-directed state intervention should not and cannot logically follow that the government should be ousted from the market except in the case of typical neoclassical market failures. Instead, prescriptions should be formulated along the lines of recognizing failures in factor and product markets, and filling in the gaps in the economy, where necessary, to promote long-term development, and there is hardly a way for neoclassical theories to be adjusted to allow private firms to do so by themselves.

Saavedra-Rivano (1998) explains some of the structural differences in South Korea and Brazil. First, the institutional and bureaucratic setting in South Korea is known for its exemplar efficiency and effectiveness to carry out developmental plans. This can be attributed to both Japanese colonial influences as well as the military regime of the 1960's. On the other hand, the bureaucratic structure of the Brazilian government does not comprise of any meritocratic hierarchy with most upper level officials appointed on the basis of alliance to the reigning political party. Moreover, wages of government officials are low, unstable and an avenue for adjusting fiscal expenditures.

Second, the relationship between the state and private businesses is systematic in South Korea, as opposed to Brazil. In the former, the state has both incentivized as well

as controlled (through credit controls, for example), the behavior and role of private enterprises in enacting developmental objectives (Lee 1992). It had taken on substantial entrepreneurial risks on behalf of the private sector and either banned or regulated foreign exploitations (Saavedra-Rivano 1998). Moreover, the state has also had strict oversight of the scale, size and diversification of the big businesses in South Korea, that eventually became the pillars of its industrial and productive capacity building in a disciplined manner (Saavedra-Rivano 1998, Seguino 1999) . Evans (1995) coined the term "embedded autonomy" in a comparative study of South Korea and Brazil to contrast state intervention in the computer industry. He concluded that "[e]embeddedness and autonomy went together, and private response was as important as public initiative" in South Korea (92). On the other hand, in Brazil, the widespread presence of state-owned enterprises and foreign-ownership in domestic companies had actively limited the purview of the private sector and in some cases, even crowded out private investment. Furthermore, an incoherent dynamic between the government and the private sector had often led to poor results from policies directed at price controls, wage moderation, etc., and in some cases, even aggravated macroeconomic instability (Naya et al. 1989).

Despite such differences in policy implementation, the discussion in this section, on the neoclassical view of export promotion, import substitution and FDI and what has been done in practice in both Brazil and South Korea, contradicts the support for a minimal state. Instead, it indicates a greater role of the government. This section also indicates that universal policies are inadequate to tackle the development process of

countries with varying levels of growth and income.[37] Instead, the state is indispensable to advance appropriate and flexible policies, that are aligned with the corresponding industrial capacity of the countries and that envision the long-term development of said countries (Chang and Grabel 2014).

4.5 Where do Latin America and East Asia Stand in the Global Value Chain today?

The world economy has supported free trade since after post-WWII. Starting from the 1980s, however, the global economy transformed into corporate-led form of globalization. Privatization, deregulation and minimization of the state under the neoliberal paradigm has allowed massive penetration of corporates in the global market. These multinational corporations are fundamentally driven by profits and competition, at the expense of social welfare implications. Global industrial concentration has risen inexplicably in the process. Since the beginning of the twenty-first century, globalization has been increasingly China-centric, especially because China constitutes the "factory for the world" (Palley 2013, 11).

Traditional trade analysis has analyzed the impact of globalization through global value chain (GVC) analysis. The proponent of GVC, Gereffi 1994, defines it to characterize the breakdown of production processes across countries based on their cost

[37] This section includes evidence for the failure of neoliberal universal policies advanced by the WC and WTO, in both South Korea and Brazil. This is especially evident in the inadequacy of export promotion to foster higher growth in the immediate post-war period in South Korea and during the pragmatic miracle of the 1960's in Brazil.

advantages through “densely networked firms or enterprises”. To summarize his contention on GVC, he writes:

> Contemporary globalization has been marked by significant shifts in the organization and governance of global industries. In the 1970s and 1980s, one such shift was characterized by the emergence of buyer-driven and producer-driven commodity chains. In the early 2000s, a more differentiated typology of governance structures was introduced, which focused on new types of coordination in global value chains (GVCs). Today the organization of the global economy is entering another phase, with transformations that are reshaping the governance structures of both GVCs and global capitalism at various levels: (1) the end of the Washington Consensus and the rise of contending centers of economic and political power; (2) a combination of geographic consolidation and value chain concentration in the global supply base, which, in some cases, is shifting bargaining power from lead firms in GVCs to large suppliers in developing economies; (3) new patterns of strategic coordination among value chain actors; (4) a shift in the end markets of many GVCs accelerated by the economic crisis of 2008–09, which is redefining regional geographies of investment and trade; and (5) a diffusion of the GVC approach to major international donor agencies, which is prompting a reformulation of established development paradigms (Gereffi 2014, 9).

There is ample multi-dimensional analysis and research in the GVC literature, and some are particularly rich in providing policy proposals for upgrading in the value chain for developing countries. GVC has earned popularity and recognition to promote a free international market by the same group of mainstream trade theorists who have lauded free trade and neoliberal policies in the traditional trade analysis. While the implications of knowledge and technology learning and transfer from GVC are strong for developing countries, developing countries are in danger of exploitation, declining terms of trade and stagnation into primary sector or low value-added activities. This in turn, bolsters the case for an active state intervention to counter some of the new challenges of current form of globalization.

With respect to the policy prescriptions stemming from the GVC literature, the World Investment Report 2001 (WIR01) talks extensively about striking backward linkages through participation in the global network of production processes and consequently through inward FDI promotion. To foster desired backward linkages, the *WIR01* urges strong local firms (in developing countries) so that governments can help domestic industries and actively nurture "specific clusters that build on the country's competitive advantages" to keep up with the locational strategies of the TNCs (xx). FDI must be promoted such that "whatever the current level of backward linkages, linkages can be increased or deepened further, with a view towards strengthening the capabilities and competitiveness of domestic firms"(xxi). To promote backward linkages, *WIR01* further paid attention to building production capacity of local firms, enhancing domestic enterprise and its competitiveness. Linkage promotion programs are said to promote local procurement "with the ultimate aim of upgrading the capacities of local suppliers to produce higher value-added goods in a competitive environment" (xxv) and foster new linkages with the advent of new technological capabilities. However, new economic activities, even from positive linkages "is subject to special problems and perhaps discontinuities whenever the next steps of the development process require, or are believed to require, a massive injection of alien technology" (Hirschman 1977, 81).

Furthermore, even when low technology levels do exist, less developed countries are generally driven to production activities that associate with less skill and technology-intensive functions. This may still be effective in promoting some backward linkage, but is a serious problem if efforts are not made to upgrade to higher levels of technology and

competence, especially for the underdeveloped economies where the spread effects of development are weak.

This problem is further exacerbated by agreements like TRIPs, which enables foreign firms using advanced technologies to take advantage of local resources without necessarily sharing any technical knowledge. Furthermore, in GVC, there may be room for supply procurement and import substitution with local firms, but they will be "guided by corporate global sourcing strategies" of the investing corporate companies. *WIR01* also mentions that countries can benefit from higher tax rates from the foreign firms. These too are limited by the terms of TRIMs which bans local content requirement and by GATS which ensures domestic treatment of foreign firms. The GVC literature recognizes that countries need to employ efforts reaching further than simply enhancing supplier capabilities, to incorporate bargain for better terms against lead companies and effectively avoid being exploited (Ravenhill 2014).[38] However, the efforts of the government to support domestic markets are now limited under the current world trading system.[39]

In the current context of globalization, China is gaining geopolitical power with respect to countries that supply low value-added inputs for its manufacturing industry, especially raw materials. The common contention is that countries that export raw

[38] Ravenhill (2014) further contends that power "asymmetries come to the fore… particularly in bilateral agreements between industrialized and developing economies" and the "outcomes of the negotiations reflect these asymmetries: a substantial number of studies document how developing economies (and, indeed, smaller industrial economies) have had to make more concessions than their partners to secure agreements" (268).

[39] The implications of International Trade Agreements on the policy space of developing countries is discussed at length in Chapter 2.

materials to China are benefitting from higher prices of their products, access to cheaper manufactured goods and commendable inward FDI (Palley 2013). However, all these benefits come with several drawbacks.

First, a country that exports raw materials may get tied in the natural resource curse, which "creates stagnation and conflict, rather than economic growth and development" due to corruption embedded in the misappropriation of income from these sources (Palley 2003,1). This is indeed prevalent in Brazil, as the premature shift to HCI and its consequent failure, coupled with increased foreign investment and demand of raw materials, has steered the Brazilian production structure increasingly towards the extraction of natural resources (Auty 1995). Second, China is undemocratic, and its commercial policies are aligned with grave violations of labor standards and human rights, and this is further exacerbated by low wages in China because it suppresses wage growth in its natural resource providing partners in Latin America (Palley 2013). Third, higher prices of natural resources may not be very beneficial. As the prices increase for natural resources, the exchange rate appreciates, which in turn causes deindustrialization (Gallagher and Porzecanski 2010). Indeed, trade with China by and large undermined the development of manufacturing industries and has caused a deindustrialization or primarization in Brazil (Jenkins 2005). China's presence in Latin America continues to grow till now and is still primarily confined to extractive industries such as copper, iron, soybeans, etc and continues to be an impediment to its growth and development (Ray 2018).

China-centric globalization poses another set of problems for its East Asian trading partners, such as Japan, South Korea and Taiwan, who supply high-tech, manufactured inputs to China. In turn, China assembles the different input goods to supply to advanced countries, such as the US, with high-tech final products, which gives China increased regional dominance. This role as the intermediator between other East Asian countries and the US, gives China an unwarranted credit that it drives regional growth, whereas it is not the source of demand that drives production in the East Asian countries (Palley 2013).

Half of the economic growth in South Korea stems from exports, and over 25% of the value of its exports, at least in recent decades, is accrued by China alone (Ferrier 2019). Therefore, the South Korean economy is dependent on China, but since most of its exports are manufactured inputs for assembly, the demand is not driven solely from China.[40] Consequently, South Korean exports are not solely contingent on whether China has the foreign reserves to service its debts. Instead, it relies on the global demand that largely diversifies its risk (Dollar 1989). Dollar (1989) also attributes the strategic basis for the trade relationship between South Korea and China, to the onset of an abundance of unskilled labor in China and a shortage of semi-skilled labor in South Korea, which explains the steady flow of capital intensive goods from South Korea to China, in turn for labor-intensive light manufacturing goods. Furthermore, the trade pattern with China,

[40] In the context of this section, it is important to note that natural resources and raw materials, which is imported by China for domestic use, is substantially vulnerable to changes in the Chinese economy. This implies that in the case of Brazil, high dependency on China as the market for its natural resources is risky and problematic.

along with being a relatively risk-averse strategy, is also aligned with its adjustment strategy to shift its production structure from labor-intensive industries, such as textiles, to heavy and high-technology industries. With rising wages, South Korea had been on the verge of losing its comparative advantage in cheap labor; and rectified the situation by importing labor-intensive light manufacturing products from China. Although, laborers in the declining industries were dissatisfied, this also ensured that China accrued a sizeable income from its exports to South Korea, to be able to afford the high-technology products from South Korea (Dollar and Sokolov 1990).

To the extent that China as an avenue for excess productive capacity from both East Asian and Latin American countries, a significant slowdown or financial crisis can have serious repercussions in their respective national economies (Harvey 2004). Since the diversification of countries exporting raw material and intermediate goods from developing countries has sharply reduced and have become particularly concentrated in China, domestic policies and stronger domestic markets are compelling channels to safeguard countries against the next crisis. In the case of Brazil and China, both countries are exceedingly dependent on China through their export industries, but in different sectors as well as stages of the GVC. Brazilian exports depend on natural resources, are much lower at the global supply chain and therefore, engage in activities that cannot enjoy considerable levels of increasing returns, spillovers and linkages. On the other hand, South Korea is much higher in the global supply chain, and exports technology-intensive products to China, which in turn has strong spillovers in the rest of the economy. In this regard, it can be argued that South Korea can be much more resilient,

and Brazil, that much vulnerable, if China faces an economic slowdown. The current context of globalization in the GVC framework with China at the focal point moves further away from the neoclassical trade model based on free market principles, and far from separating foreign trade from political influences. In contrast, the role of the state is even more prominent to not only align domestic development policies with international trade, but also construct policies that will boost its position in the GVC and negotiate its terms of trade with the rising global power, China.

4.6 Concluding Remarks

Medeiros (2017) argues that the development prescriptions of liberalization, deregulation and privatization supported by the neoliberal paradigm, have largely either overlooked or ignored historical evidence of successful governance, especially in the development of East Asian countries. Neoclassicals had urged that a "market-friendly state intervention had predominated in East Asia, contrary to what had distinguished Latin American economies in which state intervention was assumed to be pervasive and distortive" (Medeiros 2017, 37). Neoclassical prescriptions have largely limited state intervention to the provision of public goods and more recently, in non-selective sectors of the economy such as infrastructure, health and education (Lall, 2013). However, a more comprehensive analysis of the development in these regions contends that the states have done more than follow the signals from the market and aimed to solve textbook market failures and carry out non-selective intervention. This view argues that the states have actively nurtured the economy with selective intervention, to create technology and

capital-intensive comparative advantages (Bonelli & Pinheiro 2008, Medeiros 2017). Additionally, Centeno & Ferraro (2017) aptly point out that state-led development failures should not be solely attributed to corruption and rent-seeking by public officials. Rather, failures may happen despite diligent economic development efforts, more so for a faulty design instead of faulty intentions.

Nembhard (1996) pertinently delineates that successful state intervention:

> depends not just upon the caliber, delineation and enforcement of specific policies but also on the coordination, comprehensiveness, and consistency of the policies; the bureaucratic and technocratic expertise and efficiency utilized to implement the policies; and the seriousness of implementation (6).

The neoclassical literature weeds out bad examples of state intervention and condemns usually on a very narrow context and/or evidence. However, while the degree of success is admittedly different, the government in both Brazil and South Korea have had a visible role in the industrialization and development process (Evans 1995, Hosono 1998). The case of Brazil in no way has delineated that intervention should be eliminated. It has rather shown that, if the interventions had been more coherent, constructive and better implemented, economic outcomes could have been much better.

Both countries had substantial foreign debts. Korea had borrowed heavily to fund the heavy and chemical industry drive in the 1970's, and Brazil had accumulated so much debt by 1980's that it had to borrow even more to service the debts. However, Brazil and South Korea had remarkably divergent results after the second oil shock in 1979. While the Brazilian economy went through a downward spiral of balance of payment deficit, debt crisis and macroeconomic instability, South Korea faced temporary and short-lived

stagnation and rode out of the shock with exceptional export growth (Sridharan 1996, Moreira 1995, Lin & Jingyuan 1989).[41] Given the elaboration of coherent industrial policies applied by the state in South Korea, it is rather superficial for neoclassicals to claim that this was simply because of EP strategies. Rather, it was the outcome of decades of policies directed at product, factor and financial markets to development an internationally competitive as well as diverse industrial base, which helped South Korea move onto a path of high and rapid growth, digressing from Brazil. South Korea, from very early on had consistent protectionist measures for domestic industries, substantial state intervention and investment in heavy and chemical industries and meaningful control over state as well as private enterprise through government banking and financial institutions. Furthermore, the goal of coordinating these different policies have always been self-sufficient and sophisticated industrial base which was achieved and bared fruition in the face of the external shock of the second oil crisis in 1979.

[41] Figure 2 shows the exports of goods and services as a percentage of GDP for both countries from 1961 to 2017. The graph aptly illustrates the rising gap of export growth between South Korea and Brazil. It especially exhibits the increasing divergence between the countries from the 1970's, where after export growth for South Korea was higher and accelerating at considerable pace while it relatively stagnated for Brazil.

Chapter 5: Conclusion

The thesis argues against the minimal state based on three important tenets. First, the paradigm shift from Keynesianism to Neoliberalism led to a new development approach based on market fundamentalism: the Washington Consensus. Following the ineffectiveness of the Washington Consensus, the WB has proposed a Post-Washington Consensus, which is based on the consideration that markets can fail and so the state may need to intervene with capital controls, social policies, etc. However, whether this shift in paradigm has led to a real policy shift is debatable. Second, the evolution of the world trading system, from the ITO to WTO, has systematically reduced trade barriers and limit the policy space of participating countries. This has occurred despite the compelling historical evidence showing that the development trajectories of the advanced countries of today have extensively utilized the discretion of the state to use a range of policies to synchronize trade policies with broader development objectives. Third, developments in international trade theory since the 1980s have recognized the role of the state for strategic trade policies. However, similar to counterintuitive outcomes of advancements from WC to PWC, and ITO to WTO, the role of the state is still disputed in mainstream economic theory, on the grounds of government failure. The inconsistencies pointed out

through these different facets of international trade prove that the universal case against state intervention in theory, policy and practice is unwarranted. Consequently, the case studies do not contemplate on whether the state should have been invisible over the course of development in South Korea and Brazil. More importantly, it does not question whether these countries would have been better off without an active and regulatory state. Rather, it comments on the quality of implementation of the policies used in these countries.

The development of East Asia and Latin America, and especially their divergence in the 1980's is complex and manifold, and beyond the scope of this thesis. However, the thesis employs the premise of the regional divergence to compare one country from each region based on some important commonalities. Both South Korea and Brazil have had parallel, state-led efforts to move away from their designated comparative advantage, carry out active promotion of heavy industries, successfully create a diversified industrial structure and use a mix of EP and ISI policies. Neoclassicals often portray South Korea as an exception and Brazil as an example of the perils of state intervention for trade and development. However, the contention of this thesis is that it was not intervention that had led to poor outcomes in Brazil, but the quality of the implementation. Even though both countries used similar policies, South Korea had targeted product, factor and financial markets to industrialize and be internationally competitive in the long-run; in contrast, Brazil had focused more on the import bill and balance of payment conditions in the short-run. Government intervention is complex and goes beyond trade policies, and that is evident in both countries. This thesis indicates that trade policies need to be

coordinated with the broader developmental objectives of each individual country, and for this reason the state plays an essential role. Development cannot be explained or perpetuated by market forces alone, and policies need to move beyond market failures. Finally, in the context of the current global challenges, policies require a renewed and greater focus on ecological sustainability, equity and human development. To do so, policies must tackle the hazards of globalization such as environmental concerns and labor standards, among others. Chapter 2 has delineated the evolution of the WTO to incorporate new policy areas, namely, investment measures, intellectual property rights and liberalization of services. The neglected areas of environmental degradation and labor standards, insofar with their relevance to international trade must also be addressed in multilateral trade negotiations in the WTO.

A study by the WTO titled "Special Studies: Trade and Environment" demonstrates that trade liberalization can be detrimental to the environment, but this can be reversed with appropriate policies (Nordstrom and Vaughan 1999). The study further addresses the need for policies for global transboundary environmental issues as well as policies directed at pollution control and natural resource management on the national level. However, the study falls short in articulating that environmental concerns must be at the forefront of multilateral trade negotiations, so as to protect the living standards of those who live in countries with high levels of emission, just like it is important to protect the autonomy of foreign investors that is aptly captured by the TRIMs Agreement. Multilateral trade negotiations in practice have gone forward with negligible attention towards the trade-environment linkage (Esty 2001). Moreover, economists argue that

trade policies should be disjointed from environmental concerns altogether. Cooper (1994) writes:

> Environmental issues typically involve 'externalities': unwelcome imposition on what others consider to be their rights. If these externalities remain strictly within each nation, and if each national has a political system that permits residents to register their preferences with respect to environmental externalities, no specifically international issue is posed. This proposition presumes that each national community has a right to define and pursue its own objectives. Of course such national decisions may affect other countries through foreign trade, just as decisions with respect to national saving and investment, education, dispute settlement, and a host of other issues involving laws and social structure may affect patterns of trade. That is no reason to regard the actions (or lack of actions) as suspect. Indeed, trade permits different communities to enjoy their diverse preferences and circumstances at a higher standard of living than they could do in isolation (70).

On the other hand, Runge (1994), Rodrik (1997) and Esty (2001) provide compelling arguments for the incorporation of environmental regulations into international trade negotiations because "emissions limits, waste management and disposal rules, packaging and recycling regulations, and labeling policies all may shape trade flows" (Esty 2001, 114). With increasing mobility of capital and global structure of production processes, there is additional empirical evidence that countries with stricter environmental regulations lose comparative advantage in pollution-intensive export goods (Van Beers and Van Den Bergh 1997). However, the prevailing solution is not to direct resources to improvise production techniques but to transfer the production of pollution-intensive goods to countries with less stringent regulations.

There are wide ranging contentions against free trade by environmentalists, and some are inarguably extreme in their resistance against free trade (World Commission on Environment and Development, 1987). However, many argue that economic

development and growth, even in an open economy, can be achieved sustainably. Moreover, this can be done alongside environmental improvements conditional on appropriate policies adhering to the preservation of the environment. Therefore, trade, growth and conservation of the environment can all be positively associated with effective policies and apt responsiveness from the state as well as the WTO (Anderson 1998). Esty (2001) argues that "protecting drinking water or siting polluting factories downwind of urban areas, have such high benefit-cost ratios that even the poorest countries should undertake them" (119).

Second, labor standards are also linked to trade liberalization through "social dumping" whereby developing countries gain a comparative advantage by producing low-skilled labor-intensive goods for global corporations, through lax labor regulations and low wages (Golub 1997). Similar to the case of environmental regulations, economists have argued that international trade should be separate from national labor regulations to allow sovereign countries to maintain their individual preferences for labor standards; and that the role of the international trade regulations should solely be focused on ensuring unfettered movement of goods and capital across borders (Barry and Reddy 2005, Bhagwati 2004). However, the race to the bottom for cheap labor is problematic for both advanced and developing countries. Multinational corporations have heightened leverage in the current global economy to countervail any improvements in wages and working conditions because of easy of mobility. This has effectively suppressed labor power and conditions on a global scale (Lieberwitz 2006). The WTO has largely ignored the need to address the linkage between heightened global integration and labor

standards, despite dire evidence of suppressed wages and working conditions embedded in the race to the bottom (Berik 2009). Moreover, the International Labor Organization (ILO) has largely been incompetent to resist this rising global corporate power, primarily due to weak enforcement capabilities (Cooney 1998). Therefore, a renewed focus is now necessary to design a broader long-term goal to redistribute bargaining power of labor and capital, and the national government is at the forefront for such efforts.

The state can play an active role in achieving such broader redistributive goals in several ways. First, the state can ensure the right of collective action and association by allowing workers to unionize (Lieberwitz 2006). This also needs to be brought back to international trade negotiations and debate and incorporated into international regulations on a global scale because current regulations under the neoliberal paradigm has actively promoted deregulation of the labor market. Advancing the right of association on both the national and international level will unambiguously help curtail global corporate power through concerted action by the global labor power (Lieberwitz 2006). Consequently, the state can play a major role in connecting local private enterprise and international labor regulations. Second, the state can tailor national efforts to improve labor standards to fit the structure of the economy. It can bring businesses, laborers and other stakeholders to initiate domestic debate on fair wages and working conditions. It can incentivize compliance to labor regulations through tax policy, such as a reduction of corporate taxes. Furthermore, it can closely evaluate and run appraisals in certain industries or sectors, before implementing the policies nationwide (Kuruvilla and Verma 2006).

Economic development and growth are conventionally measured through the GDP, that looks largely at what is produced in the economy. Mazzucato (2018) aptly recalls the debate on such narrow and numerical measurement and more importantly, creation of value in the economy. She points out that the economic debate on value has largely converged to getting the prices right but overlooked the history of economic thought on production and wealth distribution. She argues that regulations on environmental concerns, labor standards, poverty, should not just be supplements to policy-making. Instead these concerns should be at the core of measuring variables that are used to measure value today, such as the GDP, and consequently economic growth. To achieve this, it is even more important to reach an international consensus, such that countries who make adequate strides in environment, labor and similar regulations, are not discriminated against, in the global value-chain. Krugman (2011) points out that improvements in both environmental and labor conditions are instrumental to achieve sustainable development, whereby current economic development efforts are cognizant of resource availability and standard of living of future generations. However, Klugman (2011) and Dabla-Norris et al (2015) point out that both intergenerational as well as intragenerational concerns are important. This means that development efforts also need to be equitable, such that the current generation has nondiscriminatory access to available resources, alongside future generations. Therefore, the state must participate to tackle the development challenge to ensure improvements in human development and a better standard of living for current and future generations to achieve a sustainable development trajectory.

This thesis focused on the role of the state in integrating trade policies with broader goals of national economic development. It is evident from the case studies that trade policies should not be isolated from policies directed at product and factor market, financial market, human capital, technological progress and industrial organizational reform. Rather, it is useful to exercise parallel policies in different facets of the economy to support sustainable and equitable development. There are further policy areas, such as environmental degradation and labor standards that are increasingly compelling in the current global economy. These have largely been ignored in the policy mix used in the case studies as well as in international trade negotiations but have become key for the future of both developed and developing countries. These challenges now require the attention of policy-makers to ensure sustainability, equity and human development within the country and across the globe. This cannot be assured by market forces alone; they require concerted action both on the national and international level.

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Appendix

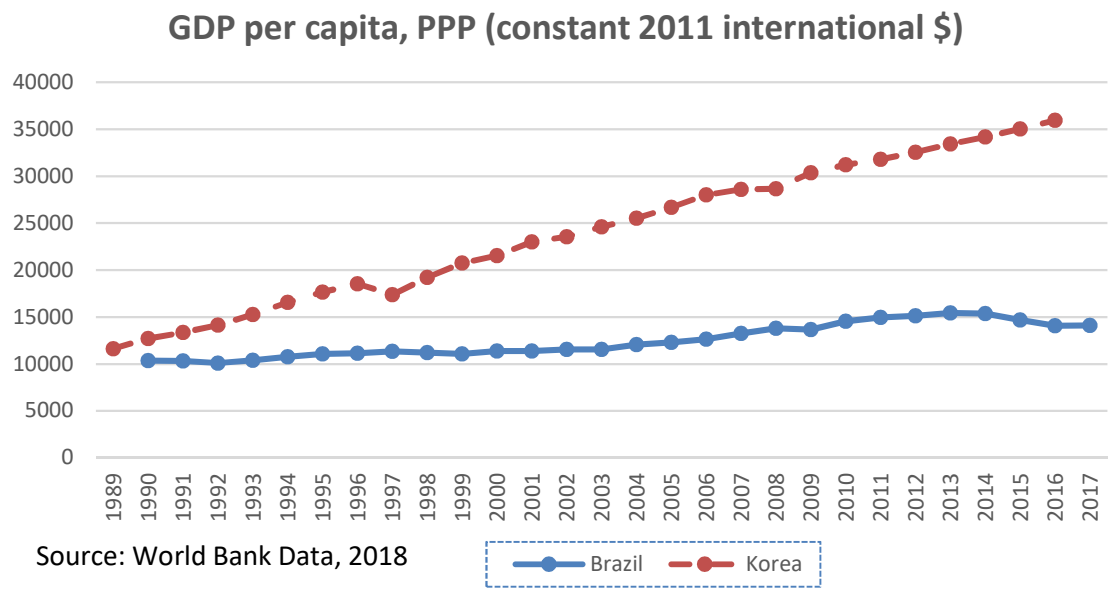

Figure 1: GDP per capita, PPP (constant 2011 international $)

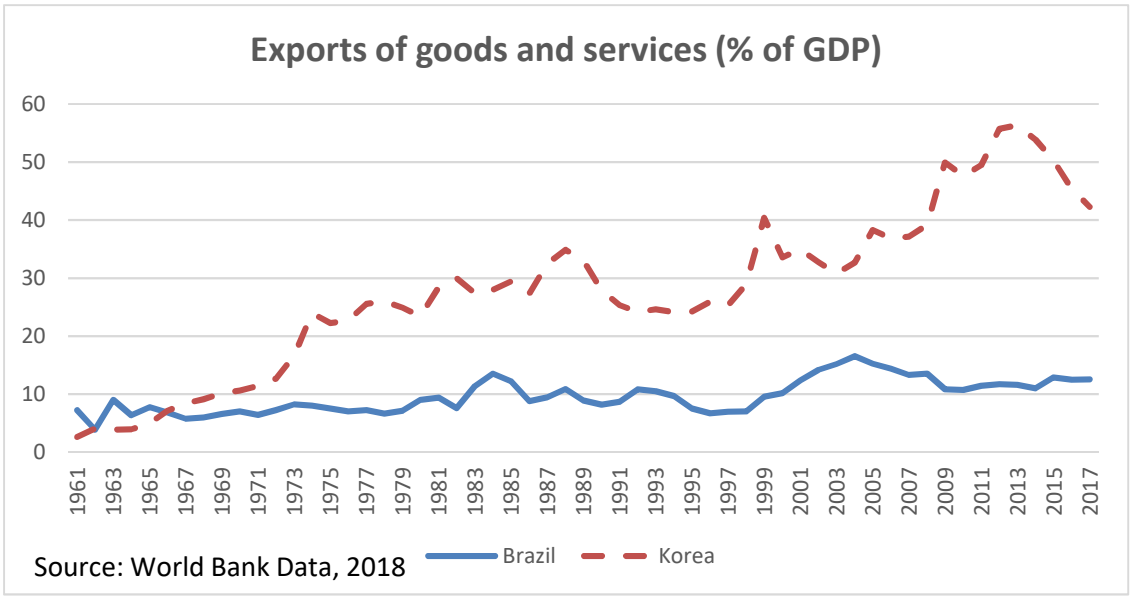

Figure 2: Exports of goods and services (% of GDP)

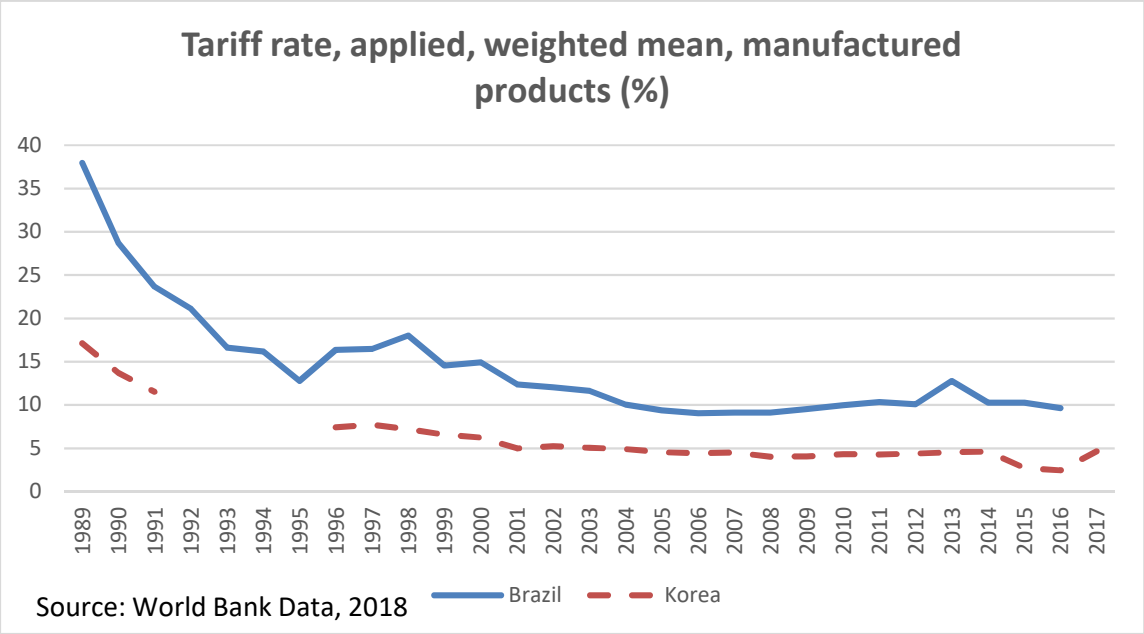

Figure 3: Tariff rate, applied, weighted mean, manufactured products (%)

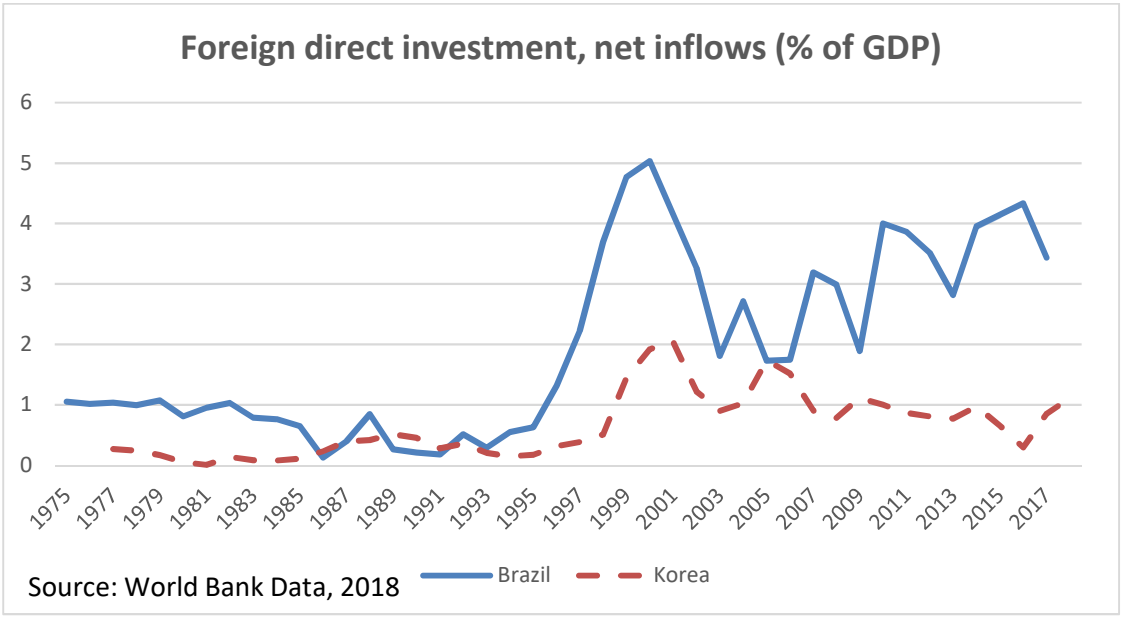

Figure 4: Foreign direct investment, net inflows (% of GDP)

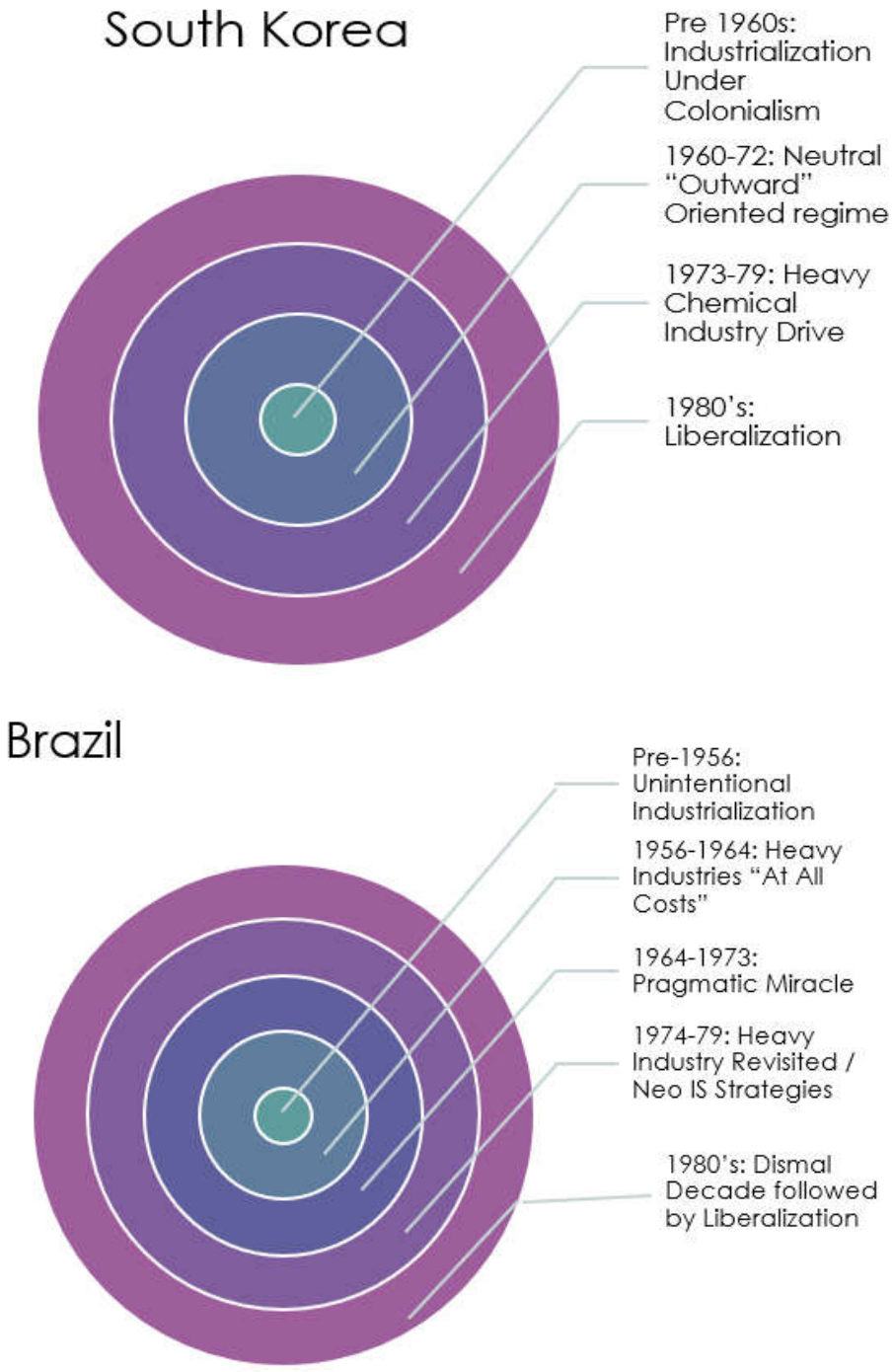

Figure 5: Trade Orientation, State Policies and Economic Development by Time Period