Finally Putting it Back into the Pockets of Brazil’s Bottom 50%: An analysis of the “Neo(Capital)” Flows on Income Inequality

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Finally Putting it Back into the Pockets of Brazil’s Bottom 50%: An analysis of the “Neo(Capital)” Flows on Income Inequality

Senior Project Submitted to
The Division of Social Studies
of Bard College

by
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Abstract

A common belief of the global community is that Income inequality in Brazil has decreased. This paper analyses the composition of income inequality in Brazil through the effects of neoliberal policies on the relationship between capital flows and income inequality from the 1980s to 2015. The neoliberal policy that will be the focus of this paper, is the Washington Consensus which was introduced in the early 1990s. The historical analysis situates the Consensus in the context of Brazil. Hyman P. Minsky’s theory of financial instability applied to Brazil reveals the flaws within standard neoclassical trade theories underlying the Consensus, i.e. Stolper-Samuelson Theorem and the Factor Price Equalization Theorem. These standard theories provide further understanding of the relationships between income inequality and capital flows, capital controls and financial liberalization. Which can be applied and compared to the actual trajectory of income inequality after the Washington Consensus was introduced to Brazil. The effect of capital flows on income inequality in Brazil, was for the most part negative. High volumes of inflows contributed to economic recessions and crises in, exacerbating the income inequality that already exists. The result is the Middle 40 percent income shares are being squeezed out, from the increase in income of the Bottom 50 percent and the stagnation of the Top 10 percent. The decline in the inequality is derived from the movements of the Bottom 50 percent shares and the Top 10 percent shares which can be partially attributed to Brazil’s successful conditional cash transfer program, the Bolsa Família. A conclusion that comes from Minsky’s theory, a lesson posed as a counterfactual of the crises is, that capital flows should be regulated and there should be restrictions on the volume of inflows. The future for Brazil’s inequality is unknown. With the worst recession in history and without careful consideration of both domestic policies and those concerning trade, there is the possibility of a relapse in the progress made in the income distribution.

JEL codes: F6, G01, N36, N26, N76, O54,
Introduction

Prominently neoliberalism has been at the forefront of economic policies issued by developed countries and institutions. Neoclassical models are the underlying theories for policies instituted by developed countries onto the developing world. Neoclassical models have flaws that do not represent nor theorize how economies function in reality. In neoclassical models factors within the economy which have resulted in unfavorable results are considered by the model through the assumptions. One factor that is often either left in the assumptions or entirely unaddressed is income distribution and the effects policies have on income inequality. Globally, economists have seen an increasing trend of income inequality in most countries from the 1980s onwards. Exceptions to this trend are Brazil and the Latin American region, who have witnessed a reduction in income inequality from the 1990s to present. With the decreasing inequality, Brazil has received much scrutiny as to the mechanisms in the economy that have permitted the government to achieve this result.

Income inequality in Brazil remains a pervasive issue as its inequality is among the highest globally. Most of the literature that attends to income inequality focuses on the relationships between inequality and investment into human capital. This paper is an analysis of the largely negative effects of neoliberal driven capital flows have had on income inequality focusing on the trajectory from the 1980s debt crisis to as current as 2015.

The first chapter is a historical analysis of the macroeconomy of Brazil from the 1980s debt crisis to the end of President Dilma Rousseff’s impeachment. It situates the Washington Consensus in a historical context. The key principles of the Washington Consensus have had a direct, negative effect on income inequality. They promoted a high volume of capital inflows and
the result in Brazil’s economy becoming increasingly vulnerable to external shocks, i.e. contagion, spillover effects, capital flight, capital reversals. Brazil was especially vulnerable to capital flows in the recovery period following the debt crisis. There was a current account deficit and the capital flows continued to compound on the exorbitant amount of debt from the crisis. Economic stabilization was a result of the openness of the markets. The downside in the increased openness of the financial markets was that there were increased possibilities for negative effects from external factors. Eventually, Brazil managed to sustain a decade of economic growth and stability which was interrupted by the Global Financial Crisis. The policies that were enforced in the aftermath of the crisis, consequently resulted in a lasting recession in Brazil.

The effects of the Washington Consensus have altered the trajectory of Brazil’s development and inequality, and shaped domestic policies. The consequences have carried through the decade of crises in the emerging market economies, the 1994 Real Plan, the decade of economic growth and stability, to the global financial crisis and the subsequent period afterwards.

The second chapter includes the two main neoclassical theories that are the basis for trade economics and policies. The Stolper-Samuelson Theorem and the Factor-Price Equalization Theorem are neoclassical theories that were the basis for the Washington Consensus and are continually used to validate trade agreements. Both theorems prioritize economic development assuming that the Solow growth model will hold true in each instance. The Solow growth model claims that in the general trajectory of development, income inequality increases to a point, which is the peak. Generally, it exists in the transition from middle income status to high income. Once a country crosses the threshold of development into high income, then inequality should
continue to fall until it is no longer an issue. The issue is that these theories promoted the reintegration of Brazil into the global capital markets to allow for the state to repay its original debt. This resulted in the government only compounding its debt.

Hyman P. Minsky, a heterodox economist, constructed a theory of Financial Fragility which has managed to predict and explain the crises within the last 35 years. His theory, applied to the global context, is set to juxtapose the neoclassical theories as an alternative that could have predicted the crises in Latin America and the emerging market economies based on the economic conditions leading up to the crises. Basically, with the increasingly high volume of capital inflows into Brazil as a method of recovery from the crisis, the economy became increasingly vulnerable to negative shocks. The negative shocks can manifest in the domestic or the foreign markets. Because Brazil’s debt was high, their reintegration into the global capital markets allowed for the country to compound on their debt from the previous crisis. There was also a current account deficit that too was carried over. To continue to borrow in the capital market, firms in Brazil gradually transitioned from low-risk and medium-risk firms to medium and high-risk borrowing firms. Eventually, the consequences of the unsustainable debt have been the crisis in the 1980s in Latin America, then thereafter the subsequent crises in the emerging market economies in throughout the 1990s and the Global Financial Crisis of 2007-8.

The third chapter is a case study of Brazil. It includes an analysis of the common belief that throughout the late 1990s into the early 2000s, Brazil reduced its income inequality. Its income inequality has been among the highest, if not the highest in the world. It was viewed as remarkable because in this period, income inequalities in most countries increased. Brazil was the exception along with countries in Latin America. This paper uses the theorized relationships between capital flows, financial liberalization and capital controls against income inequality and
applying the results to Brazil. The Stolper-Samuelson Theorem and the Factor-Price Equalization Theorem contribute to the construction of the generalized relationships that are then applied to Brazil’s history. To further demonstrate the effects of the aspects of capital flows listed above, Marc Morgan’s analysis of the trajectory of income inequality using pre-tax income shares in the period of 2001-2015 is utilized.

Morgan’s research illustrates the trajectory of the income shares in Brazil, and it is apparent that although the income inequality has reduced, it has been widely overestimated. Throughout this period, the top income shares have remained relatively stagnant, neither gaining nor losing income. The Bottom 50 percent income shares have increased throughout this period at the expense of the Middle 40 percent income shares. This is where it is evident that there has been a decline in income inequality, but the reduction is derived from the decline between the bottom shares and the top shares.

The relationship that capital flows have with income inequality, specifically in Brazil is in the past, is negative. From the 1970s, Brazil has been considered an emerging market economy. It is a developing economy that in the past decade has experienced positive and steady economic growth and relatively high interest rates. Because of these factors, Brazil has attracted high volumes of capital flows in the form of foreign direct investments and portfolio investments.

The aftermath of the debt crisis brought with it the Washington Consensus which promoted reintegration of Brazil back into the global capital market, which proved to be more harmful for the country while in a period of recovery. It can be said that either way, eventually, the high influx of capital flows into the economy have led to recessions and crises. In periods of crisis and a contraction in the economy, capital flows only exacerbate the income inequality. In
expansionary periods, capital flows are beneficial, they promote domestic investment which triggers economic growth and development. They also increase the vulnerability of the economy, especially in economies which have to some degree financially liberalized. This is the case for Brazil, capital flows have proven to be partially beneficial especially in periods of economic growth. But the neoliberal policies that are prominent are not conducive to the stability of the economy with capital flows.
Chapter 1

Introduction

In a period that spans from the 1980s to as current as 2015, the trajectory of Brazil’s economy has been tumultuous. By the 1970s, Brazil was considered an emerging market economy with a promising developmental path and strong economic growth. Brazil’s income inequality was one of the highest. Economic development and growth would provide the Brazilian government with the capital to counteract the inequality with policies that would target the middle and low income shares. In the span of 35 years, Brazil’s trajectory has adjusted with years of crises responding to the neoliberal policies. Although the neoliberal policies provided capital investments into the economy, there were repercussion of the capital flows which were not entirely beneficial for the income distribution. This chapter is a historical analysis of the past four decades of Brazil with the purpose of providing context for the succeeding chapters that situates the specifics of capital flows and income inequality within a period of time.

1.1. 1980s Debt Crisis

Developing countries characteristically adopt Import-Substitution Industrialization (ISI) to stimulate economic growth that is induced by domestic industrialization as a form of self-reliance and a step towards economic development. The issue with Latin America’s application of ISI was that while enabling domestic industrialization, there is this heavy reliance from the economy on self-industrialization to provide the commodities that would normally be imported. This in turn caused a deficit in the current account balance and an increasing debt problem (Kregel, 2008 p. 3). For Latin America to fund the asymmetry in trade they needed to borrow to
maintain the funding of industrialization in combination with the capital for the remaining imports and to produce exports that were being brought into the region. Developed countries like the United States were the main shareholders of Latin America’s debt.

ISI was working well in Latin America’s favor in the 1970s, they were introducing new industries into the domestic economies simultaneously while maintaining steady, if not increasing economic growth. This prosperous period was short-lived. In 1979, the United States’ chairman of the Federal Reserve, Paul Volcker announced policy measures that would combat the rising inflation in the United States for the last decade. Of Volcker’s proposed policy measures, raising the interest rate was going to directly impact Latin America the most because the United State and other developed countries held a large proportion of their foreign debt. Increasing the interest rate for Latin America would increase the amount of interest and ultimately the total amount for their debt repayment. The increase in the interest rates in combination with Latin America’s floating exchange rate, as a response to the collapse of the Bretton-Woods System and the energy crisis of the 1970s, led to the overall crumbling of Latin America’s balance of payments. The Bretton-Woods System provided the developing countries of Latin America with the means to maintain their financial imbalances that came about from the private capital inflows which were a necessity for sustaining ISI. In this, Latin America was able to avoid adjustment with private capital flows in combination with large external deficits and currency appreciation (Kregel, 2008* p. 7), which was a large component in the issues of Latin America’s debt.

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1 The mentioned events preceding the 1980’s debt crisis will not be further elaborated due to the material being beyond the scope of this paper.
The theoretical limit for Latin America’s maintenance of their financial imbalances came about through Evsey Domar’s 1950\(^2\) analysis researching the conditions necessary for financial imbalance sustainability. Kregel equates the economic conditions during this period to conditions in which a Ponzi financial unit can exist. Latin America was continuously purchasing foreign exchange reserves with the full awareness of their inability to repay the principle and the interest amount. This was to finance their domestic industrialization which ended up contributing to their piling debt. In combination with the other factors of the Bretton-Woods System’s collapse, the 1970s petroleum crisis and the United States increasing their interest rates ultimately led to Latin America’s debt crisis.

1.2 The Brady Plan and the Washington Consensus

Mexico was the first to make the global economy aware of its insolvency closely followed by Argentina, which resulted in a full-blown debt crisis by 1983 (Roett, 1985). In response to Latin America’s announcements of insolvency, the US, the Federal Reserve and the IMF put into action the Brady Plan in 1982 which was the beginnings of the better-known Washington Consensus (Kregel, 2008 p. 542).

1.2.1 The Brady Plan

The Brady Plan had three conditions that would bring the region back into the international capital markets and expand the role of the market in economic decision making (Kregel, 2008 p. 542). The two objectives mentioned above were contingent on “1) debt relief in exchange for assurance of collectability in principle and interest collateral 2) debt relief linked to

\(^2\) Refer to Domar (1950).
an assurance of economic reform 3) the resulting debt would be more tradable, allowing for creditors to diversify risk more widely through financial and investment community” (“The Brady Plan”, 2009).

1.2.2 The Washington Consensus

The Brady Plan gave way for the Washington Consensus which codified the general objectives the Brady Plan laid out (Kregel, 2008 p. 542). It was a continuation that expanded on policies and reforms. Washington and the Federal Reserve chair, John Williamson believed that it was the key to successfully overcoming the current crisis and were preventative measures in avoiding future crises. Further, the Washington Consensus detailed a list of ten principles that gave developed economies access to exploit Latin America’s resources. Of the ten principles of the Consensus, included was decreasing government spending in hopes to alleviate the overwhelming nature of the budget deficits that were abundant in the region, tax reforms, public investments and reallocation of the public investment, market deregulation and liberalization, privatization, competitive exchange rates, decreasing inflation, financial reforms, further integration into the foreign capital markets, and instituting the protection of property rights (Berr, Combornous, 2007 p. 527 & 528). Ultimately, the adoption of these policies was in the hopes that these economies would once again attract capital flows and “attack” the “non-debt” flows, speeding up the economic recovery and debt relief (Cornford, Kregel, 1996 p. 13). This included decreasing/eliminating the inflation rate and increasing the attractiveness of Latin America to capital flows to repay their uncontrollable debt. The Brady Plan was successful in attracting capital inflows, but what remained was high inflation, hyperinflation in many Latin American countries, especially Brazil.
Contrary to neoclassical belief, the years of liberalization and reform negatively impacted income inequality and poverty in Brazil. Paul Krugman cites a study of Miguel Szekely’s (2001) which provided evidence that there was a positive correlation between inequality and the progress, or lack thereof in reducing poverty (Krugman, 2008).

1.3 Stabilization in the Real Plan

In the intermediary years from the Washington Consensus to 1999, Brazil set about enacting a stabilization policy as an extension of the Brady Plan. In 1994 Brazil’s stabilization plan, the Real Plan (Plano Real) was executed (Kregel, 2000 p. 1). It benefitted from the post-Brady Plan economy which had accomplished liberalization, the renewed influx of capital flows, an obsession from developed countries to diversify their portfolios, and “the exploitation of excess returns in emerging markets” (Kregel, 2000 p. 4). The goals of the Real Plan were to eliminate the indexing of wages and prices, and to use the nominal exchange rate as an anchor for stability (Kregel, 2000 p. 4). The state planned to use the nominal exchange rate as an anchor to eliminate the inertial inflation as a stabilization method after the volatility of the previous decade.

The Real Plan was a successful domestic policy achieving a rapid decline in the domestic inflation rate from the currency appreciation, of almost 15 percent (Kregel, 2000 p. 4). It reinforced the return of net capital inflows. This was trademarked as a success of economic improvement for Brazil. Investors were assured of the reliability and high yielding returns with the high interest rate, reinforcing the volume of capital inflows. After the Bretton-Woods exchange rate regime collapsed, Brazil took on a floating exchange rate. As a condition of the Real Plan, the state switched over to a fixed exchange rate regime that would maintain
“competitiveness by putting pressure on the domestic producers from foreign imports” (Kregel, 2000 p. 4). The use of the fixed exchange rate acted more as a stimulant to international trade providing stability for domestic firms. This resulted in negatively affecting domestic producers who were unable to adjust their costs accordingly, with the Real’s appreciation and the pressures from global imports. The result was the resurfacing of the imbalance in the balance of payments but within the neoliberal, liberalized trade context.

The conditions of the Washington Consensus were meant as a stabilizer for crises of a similar nature through neoliberal economic structures. Therefore, the unsustainable balance of payments that the Real Plan saw should have been eliminated as proposed in neoclassical theories. The capital inflows that accompanied the imbalance of payments influenced fiscal conditions. In response to the inflation from the Real Plan, Brazil’s Central Bank enlisted a sterilization to protect the monetary policy. The sterilization policy required the transaction of selling domestic bonds in exchange for foreign exchange reserves that were reinvested at a low foreign interest rate, leading to a situation where the cost outweighed the returns (Kregel, 2000 p. 6). The negative effect of the reinvestment, simultaneously with the decrease in inflation rate, reinforced the deterioration of Brazil’s “fiscal position” (Kregel, 2000 p. 4). The decreased position of the inflation rate produced an increase in real expenditure which was apparent in the increase in household incomes. The currency appreciation forced the prices to decline rapidly, resulting in the prices of liberalized imports to fall (Kregel, 2000 p. 11). The decrease in prices of imports that had been liberalized and the increase in real incomes and household incomes resulted in a consumption boom of liberalized imports. The Real Plan was not entirely successful. The rapid decline in inflation was accomplished, but the means to accomplish this reinforced the deterioration of the current account through the Central Bank’s sterilization policy.
and the heavy reliance on high interest rates, ultimately leading to the exchange rate crisis in 1999 (Kregel, 2000 p. 11).

Although there were aspects of Brazil’s Real Plan that were economically unsuccessful, it was able to encourage domestic growth, tackling the high income inequality. The macroeconomic stabilization that was essential to policies that the state enforced promoted a rapid increase in income growth of the poor (Clements, 1997 p. 46). Therefore, inequality within poverty decreased. The Monthly Employment Survey (1996) provides evidence that in the period between 1994 and 1995, the incomes of the Bottom 50 percent increased while the top percent shares increased at a much slower rate of 10 percent. During the same period, the poverty rate decreased from 30.4 percent to 20.6 percent (Clements, 1997 p. 46). The decline in the poverty rate decreased the gap in poverty and showed a decrease in the disparity in income amongst the bottom incomes.

1.4 Emerging Market Crises of the late 1990s

In a span of a decade following the Consensus’ years, several developing economies collapsed in a set of financial crises that were not altogether unrelated. Which began in 1994 with Mexico’s Tequila Crisis. From there in a quick succession the East Asian countries in 1997, Russia 1998, Brazil 1999, and Argentina in 2001 (Kregel, 2008* p. 9). The rapid timeline of these crises was not a coincidence, they were ultimately a resolution of sorts. Collectively, with sharp capital flow reversals, these financial crises were a default form of domestic policy adjustment related to the policies of the Washington Consensus (Kregel, 2008* p. 7).
1.4.1 Capital Flow Reversals

The crises that followed were the result of failings of the generality of the neoliberal policies that came with the Washington Consensus. According to Kregel, these crises were ultimately a result of a need for domestic adjustment that they all had managed to evade through careful use of their domestic policies. The Washington Consensus reintroduced the developing countries into the global capital market. The results were that capital flows were made abundantly available to countries. Latin American countries were once again permitted to continue their accumulation of debt compounded onto the pre-existing debt leftover from the crisis and the debt repayment plans that were a result. In brief periods of distorted conditions of recovery, Latin American countries accumulated not only more loans, but foreign direct investments and foreign exchange reserves. These reserves were not in their domestic currencies, but in stronger currencies, i.e. United States Dollar, British Pound, Euro. Figure 1 in the Appendix\(^3\) provides evidence of Brazil accumulating reserves beginning in the early 1990s.

As the Latin American economies again began showing signs of trouble investors’ fears of another crisis increased. During this period of liberalization and reforms, markets were extremely vulnerable to negative external shocks and with the possibility of trouble, investors were moving their capital out of the country and into safer portfolios. After realizing that the foreign exchange reserves were not beneficial for their currencies from the influx of capital moving out of the economy and debt continuing to accumulate at alarming rates, the governments sold their foreign exchange reserves. They, they completed the cycles of capital flow reversals. Capital flow reversals from speculation are what ultimately led to the financial crises that occurred in the succeeding years.

\(^3\) All succeeding figures will be located in the Appendix.
1.4.2 *Tequila Crisis*

In 1994 Mexico experienced an exchange rate crisis that emerged from the Peso. After the Bretton-Woods system’s collapse, Mexico adopted a pegged exchange rate (Edwards, 1999 p. 3) in the hopes that it would help to maintain economic stability and international trade in exports to increase Mexico’s stock of international reserves (Kregel, 2000 p. 6). In Mexico’s case, the pegged system was used to “guide disinflation and to maintain macroeconomic stability” (Edwards, 1999 p. 4) needed during the period of recovery. The main problem that economists have with exchange rate-stabilization programs is that the inflation tends towards a significant degree of inertial inflation (Edwards, 1999 p. 4), like what Brazil was attempting to combat in the form of the Real Plan. Like before the Real Plan, domestic prices and wages increased leading to a decrease in the competitiveness of exports, generating into an overvaluation of the real exchange rate (Edwards, 1999 p. 4). Edwards cites Rudiger Dornbush’s remarks on Mexico’s crisis. He adds that the real appreciation was with a large current account deficit and a decrease in the rate of exports. To eventually re-stabilize the economy, a currency devaluation was necessary (Edwards, 1999 p. 4) along with appropriate monetary and fiscal policy that combats the other conditions that arise with the reaction to the negative external shocks. Before the 1994 crisis, the current account deficit was in part exacerbated by the Brady Plan’s purpose of reintegrating Latin America back into the global capital markets. This had decreased the competitiveness of exports Mexico had experienced prior. To attract foreign investment and capital inflows back into the country in 1994, the Mexican government and financial institutions issued “dollar-linked securities – the infamous Tesobonos” along with increasing the interest rate and appreciating the exchange rate. By the second half of the year, investments were being pulled out of the country resulting in speculation by the residents who
moved large funds out of the country (Edwards, 1999 p. 13) eventually leading to and exacerbating a crisis. This is an example of capital flow reversals, another instance is what happened in East Asian countries.

1.4.3 East Asian Crisis

The East Asian crisis in 1997 came as a shock to economists around the world. Preceding the crisis, the East Asian countries were formally dubbed as the “Miracle” considering the magnitude of their steadily increasing economic growth and the overall success of the economy. Instead of utilizing ISI as a policy to stabilize the country while industrializing, the East Asian countries adopted export-substitution industrialization to accomplish the same goals, which might be a reason for their “miracle” growth.

Up to the crisis, large volumes of capital were being flooded into Asia. The crisis was initiated with the Thai government devaluing their currency, the Baht. In the preceding period, Korea and the other Asian countries were experiencing troubles within their government and financial institutions. With the Thai Baht’s devaluation investors fled to other regions with the guarantee of higher returns which led to Asian countries’ currencies to fall and a capital reversal, spiraling the economies into contractions (Radelet, Sachs, 1998 p. 2). The crisis spread to the economically stronger East Asian countries during the transition towards financial liberalization and reform (Radelet, Sachs, 1998 p. 5). Both were conditions of the Washington Consensus that the neoclassical economists used to open the markets to international trade. In the East Asian Crisis, vulnerability of the market to negative shocks was apparent in the magnitude of the crisis and the fact of its initial unpredictability.
1.4.4 Soviet Union Crisis

Almost in quick succession, crises in the Soviet Union, Brazil, and Argentina hit the global market, affecting the overall stability of the global economy. The crisis in 1998 was a direct result of the economic and political actions after the fall of the Soviet Union. Following the Soviet Union’s collapse, the state enacted economic and structural reform. Including policies like privatization and macroeconomic stabilization practices that were popular among neoclassical economics were applied to Latin America (Chiodo, Owayang, 2002 p. 9). The crisis hit the economy as it was showing signs of positive economic growth. The Russian Central Bank established exchange rate controls and there was a visible shift in the balance of payments towards an equalization of imports and exports. Output was recovering, oil prices, their main export, were increasing and the state was in negotiations to repay its sovereign debt (Chiodo, Owayang, 2002 p. 9).

A year before the crisis in Russia, the East Asian crisis ensued resulting in speculatory flows of the Ruble making it vulnerable to negative external shocks (Chiodo, Owayang, 2002 p. 16), requiring the state to sell U.S. foreign exchange reserves to protect the currency. Simultaneously while speculation was surrounding the Russian Ruble, holders of short-term government bills (GKOs) signed contracts to exchange GKOs with foreign currency, expecting the Ruble to lose value (Chiodo, Owayang, 2002 p. 12). Combination of media speculation, shocks to oil prices, and debt all led to investors selling Russian bonds and securities (Chiodo, Owayang, 2002 p. 14) who were wary of the Russian economy’s stability and the political atmosphere. The capital flow reversal was due to expectations and speculations, eventually led to the Russian Federation’s stock market crash in 1998. The contagion eventually reached Brazil in 1999.
1.4.5 *Brazilian Crisis*

In 1999, Brazil was hit with another crisis. This time instead of primarily a balance of payments crisis, it was a currency crisis. It involved the unsolved debt deficit issues, the exchange rate and an official devaluation, the inflation rate and how all those factors affected capital flows in Brazil. A main objective of the Real Plan was to gain control over the domestic inflation rate in relation to the United States’ inflation (Gruben, Welch, 2001 p. 13). This remained to be an unsolved issue that the Brazilian state was grappling with along with the debt that had been compounding since the crisis in the 1980s. Brazil’s debt led to a fiscal deficit that was the remainder of the current account imbalance debt. Because Brazil was continuing to accumulate debt and the reminder of its history of debt default, investors were wary of the stability of the economy. Which translated into high interest rates resulting in “large interest payment portions of the deficit” (Gruben, Welch, 2001 p. 14). The interest rates were already high with the Real Plan policies that responded to the recent crises in Mexico, Asia, and Russia. Brazil further increased the interest rates (Gruben, Welch, 2001 p. 15) to protect their exchange rate from the capital flows that were abundant in the country.

After the 1998 Russian crisis, investors viewed the rise in the interest rate in a speculative manner. This increased the suspicion of the viability of the stabilization efforts (Gruben, Welch, 2001 p. 15) and increased the fiscal deficit interest rate payments, causing further suspicion of the sustainability of the debt. The “breaking point” which can be argued, ultimately led to the devaluation of the Real, was the announcement of the suspension debt payments to the Brazilian government by Governor Itamar Franco (Gruben, Welch, 2001 p. 15). Franco’s announcement was a realization of the fears that investors, economists, and politicians had concerning Brazil’s debt sustainability. It eventually resulted in the devaluation of the Brazilian Real and an increase
in the rate of capital outflows by capital flight (Gruben, Welch, 2001 p. 21). Contagion from Brazil’s crisis spread easily through Latin America and impacted the initial stages of the crisis in Argentina.

1.4.6 Argentinian Crisis

The Argentinian crisis in 2001 was the final crisis that marked the ending of a decade of emerging market crises brought about by capital flow reversals and effects of contagion. Recovery from the 1980s debt crisis in Latin America was hindered by the effects of the crises that occurred in rapid succession from 1994 to 1999. Negative shocks that affected Argentina came primarily from Russia’s default and Brazil’s devaluation, one in the accessibility of the market and the other in the competitiveness of foreign currency. Both simultaneously forcing the country into a recession that would last through to 2002 (Setser, Gelpern, 2006 p. 467). With the lengthy recession the country was experiencing, investors lost interest in the government bonds (Setser, Gelpern, 2006 p. 467). In response to the loss in investiture, the government turned to the IMF for aid. Argentina and the IMF had a long-standing relationship that proved to be prosperous for the country in the recovery from the 1980s debt crisis (Setser, Gelpern, 2006 p. 471). The IMF’s stabilization policies that were implemented by Argentina were highly successful, incentivizing flocks of investment into the country. The loss of investor’s interest in government bonds saw a capital flow reversal, instead of investment flowing into the country, capital was flowing out with the domestic debt continuing to accumulate at highly unsustainable rates. The call for the IMF for help was temporarily successful in improving the market’s credibility with the public, but it was short lived. After exhausting the resources of the IMF, domestic and foreign banks, the Argentinian government “unilaterally restructured its domestic
debt and defaulted on its external bonds at the end of 2001” (Setser, Gelpern, 2006 p. 467). The default on its external bonds broke the credibility of the market once again and in response there were a series of domestic banks runs which left domestic, private and public debt to be restructured (Setser, Gelpern, 2006 p. 467). In this mess, the government was forced to default on domestic debt, devalue their Peso, abandon convertibility of their assets, Pesification⁴, and restructure their debts. Capital flow reversals are the faults of the Washington Consensus with the policies that forcibly promoted trade liberalization and financial reforms, leaving the economies more vulnerable to negative shocks.

1.5 21st Century

The crisis in Argentina marked the conclusion to the 20th century and the control of neoliberalism that wrecked Latin America. The commencement of the 21st century with Latin America, especially Brazil, asserted itself in the policies that will define the future of the economy. The Washington Consensus was implemented in various states and fashions throughout Latin America until 2003. Because the Consensus was applied with Asian Miracle-like stability in mind, and not tailored specifically towards the separate economies, the Consensus was an obvious fail. By the end of the Consensus years, the Latin American countries were cognizant of the impact of the forced policies favoring the developed OECD countries that created them. Elections swung towards political leaders to the left who criticized the consensus (Edwards, 2008 p. 130). They in turn forced out the involvement of those said OECD countries and their institutions in favor of the protection provided by their policies

⁴ Pesification: conversion of foreign debt to Peso denominations (Setser, Gelpern, 2006)
which were aimed at improving their own domestic economies. Policies that many of the Latin American countries adopted were intended to tackle social issues such as poverty. The reversal of several policies under the Consensus such as the “nationalization of industries, increased government controls and higher import tariffs” (Edwards, 2008 p. 131) became more apparent as the countries developed under the neoliberal regime. To combat the negative impact on the bottom income shares, Latin American countries employed welfare programs, i.e. conditional cash transfer programs. Brazil’s specific cash transfer program was the Bolsa Familia⁵.

1.5.1 Bolsa Familia

The Bolsa Familia has evolved from 1990s sub-national programs attacking poverty with Cardoso’s regime. In the late 1990s Brazil, like other Latin American countries, began to take notice of the depth of poverty that resulted the Washington Consensus. President ‘Lula’ was the main champion of the working class, he continued the initiatives that his predecessor President Cardoso created under the umbrella term Fome Zero, Zero Hunger (Hall, 2008 p. 803). There were four state-run programs under the Fome Zero⁶ that dealt with education, healthcare, child labor, and nutrition subsidies. By 2003, the Fome Zero had significantly expanded to dispensing nearly $500 million USD in grants to nearly the entirety of Brazil (Hall, 2008 p. 804). President ‘Lula’’s Fome Zero encouraged private domestic donors and international donors to expand the

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⁵ For further information on Latin American conditional cash transfer programs refer to, Rhinehart, McGuire, (2017); Soares, Ribas, Osório, (2010);
⁶ Hall (2008): Under the Fome Zero were the Bolsa Escola, Bolsa Alimentação, Auxílio Gas, and the PETI program (Programa de Erradicação do Trabalho Infantil), and later Cartão Alimentação. The Bolsa Escola was the largest of the four programs, granting mothers a monthly stipend provided that their children attended school 85 percent of the school year. The Bolsa Alimentação focused on maternal nutrition, PETI program protected against child labor, and the Auxílio Gas provided a stipend for gas. President ‘Lula’ added the Cartão Alimentação which dealt with electronic cards that permitted a subsidized purchase of certain products.
program’s wide-reach. The World Bank provided support to the program under the expectation that it would provide short-term relief and provisions that would improve the livelihoods of the impoverished as a foundation for development. Fome Zero’s deterioration was partially due to the fragmented implementation of the programs and political corruption that harkened back to past failed programs (Hall, 2008 p. 813).

In the wake of the corruption accusations, the Bolsa Família\(^7\) was created as a replacement, in name, for the politically corrupted Fome Zero. Under the Bolsa Família the four state-run welfare programs remained, with President ‘Lula’ increasing the benefits and merging the conditionalities (Hall, 2008 p. 805). The Bolsa Família prospered with restructuring and centralizing the infrastructure, it targeted the “poor” and the “very poor”\(^8\). Extremely impoverished households were automatically guaranteed a flat monthly payment regardless of the household distribution (Hall, 2008 p. 805). International support was extremely forthcoming following the restructuring of the public safety-net programs. In 2004 both the World Bank and the International Development Bank committed to loaning almost a quarter of the funding for President ‘Lula’s first term (Hall, 2008 p. 804).

The World Bank considers the Bolsa Família the most successful and targeted cash conditional program with wide-spread programs that include, for the first time in Brazil, groups that would not normally qualify under social safety-net programs, i.e. indigenous, homeless and the quilombola\(^9\). Its attributed success in covering the poorest 20 percent with 73 percent of the benefits (Hall, 2008 p. 807) is partially owed to the inherent nature of the program, which is

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7 Under both the Bolsa Escola and the Bolsa Família, the provisions provided mothers stipends for education, health care, and nutrition.

8 Hall (2008): The Brazilian government classifies poor as earnings of about $73 USD (R 60.1 – R 120) and very poor as earning monthly about $36 USD (R 60), as of 2008.

9 According to Hall (2008), dwellings of groups of runaway slaves.
increasing household incomes with monthly stipends. The World Bank released an extensive baseline study of the Bolsa Família, supporting evidence of the benefits with a “3.6 percent increase in school attendance and lower drop-out rates of beneficiaries” (Hall, 2008 p. 808). The Bolsa Familia has been effective in providing financial support for the impoverished percentage of the population and investing into the improvement of Brazil’s human capital during a period when urban unemployment has risen. The program has also managed to play a key role in the reduction of absolute poverty and inequality, with urban pensions and other welfare programs significantly contributing to the reduction in inequality (Hall, 2008 p. 809).

The Bolsa Família, like other conditional cash transfer programs are fairly effective in the short-run, but critics of the programs are wary of the medium and long-run effects\textsuperscript{10} which are speculative. Criticisms of the Bolsa Família exist both from the international community and from within Brazil in the overall efforts of the program and the specific conditionality of it. On the internal level, Brazilians that oppose the program either oppose it because they believe that the money that is being used to fund it is better invested into the outdated educational system and infrastructures (Highfill, 2016). Or it is heavily opposed by the typically conservative led southern states who claim it is a way for the more liberal Worker’s Party to buy votes from the poor. Criticisms from the international community include concerns of possibilities of it fostering a sense of dependency on the government and it discouraging the search for formal employment (Highfill, 2016). The issue of dependency is one that developed countries have with foreign aid as well. Because the government is providing the extremely poor with a flat rate monthly stipend based on income, economists believe that there is the possibility that dependency on the stipend can become an issue.

\textsuperscript{10} For further information on the critiques of the Bolsa Família, refer to Hall (2008).
Critics of the specific requirements of the program include development economists. Development economists are not necessarily against the Bolsa Família, but there is a debate as to whether a cash transfer program should be unconditional or tied to certain requirements (Highfill, 2016). If the program was based on unconditionality, some economists believe that the participants would use the money to fulfill their exact needs. The contrasting argument is that the “nudges” from aid organizations or the government typically are useful in that they overcome possible issues that are result of the poor’s lack of access to information (Highfill, 2016).

The possibility arises for criticism when there are specific issues within the actual construction and implementation of the program. Firstly, there is criticisms that the Bolsa Família is too narrow with its focus. Typical of cash transfer programs in Latin America, they target children of school age. The government ignores the fact that capital accumulation for children takes years to develop (Handa, Davis, 2006 p. 517) all the while ignoring the benefits of extending the program to adults above schooling age. The benefits of extending the program to reach adults past schooling age would be that the “accumulation of productive capital for the here and now that is, capital, such as land or non-agricultural assets, would have both long- and short-term effects on poverty alleviation” (Handa, Davis, 2006 p. 514). The objective of the Bolsa Família is poverty alleviation, by extending the reach of who is covered under the cash transfer, it would sustain the “impact of the cash transfer, which cannot continue indefinitely” (Handa, Davis, 2006 p. 518). Advocates believe that because the cash transfer program cannot cover participants past the medium term due to unsustainability and financing, including adults would extend the development of human capital. Secondly, for the poor, the Bolsa Família has a cap on the amount a family receives based on the number of school aged children. Concerns are that there are possibilities that this could lead to perverse incentives to have more children for a
larger stipend (Handa, Davis, 2006 p. 521). This is especially applicable to the Bolsa Família because the implementation of the cash transfers are done by the municipalities. Who according to Handa and Davis, are haphazard at best and at the lower level are susceptible to corruption via beneficiary manipulation and measurement errors (2006 p. 523).

Although the Bolsa Família was significantly successful enough in Brazil that it attracted international and OECD institution attentions with its poverty alleviating results and wide-reaching programs, there remain to be significant criticisms of it. President Lula’s administration was integral in constructing another program that would solve several of the issues that were mentioned above.

1.5.2 Growth Acceleration Plan (PAC)

Another program that President Lula headed was a growth acceleration plan, otherwise known as PAC. PAC was targeted at public infrastructure in areas that had a predominantly poor population. Through investment in “building or rebuilding new homes and roads, and improving sanitation, sewage, water, and electrical services” (Carrasco, Williams, 2012 p. 107), President Lula hoped to bolster the economy. Lula managed to provide employment to the local population and improve the poor infrastructures that perpetuated a pattern of exclusion. President Lula extended the project to PAC II which focused on preparing infrastructures for the hosting of both the World Cup and the Olympics which were followed on a global scale (Carrasco, Williams, 2012 p. 108). The goals of these programs were to improve the physical public infrastructure through the provisions of employment to boost the economy in poorer areas, improving the welfare of the community, therefore decreasing the poverty and income inequality.
1.5.3 Decade of Economic Growth

The decade of economic growth, as seen in Figure 2, that followed the recovery period in Brazil was vital to the decrease in the income inequality, measured by the GINI coefficient illustrated in Figure 3. Figure 2 shows that from 2002 to 2010, there was steady economic growth which supported development. Expansionary policy shows that with a decrease in taxes, there is an increase in the disposable income of domestic households which encourages those households to increase consumption, reinvesting capital back into the domestic economy. Domestic investment triggered economic growth which reassured investiture into the economy. That investment into the country can be used towards both the public or the private sector, as can be inferred from the success of the Bolsa Família, a portion of the investment went into the public sector, i.e. education, health care, social safety-net programs. During that same period, the income inequality (Figure 3) was steadily decreasing, which was a result of the economic growth and the Bolsa Família. Figure 2 shows that to about 2008, there was a steady increase in GDP in Brazil and then there is short period of stagnation, presented in a plateau, and then an increase once again until 2010. After 2011, GDP clearly declines. That period of stagnation was the effects of the global financial crisis affecting Brazil.

1.5.4 Global Financial Crisis

The spillover effects of the 2007-8 crisis, the Great Recession, were detrimental on a global scale. The collapse of the United States’ housing bubble and stock market affected economies that interacted in trade with the United States. Contrary to expectations, developed countries were affected more significantly than developing countries that were emerging economies like the BRIC (Brazil, Russia, India, China) countries. The impacts of the Great
Recession on Brazil were momentary. Consumption, exports, and investment declined which disturbed production, stagnating GDP (Arestis, Baltar, Prates, 2016 p. 158). GDP stagnation was brief from 2009 to 2010 (Carrasco, Williams, 2012 p. 104), which can be observed in Figure 2. According to Carrasco and Williams, Brazil’s strong economic performance was attributable to several factors of the economy (2012 p. 104). Brazilian banks had less exposure to the U.S.’s securities-backed market than other countries and they benefitted from the Central Bank acting as a “central regulator” (Carrasco, Williams, 2012 p. 104). Another policy that was extremely beneficial for Brazil was that the enforcement of via capital controls, later in 2010. The combination of these policies protected Brazilian Banks so that they would not have to finance large sums of capital for the bailouts that the U.S. had to do for several of its major corporations. Brazil also boasted a low rate of unemployment and a low dependence on international trade, specifically with developed countries (Carrasco, Williams, 2012 p. 104). President Lula’s focus was on diversifying Brazil’s consumer profile which expanded its trade with China. The increase in Chinese imports compensated for the decline in domestic consumption (Arestis, Baltar, Prates, 2016 p. 161) which was a direct result of the contagion from the Great Recession. Before the Great Recession, Brazil was experiencing an increase in consumption and a commodity boom (Cohen, 2013 p. 936) which was obviously affected by the global financial crisis, but Brazil’s counter-cyclical policy could readjust consumption to produce positive growth (Arestis, Baltar, Prates, 2016 p. 162). Although Brazil fared better than the United States at a faster recovery, it was not unscathed. The government nevertheless had to provide a stimulus package of 1.5 percent to boost the economy (Carrasco, Williams, 2012 p. 105).
In the period of Brazil’s recovery from the Great Recession, Brazil, like other Latin American countries\textsuperscript{11}, decided to go against the conventional decision of employing austerity measures for an extended period of time. The expansionary measures, for the most part, were beneficial for Brazil’s economy, once again attracting foreign investments into the country in the hopes for higher returns (Cohen, 2013 p. 931). The expansionary policies encouraged an increase in spending which, according to Cohen had a greater probability of maintaining aggregate demand and providing welfare programs and infrastructure on the micro level (2013 p. 931). The expansionary measures constrained the Brazilian government in performing actively, successful fiscal policy, so there was a need to supplement with monetary policy, protecting the currency from the possibility of appreciation (Cohen, 2013 p. 940). Although there was much success in the expansionary policies that were employed, Brazil’s exports, GDP, consumption, and investment were negatively affected in the aftermath.

International competition increased and Brazil’s manufactured exports were undercut by China’s cheaper exports, while Brazil’s primary exports to China increased, resulting in a diminishing rate of export growth (Arestis, Baltar, Prates, 2016 p. 161). Throughout this period of depreciating growth of exports, Brazil’s consumption of imports from China increased worsening the current account deficit (Arestis, Baltar, Prates, 2016 p. 161). On top of the deteriorating trade balance, investment, consumption, and economic growth decreased. With the macroeconomic growth at a decline, in Brazil, income inequality increased. Poverty increased and deepened resulting in the poor’s recovery rate much slower than the rich. Brazil’s economy did not dwell on the contagion results of the Great Recession for long, by President Dilma

\textsuperscript{11} For further information on the negative effects of the Great Recession on Argentina’s and Mexico’s recovery, refer to Cohen (2013).
Rouseff’s election macroeconomic growth was increasing and the unemployment and inflation were low, providing a clear starting point for President ‘Dilma’.

1.5.5 The 2010s

Immediately into her first term in 2010, President Dilma imposed currency controls on the Brazilian Real to defend against the influx of capital inflows in search of short-term gains (Cohen, 2013 p. 940). During her first term President Dilma’s main objective for the economy was to tackle a rising inflation rate while sustaining economic growth in the medium-run (“Dilma’s first big test,” 2011). The issue had been that the Real’s appreciation to uncomfortable levels for domestic manufacturers, had not tampered the steadily increasing inflation rate which was attributed to a low unemployment rate pushing the wages up resulting in an increase in the inflation rate (“Dilma’s first big test,” 2011). This was a complication for Dilma’s presidency because her predecessors, both President ‘Lula’ and President Cardoso, managed successful economic growth while tampering the high inflation rate. Using the central bank and the government’s fiscal policies to tighten controls on the economy President Dilma’s intentions were to slow down the economy. In 2011, the Central Bank’s role was a raising of its benchmark rate several times and to enforce new taxes on lending with stricter reserve requirements (“Dilma’s first big test,” 2011) to tamper down the expansionary efflux of lending. Dilma called for fiscal tightening due to the primary surplus increasing from tax revenues and the government spending at a significantly higher percentage than the previous year which has effected public investment negatively (“Dilma’s first big test,” 2011).

President Dilma was unsuccessful in sustaining economic growth in the medium-run during her first term, with growth averaging to only 2 percent at a time when the demand for
Brazil’s agricultural commodities has risen again (“Recession’s sharp bite,” 2015). The anemic economic growth of her first term and the government’s failed attempt at interventionist policy resulted in another recession for Brazil. Dilma’s “excessively loose monetary and fiscal policy, sapped confidence; investment dried up and inflation soared,” (“Recession’s sharp bite,” 2015) during her first term and GDP collapsed which can be seen in Figure 2. The collapse in the GDP cost at least 500,000 jobs (“Recession’s sharp bite,” 2015) and overall resulted in a demotion of Brazilian corporations by the S&P (“Recession’s sharp bite,” 2015) which was in accordance with worries for the economy and investments. Along with the poor performance of the market, the interest rate continued to increase for the public and private sector (“Recession’s sharp bite,” 2015) discouraging industry and job creation. An expansion of the economy and the weakened currency had provoked the inflation rate to increase to high levels (“Recession’s sharp bite,” 2015) which the government has been battling with contractionary interest rate increases. Figure 4 demonstrates the interest rate throughout this period. The interest rate is measured in the period of 1997-2016. Although it is apparent in figure 4 that its trend is decreasing, there is a sharp increase approximately beginning in 2013 in the initial years of the recession. Both of President Dilma’s presidencies have been shrouded in corruption accusations against her and other party members in charge of the public sector and social welfare programs, most recently Petrobras, the largest energy corporation in Brazil. Ms. Dilma Rousseff was impeached in late 2016 and formally replaced by interim President Michel Temer until the end of her original term in 2019. President Temer’s term has recent but he has announced his intentions for structural reforms and pro-business policies that will once again attract international investors, turning Brazil into a more open and globalized economy.
The medium-term and long-term effects of the political instability, combined with the recession, on poverty and income inequality from 2015 to currently are relatively unknown. But one can assume from trends that the recession in combination with the political corruption accusations and scandals that caused the impeachment had, was more significant than if either were independent occurrences. The recession has been believed to be the worst recession in Brazil’s history with the length of the recession and contractionary policies having a significant enough impact, deepening poverty to such an extent that it makes it more difficult for the impoverished to improve their conditions. President Tremer’s intended policies for increasing returns for foreign investments are shifting the country away from the political left like his predecessors President ‘Lula’ and President ‘Rouseff’ and back towards the right and neoliberalism with the possibility of the past mistakes returning.

Conclusion

Over the span of 35 years, Brazil has witnessed crises and neoliberalism at its “finest”. The consequence of the neoliberal policies which were responses to the crises in the 1980s have altered the trajectory of Brazil’s income inequality. The primary neoliberal policy enforced on Brazil throughout the 1990s through the 2000s was the Washington Consensus. The Washington Consensus promoted capital flows which triggered hyperinflation and continued to exacerbate the current account deficit. The high volume of inflows, which is illustrated in figure 5 in the international transactions of Brazil was detrimental and because of Brazil’s economy not at the capacity to recover from the Global Financial Crisis, Brazil’s economy is experiencing an extended recession which is foreseen to last for several years more. The trajectory of income inequality corresponded to the wellbeing of the economy. In the decade of economic strong
economic growth, the government had the resource capabilities to focus on policies to reduce the inequality. During the crisis and the subsequent years, income inequality has begun to rise once more as Brazil’s economy is unstable and is experiencing a recession. As was demonstrated in this chapter, there is a relationship between the neoliberal’s Washington Consensus and the corresponding capital flow and income inequality.
Chapter 2

Introduction

Neoliberal policies have dominated the political atmosphere since before the 1970s. In that, the policies that are being imposed by developed countries are neoliberal. Underlying the neoliberal policies are neoclassical theories that when put into practice, make apparent the flaws within the theories and the weak spots of an economy. The flaws of the neoliberal policies imposed on Brazil and Latin America without a forethought as to the impacts have proven to be detrimental and continuously more harmful for the economies. The main issue with neoliberal policies is that they are not specifically tailored to each economy in context, they are placed on all developing, emerging market economies without any specificity.

Further flaws will be identified using the Stolper-Samuelson Theorem (1941) and the Factor Price Equalization Theorem, both underlying theories for trade policies. To offer an alternative, in a counterfactualized manner, Hyman P. Minsky’s Theory of Financial Fragility will be explored and the application of it on the global context, specifically Brazil. Minsky’s theory offers a brief policy suggestion that could in the future have beneficial effects for economies negatively impacted by capital flows.

2.1 Flaws of Neoclassical Theories

Neoliberal agendas have been based on flawed theories in which the constructed models are not an accurate reflection of the “real world” economies meant to be represented. They illustrate unreliable depictions of relationships that occur within the global markets. In Lucas’ “Why Doesn’t Capital Flow from Rich to Poor Countries?” (1990) he claims that the main objective of “all postwar [neoclassical] development policies is to stimulate transfers of capital
goods from rich to poor countries”. In the article, he readily calls attention to the severe flaws that exist within neoclassical policies with the oversimplification of theories. They make assumptions which would rightly complicate the models to represent reality. He uses a standard framework of the Cobb-Douglass production function consisting of a two-country model. Where both countries are producing the same good, have the same constant returns to scale and the same production function with capital and labor outputs (Lucas, 1990 p. 92). The only difference is in the production of labor. There are different levels of capital per worker, the Law of Diminishing Returns implies that the marginal product of capital is higher in the less productive country (Lucas, 1990 p. 92). Further, this implies that if trade and capital goods are free and competitive, then new investments will occur in the poorer economy which will hold true until the ratio between wages and capital returns are equalized (Lucas, 1990 p. 92). Through a simplified mathematical analysis of the Cobb-Douglas production function using the framework above, Lucas concludes that the model is inherently inaccurate in its reflection and its assumption that markets are free and complete. If the model held true, then there would be evidence of more capital flows, specifically investment, flowing from developed countries to developing. While there are a large volume of capital flows to developing countries, there remains to be a large volume flowing to developed countries in the form of remittances from FDI and debt repayments. The purpose of Lucas’ article is to acknowledge the severe flaws within the typical neoclassical model.

2.1.1 Flaws of Neoclassical Theory in Relation to Capital Flows

These flaws that Lucas (1990) concentrates on are evident in the World Bank’s chapter, “International Capital Flows and Economic Growth”. As a contextual structure to provide
evidence, the World Bank reiterates the neoclassical belief that there is a positive relationship between capital flows and domestic investment. Figures 6 and 7 illustrate the relationship between the financial account which measures the total capital flows and total domestic investment. The reallocation of capital from industrial economies to developing can improve living standards by mobilizing global savings to finance investments in countries where the marginal productivity of investment is relatively high (Mishra, Mody, & Murshid, 2001 p. 60).

Beneficial reallocations of capital occur in FDIs and foreign investment. FDIs and bank lending are associated with an increase in investment. Foreign investment can be supplementary to domestic savings (Mishra, Mody, & Murshid, 2001 p. 60). The World Bank’s chapter focuses on the analysis of the relationship between capital flows into developing nations and the domestic investment using the neoclassical theory. It supports the argument that capital flows into a developing country is meant to bolster domestic investment, which in turn should boost economic growth. But, a clear fallacy in this, through evidence of what occurs in practice between global and domestic markets, is that capital flows may boost growth often through consumption. The chapter is broad in that it is not focused on a specific region of developing countries, but it’s findings can be recognized in Brazil during the 1990s, especially in the years immediately following the Washington Consensus and the Real Plan of 1994. Data has shown in the past that long-term private capital flows are strongly and positively related to domestic investment. Neoclassical theory insists that there is a positive relationship between developing countries and domestic investment. But the World Bank challenges that predetermined notion, stating that the relationship has weakened over time. It pinpoints the decade in which the relationship had weakened to the 1990s with the advocating and coercion for financial liberalization, an aspect of the Consensus (Mishra, Mody, & Murshid, 2001 p. 59). A comparison
of the data in both figures demonstrates a negative relationship between the capital flows and investment especially during 2000-2013.

In figure 6, capital flows increased and then steadily decreased from the mid-2000s onwards. In figure 7, domestic investment declined and from the mid-2000s onwards, rapidly increased, providing evidence that the relationship between the two factors is negative, at least in Brazil. Figure 8 provides a more holistic picture of the relationship between the capital flows and the domestic investment. Figure 9 illustrates the gross capital formation which is a measurement of the net savings rate. It is another way to gauge the relationship between domestic investments and capital flows. If the capital formation is positive, then households have a higher savings rate and they can use that capital to invest in the domestic economy. In Brazil, the savings rate is increasing up until 2012 when the savings rate steadily declines with the presumed recession.

The way in which the economy interacts with capital flows is based on the absorptive capacity of the economy, which affects the resulting productivity from the degree of impact of the capital. It may result in volatility/spillover into other countries. To better understand capital flows and how they function within the economy one must consider their impact on investment. According to Feldstein (1994), there is an ambiguity to that relationship in that capital inflows prospectively may increase domestic investment. The downside is that instead the capital will increase imports which will decrease domestic production and therefore investment (Mishra, Mody, & Murshid, 2001 p. 60). One must also consider the possibility of capital inflows inducing capital outflows which is what occurred in Brazil and Latin America during the crises in the 1980s and 1990s. The previously positive relationship between capital inflows and domestic investment is due to the pre-liberalized economies, where almost the entirety of domestic savings was invested into the domestic economy. It induced outflows which were not
significant enough to offset the inflows, therefore the aggregate domestic investment reflected close to the full amount of inflows (Mishra, Mody, & Murshid, 2001 p. 61). In this case, there is a strong positive relationship between capital inflows and domestic investment, but this relationship is weakened when financial liberalization takes place. The relationship weakens when there is an increased incentive for capital outflows to finance projects domestically and globally, instead of financing the projects via the domestic savings coming from the capital inflows.

The absorptive capacity can be affected by several factors within the economy. For instance, the short-term capital flows are known to exist within a volatile market which “tend to perform their role of trade and bridging finance better in more stable situations” (Mishra, Mody, & Murshid, 2001 p. 62). The absorptive capacity of an economy is also impacted by the degree of development the economy has progressed to. Low income and developing countries have the most need for capital inflows, with low income countries relying heavily on FDIs as their capital inflows. According to the World Bank, the poorest countries receive a significantly limited amount of FDIs that are not consistently distributed evenly. Most of the FDIs that go to low income countries, flow towards resource abundant countries in oil and minerals (Mishra, Mody, & Murshid, 2001 p. 63). Resource abundant countries offer investors prospects of relatively higher yields than countries with less resources. Specifically in resources that are nonrenewable, the investors objectives are to gain stakes within the domestic companies that control the resources, generally state-owned. In the 1990s, the bulk of the FDIs were going to a select group of countries (Mishra, Mody, & Murshid, 2001 p. 63) whose economies offered opportunities of high yields which enticed investors from developed countries. Countries with low absorptive capacity are those with weak formal institutions. The financial markets are not well equipped to
deal with capital flows and FDIs domestically, resulting in weak productivity and little incentive for domestic firms to increase their productivity. Therefore, capital flows and FDIs do not present a significantly positive relationship to investment and productivity in low absorptive capacity countries. In high absorptive capacity countries like the East Asian countries, the expected positive relationship between FDIs and productivity is evident in the high productivity in foreign firms and the spillover effects into the domestic firms (Mishra, Mody, & Murshid, 2001 p. 68). It is common knowledge that East Asian countries have created strong formal institutions and have governmental controls and policies in place which regulate their economies within highly productive trajectories. Therefore, the positive relationship that exists between capital flows (FDIs) and productivity only can exist if the economy has high absorptive capacities and offers relatively high yields from investment.

Last component of the analysis between the relationship, is the fact that capital flows are often associated with volatility. Volatility comes from the uncertainty that exists around prospective yields and consequences of entrepreneurial decisions. Capital flows are inherently volatile, but when financial markets are deregulated it opens the markets to increased flows and the hazards of increasing volatility, amplifying it within the domestic consumption and production (Mishra, Mody, & Murshid, 2001 p. 70 & 73). With the financial market liberalization imposed by the policies of the Washington Consensus, developing countries have increased their exposure to volatile capital flows intensifying the volatility of domestic consumption. This results in economic growth stemming from the consumption boom from the capital flows, which is what ensued as a result of the Real Plan in Brazil in 1994. The consumption boom facilitates further volatility within the financial market leading to a general instability within the economy in which speculative flows lead to investors fleeing from the
market and the state selling all its reserves. Ultimately, causing a financial crisis, in 1999, the crisis in Brazil.

Neoclassical theories inherently have flaws in them which are exacerbated in the manifestation when they are imposed on countries. In theory, the flaws are avoidable, and pose little problem besides the fact that they are not accurately representative of what occurs in the economy in practice. To further understand the inherent flaws and the theories in the original context, the Stolper-Samuelson theory and the Factor Price Equalization Theorem are explained in deeper context. The Stolper-Samuelson Theorem is an underlying model for the Washington Consensus and the explanation of it furthers an understanding of the characteristics of the Washington Consensus.

2.1.2 Stolper-Samuelson Theorem

Wolfgang Stolper and Paul Samuelson’s theorem of 1941 concluded that international trade leads to an increase in return on a country’s abundant factor and a decrease in return to its scarce factor. Their theoretical model was derived from the Heckscher-Ohlin model (1933). In Stolper-Samuelson’s article “Protection and Wages” (1941) they begin with several assumptions for which they apply to two cases proposed. They initially assume that the framework of the model is a two-country model, Country 1 and Country 2. Corresponding to the two countries, are two goods produced, Good A (“wheat”) and Good B (“watches”). Further in the theory, Stolper and Samuelson add several more assumptions to construct the model’s general parameters. (1) the country in question is relatively small and has no influence on the terms of trade, (2) the removal of the duty (of the terms of trade) does not destroy formerly protected industries, but
contracts them instead, (3) the country in question is relatively well supplied in capital, and (4) the proportion of labor to capital in production is lower in wheat than watches\(^{12}\).

The two cases that Stolper-Saumelson propose are opposing in views, but ultimately reach the same conclusion, that international trade is beneficial for a country’s abundant factor. The two cases are as follows, where the wage good is also the good whose production capital is relatively important (1941 p. 62). In Case 1, wheat is the wage good. Introducing trade into the country will shift the production by increasing the exportation of wheat. This results in the contraction of the less competitive good’s production (Stolper, Samuelson, 1941 p. 64). There will be a transfer of both labor and capital from the watch industry to the wheat industry. This will lead to an increase of the amount of labor available to the wheat industry. In response to the abrupt abundance in labor, there will be a decrease in the wheat’s real wage rate, resulting in a decrease in the real wage. In this instance, Stolper and Samuelson discredit classical theory which in this case, the decrease in productivity would increase the price of the export, the wage good (Stolper-Samuelson, 1941 p. 66). In Case 2, watches are the good whose production labor is relatively important. The introduction of trade increases the production of watches and decreases the production of wheat. Emphasis in this case is on watches, and with the decrease in production of wheat, there is a transfer of capital from the wheat industry to the watch industry (Stolper, Samuelson, 1941 p. 65).

\(^{12}\) Author only includes certain assumptions, Stolper-Samuelson includes several more assumptions. For the remaining assumptions not included see Stolper, Samuelson (1941) paper in bibliography, for the specific equation.
2.2.1 Application of the Stolper-Samuelson

Both cases that were proposed by Stolper and Samuelson conclude that international trade leads to an increase in return on a country’s abundant factor and a decrease in return of its scarce factor (1941 p. 58). This base model can be applied to modern economies, using the factors of production of skilled labor, unskilled labor, and capital. In developed countries, skilled labor and capital are abundant factors, conversely, in developing countries, unskilled labor is the abundant factor (“The Heckscher-Ohlin”, 2012/2016). The implication that this has is that increased international trade leads to an increase in the returns to the unskilled labor in the developing country (“The Heckscher-Ohlin”, 2012/2016).

Based off of the conclusion, the increased capital gains in the unskilled sector of the industry can be used by the firms for investments into the labor force, public sector and technology to become more capital intensive. The investments should focus on education, healthcare, infrastructure, and social safety nets; sectors that can help decrease poverty and close the gap between the skilled labor and unskilled labor in the country. In theory, investments targeted at the middle and low income groups should decrease the gap within a developed and developing country in technology, income, and growth. By decreasing the gap, it triggers economic growth which is a catalyst for economic development. This is the general basis for the conclusion that Kaldor’s extension on Solow’s Convergence Theorem, where developing countries should “catch up” with developed countries, when the developed countries reach the steady state\textsuperscript{13}.

\textsuperscript{13} For further information regarding Kaldor’s extension of the Solow model, see Kaldor (1956/1957)
2.2.2 Application of the Stolper-Samuelson to Brazil

The application of the Stolper-Samuelson Theorem to Latin America has been quite flawed on the basis that the results of the Washington Consensus were not beneficial for Brazil. But rather, beneficial for the USA, Europe, IMF, World Bank, China, and others. Neoclassical theories underlie the Consensus’ ten policy recommendations. A policy suggestion of the Consensus was trade liberalization, opening the country to international trade by eliminating barriers through the decrease in tariffs on imported goods (Kregel, 2008). Trade liberalization is a recommendation that encourages Brazil, an emerging market economy (EME) to further engage in trade with developed countries and institutions. Generally, a characteristic of developing countries is that they are relatively abundant in labor, specifically unskilled labor and relatively scarce in capital and scarce labor. The abundant factor, unskilled labor is used to produce exports for the region. The scarce factor, capital is used to purchase imports for the country (“The Heckscher-Ohlin,” 2012/2016). Basically, capital is used to not only purchase physical goods and services, but to invest in technology and physical capital that will increase innovation and growth.

When enacting free trade, prices change dependent on the abundant factor and the scarce factor. Based on this, the abundant factor’s returns will increase and the scarce factor’s return will fall with the result being that the abundant factor always benefits from free trade (“The Heckscher-Ohlin,” 2012/2016; Stolper, Samuelson, 1941 p. 58). According to the Stolper-Samuelson Theorem, the labor in Brazil should benefit far more than the capital owners (capitalists) who should have a decrease in profits. This is because Brazil’s relative abundance in labor and relative scarcity in capital and developed countries they are engaged in trade with, have a relative abundance in capital and a relative scarcity in labor. Conversely, in developed
countries the capitalists should gain and there should be an increase in profits while the laborers or workers should see a decrease in wages. Concluding that the abundant factor in the country will benefit despite the industry. This is fundamentally a matter of gains and losses in purchasing power (“The Heckscher-Ohlin,” 2012/2016).

Because a country’s abundant factor is used to produce exports and the scarce factor to purchase goods that are imported, the introduction of free trade results in the price of a country’s exports to decrease. Simultaneously, there is an increase in the price of imports. Conversely, an increase in price of exports will incentivize firms to expand production with the possibility for an increase in profit in the good in the future. There is a simultaneous decrease in the price of imports which will result in firms reducing production of the good due to increased competition, and vice versa (“The Heckscher-Ohlin,” 2012/2016). The Stolper-Samuelson says that the abundant good will be in higher demand. An excess demand for the abundant factor increases the price of the good and an excess supply of the scarce factor will decrease the price of the scarce good. This results in an increase in the abundant factor’s returns and a decrease in the scarce factor’s returns (“The Heckscher-Ohlin,” 2012/2016).

Furthering the application of the theorem on Brazil, when there is a shift towards trade liberalization, the expected result is that the exported good’s production will expand and the import-competing good’s production will be reduced. Resulting from an increase in demand for the abundant factor (labor), the expansion of exports is due to the nature of the production being labor intensive. Applied theoretically to Brazil, the result should be a negative relationship between the demand for labor and the demand for capital. The demand for labor increases and the demand for capital decreases. Eventually this causes an increase in the price of labor with a corresponding increase in the wages of workers and decrease in the price for capital or the gains
for capitalists. A shift in the income distribution should be the result, with the wage share and the capital share reaching a split that is closer to 0.5 and 0.5\(^{14}\). Surprisingly to the economists and policy makers of the Washington Consensus, the effects of free trade did not reflect the presumed conclusions of the theorem. Stolper and Samuelson concluded that international trade is beneficial for a country’s abundant factor, leading to an increase in the production and the gains from trade. Another theorem that is underlying the Washington Consensus and all trade agreements for free trade is the Factor Price Equalization Theorem.

2.3 Factor Price Equalization Theorem

The Factor Price Equalization Theorem is most commonly utilized in the debates for international trade agreements, most recently heard in debates for the North American Free Trade Agreement (NAFTA) (“The Heckscher-Ohlin,” 2012/2016). The basic conclusion for this theorem is that enacting free trade leads to the equalization of wages and rents, globally. But it is contingent upon the assumption that countries possess the same level of technology and that the markets that exist are perfectly competitive. These assumptions make apparent the disparities in the level of technological development among countries. Especially between low income countries and high income countries, as well as countries that remain in the middle income trap. There is also need to acknowledge the fact that the global markets are not perfectly competitive.

Breaking down the model, perfect competition allows for wages to be directly related to marginal productivity, which is dependent on the price of goods. When there are variations in prices among countries, the results are differing marginal productivities. By turning to free trade policies, prices, marginal productivities, and wages are equalized (“The Heckscher-Ohlin,”

\[ \frac{1}{\alpha} = \frac{1 - \alpha}{-\alpha} \]

\(^{14}\) For further explanation regarding the actual split in the wage share and the capital share see,
The specific conditions that are necessary to fulfill make the Factor Price Equalization Theorem increasingly difficult to apply across a panel of countries that are not in similar income brackets as the other. The results are that the disparities among countries becomes more obvious. The authors of The Heckscher-Ohlin (Factor Proportions) Model (2012/2016) propose that it be applied with an interpretation of the theorem in a way that expresses factor prices moving together when free trade is enacted.

2.3.1 Application of the Factor Price Equalization Theorem

It has already been pointed out that the Factor Price Equalization Theorem is not applicable in its originally intended context to the “real world” setting. It is common that most developing countries, aside from East Asian countries, have not attained the level of technology and innovation that is apparent in developed economies. The track of technological advancement differs dependent on the type of economy, i.e. net exporter or net importer. The other assumption that restricts the ability of the applicability of the theorem is perfect competition. In the modern capitalist society, perfect competition is not at all realistic to the conditions that are present in today’s economy. The implications that this theorem has on income inequality, if it were to be perfectly applicable to the situation, were that the disparity present between developing and developed countries would cease to exist. Therefore, an implication of the inapplicability of the Factor Price Equalization Theorem is that there is no convergence, defined in Kaldor’s Model, in the level of technology among countries. In practice, applying policies that enact this theorem will perpetuate the income inequality that is already apparent between countries. The Factor Price Equalization Theorem states that there will be an equalization of wages and rents when
countries engage in free trade. When it was applied to Brazil and other developing countries, the desired results were not attained.

2.4 Effects of Stolper-Samuelson and Factor Price Equalization Theorem in Brazil

Both theorems produced policies that have been forced upon developing countries, like Brazil in the late 20th to the 21st century via the Washington Consensus. Following the debt crisis in the 1980s the results in Brazil were relatively negative. There was a brief period of “recovery” which the countries were accumulating foreign exchange reserves for stabilization simultaneously while they were assuming compounding debt (Kregel, 2008* p. 8). The accumulation of debt was significant enough that it rapidly became unsustainable once again and the theory of loaning capital to countries that are using the capital to pay off pre-existing loans, makes for a volatile financial economy. This easily led to an environment where any magnitude of a negative shock would easily cause investors to speculatively pull out their investments, which would trigger a rush of capital out of the countries with foreign and domestic investors moving capital out of Brazil. In response, the government would sell their foreign exchange reserves, unwilling to be saddled with more debt in other stronger currencies that they were unable to repay (Kregel, 2008* p. 9). These capital flow reversals ultimately led to contagion and crises rapidly succeeding one another with the crises in the emerging market economies.

Ultimately, there were inherent flaws within both the Stolper-Samuelson Theorem and the Factor Price Equalization Theorem and when applied to developing countries like Brazil, the flaws manifested. Both theories advocate for trade liberalization. But in the case of Brazil, imposing trade liberalization, reform, and capital liberalization too soon after the debt crisis and with weak institutions, the result was increased economic vulnerability to external shocks.
Proving that although Brazil was classified as an emerging market economy when the policies were imposed on it, its economic development was not advanced enough to be able to combat the detrimental natures of the policies. Hyman P. Minsky offers an alternative to the mainstream neoclassical theory. His theory is constructed based on the functioning of the economy in practice and what he witnessed. Several economists apply his theory to the global context which offers an alternative, counterfactual to the Brazil, beginning with the debt crisis in the 1980s.

2.5 Minsky’s Theory of Financial Fragility

Hyman Minsky founded a theory that if given more credence, would have been more useful to Brazil and the other middle-income countries in the 1980s and 1990s. It could have possibly altered the trajectory of Brazil and the other developing countries. Minsky’s theory is an attempt to explain the impact of debt on system behavior and incorporates the manner in which debt is validated (Minsky, 1992 p. 6). Minsky’s Theory of Financial Instability or Fragility is based first and foremost on Keynes’ work in the General Theory. There are two conclusions of his theory: (1) the reasons for periodic crises is that there is an inability of firms to repay their debts in the financial sector, (2) the business cycle is basically a cycle of financial systems becoming increasingly fragile (Beshenov, Rozmainsky, 2015 p. 424).

In his theory, Minsky identifies three types of financial firms, hedge, speculative and Ponzi (Wolfson, 2002 p. 394). Ranging from the most risk averse borrowers and lenders, gradually increased to the riskiest borrowers and lenders. According to Minsky, hedge financing unit is when the expected income from a company’s operations is predicted to be sufficient enough to meet the payment commitment on debt. Hedge financing units dominate the financial market during periods of recovery (Beshenov, Rozmainsky, 2015 p. 423). Speculative financing
is defined as when a company’s income is not sufficient to cover both the present principle amount and the interest amount. For the firm to meet the payment commitment would need to contract new short-term loans. Speculative financing firms are predominant in periods of booms, i.e. the consumption boom (Beshenov, Rozmainsky, 2015 p. 424). Both hedge and speculative financing are considered to be valid forms of financing units within a period of economic success so long as speculative firms continue to refinance their positions (Minsky, 1977 p. 25). Higher interest rates increase the amount of the payment commitment for speculative financiers due to the increase in both the interest amount owed on the initial after refinancing. But higher interest rates do not guarantee an increase in the returns on the assets (Minsky, 1977 p. 25). Firms that are speculative borrowers are vulnerable in that (1) there is a necessity to continue to meet the market to refinance and to successfully maintain the loans. (2) The market value of assets can become smaller than the value of their debts (Minsky 1977 p. 25), which can be from the increase in both long-term and short-term interest rates which negatively affects assets more so than liabilities due to the short-term nature of liabilities. (3) Minsky mentions the subjectivity of acceptable structures and with a “shortfall of cash receipts relative to cash payment commitments anywhere in the economy” (1977 p. 25) the result can be a revaluation of the structures.

The third type of financing unit that Minsky introduces is a Ponzi unit. A Ponzi firm is the riskiest, where the firm is unable to pay both the principle and the interest and therefore must continue to accumulate and refinance loans to repay debt, without restrictions or reforms (Wolfson, 2002 p. 394). Ponzi units or capitalization of interests (Minsky, 1986 p. 8) always lead to recessions (Beshenov, Rozmainsky, 2015 p. 424). Minsky considers that “stability induces instability” (Minsky, 1986 p. 15). A highly stable financial structure always progresses to an unstable structure. In the recovery period when hedge financing units dominate, little time has
passed and both lenders and borrowers are cognizant of the crisis or recession that just occurred. As time progresses, lenders and borrowers become less risk averse with the forgotten times of economic contraction. Inherent in the structure is that the previous events are easily forgotten and lenders and borrowers gradually progress to decreasingly risk averse.

High or increasing interest rates can turn hedge units into speculative units, and speculative units into Ponzi units. Increasing the degree of risk in the financing of debt within an economy, brings about instability and can cause a financial crisis and/or lead to a recession. A Ponzi finance units leads can lead to a crisis when eventually the financing units are unable to attain new loans because either the risk for lenders is too high or there is lack of financial resources in the economy (Beshenov, Rozmainsky, 2015 p. 424). To continue to pay off their debt, financing units can sell or pledge their productive assets to gain liquid capital which leads to a decrease in demand price. With the fall in demand price, investment levels will decrease and this will lead to a crisis (Beshenov, Rozmainsky, 2015 p. 424). This crisis is further exacerbated when there is an excessive borrower risk. When there is an excessively high borrower risk, investments decrease, and demand prices for assets fall below the supply price (Beshenov, Rozmainsky, 2015 p.424). When demand price for assets has fallen below the supply price, this halts the investment process altogether.

Alternatively, a crisis can be brought about when the financial weakness becomes apparent to investors and there is an unwillingness to finance certain organizations and sectors of the economy. Unless the government invests into the domestic economy to offset the loss in foreign investments, the results are a decrease in investment and profits. Making it difficult for firms, banks and the government to maintain the degree of debt that is being borrowed, pressuring firms to lower the debt ratio which can cause a panic (Minsky, 1977 p. 25). This panic
is caused by the debt-deflation which happens soon after interest rates shift speculative units towards Ponzi units. The debt-deflation process occurs when there are defaults on debt payments which decrease aggregate demand. It decreases prices and increase the real value of the outstanding debt payment commitment resulting in the acceleration of the economy’s downward spiral (Wolfson, 2002 p. 397).

Within Minsky’s financial instability hypothesis, he includes several policy suggestions. He is an advocate for structuring into the financial system ‘lender of the last resort’ which is controlled by the Central Banks as an interventionist method. In crises, he promotes an active role of the government in employing both expansionary macroeconomic, monetary and fiscal policies. In this he acknowledges that an issue with these types of policies would be that they “lull both firms and banks into a false sense of security” and that the result often is stagflation (Beshenov, Rozmainsky, 2015 p. 424). Paired with lender of the last resort, Minsky also advocates for government deficits and government controlled regulations on capital and investments (Minsky, 1986 p. 23).

2.5.1 Financial Fragility Applied to the Global Context

When Minsky was working on his Theory of Financial Fragility, the context of this was set in the domestic economy of the United States. Since then economists have worked to apply his theory to the global context. Martin H. Wolfson is an economist who attempts to make Minsky’s theory applicable to the global context as an explanation of financial crises. The application of Minsky to the global markets included the observation that money can flow from one country to another in the form of capital flows which are linked to investments and loans. The neoliberal agendas in the 1990s introduced the decision to increase the reliance on capital
flows and privatization in developing countries to create assets to trade (Cornford, Kregel, 1996 p. 13) which has increased the possibility for Minsky’s proposed financial instability and resulted in crises. In the 1990s, the recession in the United States and other developed countries resulted in the falling interest rate and capital flows to developing countries in Latin America and Asia (Wolfson, 2002 p. 395). In these countries, speculative and Ponzi units made up most firms within the domestic economies. Most relying on the domestic borrowing at relatively low short-term rates and lending at relatively high long-term rates in the foreign markets (Wolfson, 2002 p. 396). The foreign market collapsed when there was, according to Minsky a “not unusual” event. The “not unusual” event was defined by Minsky (1977) as the “forced selling of assets to raise cash and a sharp fall in the prices of the assets” (Wolfson, 2002 p. 396). This “not unusual” event paired with the falling exchange rate led to a debt-deflation process on the global level, in which the exchange rate decreased resulting in borrower’s inability to meet debt payment commitments in hard currency, increasing loan default. Because loans were not renegotiated, there was an unreliability in the markets and investors fled to protect their investments which further depressed the exchange rate. This exact scenario occurred in the 1990s in the emerging market crises which spread more expediently via contagion from the removal of capital controls and the financial deregulation. The removal of capital controls and financial deregulation were part of mandatory policies that were enforced on developing countries. Paired with a lack of regulation and lack of laws limiting foreign financial investment, permitted the spiral towards financial fragility and increased the likelihood of financial crises.
2.5.2 Financial Fragility Applied to Brazil

Minsky’s theory could have been applied in the years following the 1994 Real Plan. Brazil’s economy experienced another crisis in 1999 which was a result of contagion and the financial fragility within the economy. The Brady Plan in 1992 reintegrated Brazil back into the global financial markets which the Real Plan benefitted from, which was partially the reason for its initial success. While it was successful, it created an imbalance of payments. The capital flows that went with the imbalance of payments affected the financial conditions due to the absence of inflation from the government’s sterilization policy creating a “negative carry”. Negative carry is defined as being a situation in which the cost of the investment exceeds the returns on that given investment (“Negative Carry,” n.d.), exacerbating the current budget deficit (Kregel, 2000 p. 4). The sharp decline in the inflation rate resulted in increases in consumption and Brazil experiencing a consumption boom in which banks were forced to lend aggressively to domestic consumers which further fueled the boom. The boom preceded the 1999 crisis, artificially stimulated the economy and earned incomes. It was meant to stimulate domestic investment to encourage growth. With the consumption boom, the Brazilian economy was left more vulnerable to external shocks.

Within Wolfson’s proposed framework, the implications on the income distribution are different than the relationship between free trade and income inequality as the neoclassicals theorize. As the neoclassicals theorize, globalization, i.e. free trade, capital flows, is a step that produces economic development and growth. Most developing economies utilize this concept to construct their development processes. Globalization includes capital flows and investment which are used to invest in technology and in the public sector, i.e. infrastructure, education, healthcare, social safety nets, all factors which aid in decreasing income inequality.
According to Wolfson, theoretically, capital controls paired with other economic policies can mitigate either the harmful effects of a crisis or, given the policies, can bypass a crisis. Handa and Davis on crises consider that a feature of recessions and crises is that the poor become even poorer and the number of near poor or lower middle class families drop into poverty (Handa, Davis, 2006 p. 518). As can be observed from the past 35 years in Brazil, capital flows eventually lead to a recession or crisis and as a result, the income distribution is widened further. Capital controls have been beneficial preventative measures that in some ways mitigate some of the additive harmful effects of the crisis or recession.

Conclusion

Brazil’s heavy reliance on capital flows required high interest rates to keep the exchange rate stable. While the inflation rate was rapidly declining, there was a real appreciation of the Real (Kregel, 2000). The appreciation of the Real simultaneously with the return of capital, resulted in the economy’s vulnerability which Brazil attempted to combat with high interest rates. Along with the return of capital inflows in the 1990s, Brazil quickly found an increasing proportion of their public debt owned by foreigners. This resulted in much of the external and domestic debt being indexed to the overnight domestic rate (Kregel, 2000) which was a threat of instability to the economy. The required high interest rates induced a deterioration in the fiscal and foreign balances, which created doubts in the viability of the policy (Kregel, 2000). With the doubts of future success, investors fled and it resulted in a reversal of capital flows and the exchange rate to fall. The economic instability that Brazil was combatting was negatively impacted by the contagion from the crises in the East Asian countries, making it more susceptible to a crisis of its own which is exactly what occurred in Brazil in 1999.
Increasing international trade/capital in a recovery period, which is what the Stolper-Samuelson and the Factor Price Equalization Theorem promote, has been more harmful to Brazil, than beneficial. In developing countries with weak institutions, capital flows only serve to exacerbate any issues within the economy.

Leading up to the 1980s, financial institutions in Latin American countries were mostly Ponzi units, where their continual accumulation of debt was unrestricted by their government or other institutions. Then in the recovery period, the Brady Plan and the Washington Consensus promoted the reintegration into the foreign capital markets, as a way to refinance their initial debt for repayment. This allowed for the countries to continue to accumulate more debt on top of the pre-existing, that was from the debt crisis while simulating conditions of economic recovery, a period in which investors and borrowers forgot the conditions of the previous crisis. Ultimately, this led to capital flow reversals resulting in the rapid succession of crises. The main policy conclusion that Wolfson and Minsky come to, is the necessity of having restrictions on the accumulation of debt by way of capital flows. This was not a factor leading up to the crises at the end of the 20th century. Restrictions on the amount of capital accumulated would have been beneficial for the economies in that influxes of capital flows often leads to economic instability in developing countries.
Chapter 3

Introduction

Based on the fact that Brazil is the largest economy in Latin America and has one of the largest disparities in the income distribution globally, the attention it received in the past is momentous. It has resulted from the perpetuation of inequality from the colonial period. In the period since the Washington Consensus income inequality has reduced relatively significantly. Because of Brazil’s history with neoliberal policies, it is a valid claim that there should be consideration of the impacts of capital flows and the restricting/loosening of capital controls have on income inequality.

Much of the literature considers only the domestic factors as mechanisms that impacted the decline in income inequality in Brazil. With little mention of the effects global factors may have on the income inequality directly or indirectly. This chapter is complementary to the previous chapters. The effects of capital flows and capital controls are analysed utilizing the general models and frameworks applied to Brazil. Ultimately, it analyses the relationship between the capital flows that the neoclassical policies of the Consensus promoted which were commonly believed to have positive effect on the development and in turn a positive effect on the income distribution in Brazil.

3.1 Effects of Financial Liberalization and Capital Controls on Income Inequality

Capital affects the income distribution. How it affects is the income distribution is dependent on factors within the economy, i.e. the depth of financial integration, liberalization and development within a given economy. The mainstream neoclassical belief is that capital
flows are beneficial to income inequality. They inject foreign investment into a developing economy which is used to invest into technology and for domestic projects. As well as to encourage economic growth using foreign direct investment as a catalyst for domestic investment.

3.1.1 Effects of Financial Liberalization on Income Inequality

Capital account liberalization may have a negative effect on growth because it often causes conditions for financial instability in emerging markets (Lagarda, Linares, Gallagher, 2017 p. 1). The Washington Consensus was imposed solely on emerging market economies, middle income economies amid development of foundational structures of the economy, i.e. institutions. Financial liberalization was an essential condition of the Consensus which promoted capital inflows and financial integration. The process of financial liberalization itself was not detrimental to these countries, but the effects of the liberalization were. During liberalization, economies became increasingly vulnerable to external shocks, they were more susceptible to the resulting damages from them.

This is what occurred in South Korea, which facilitated the contagion of a crisis from Thailand to the East Asian countries. Thailand’s Baht was being devalued and as a result, investors were fleeing from what was once a haven’t for capital flows. The results of investors fleeing from the Asian countries, created a contagion affect in East Asia. It started with South Korea and the bailouts of big corporations, which resulted from the spillover of Thailand’s economic instability while South Korea was transitioning to a more financially liberalized system. The financial liberalization forced South Korea to increase its financial openness and dependency on foreign capital inflows. Because of the economic instability in Thailand,
investors therefore fled from the remaining East Asian countries which is the outbreak for the East Asian Crisis in 1997.

In this period, the East Asian countries were in the process of transitioning to a more liberalized financial atmosphere in alignment with the policies and agendas of liberalism in the West. Their development towards this state left them unprepared and less flexible to the altered economic environment resulting from the shock. In an economic crisis the disparity in the income distribution is exacerbated (Lagarda, Linares, Gallagher, 2017 p. 25), which is what is evident in countries that were affected by the Global Financial Crisis. The middle and bottom income shares do not have the same resources available to recover quickly while the top income shares’ wealth can be utilized to cushion the contraction of the economy. Therefore, the inequality deepens as the lower income shares continue to grapple with decreases or loss of incomes.

According to Bumann and Lensink, the impact of financial liberalization on income inequality is that it will improve the distribution (2016 p. 144). This is only applicable in countries where the financial depth is high. In countries where the financial depth is low, interest rate elasticity of demand for loans is low. This leads to an “increase in the bank efficiency, and the related decrease in borrowing costs will only have a minor impact on loan demand” (Bumann, Lensink, 2016 p. 144). According to the authors, the “financial market equilibrium requires a decrease in the deposit rate which reduces the income of savers and consequently increases income inequality” (Bumann, Lensink, 2016 p. 144). In the case of countries with high financial depth, the opposite scenario is what occurs. In high financial depth countries, the interest rate elasticity of demand for loans is high leading to an increase in the deposit rate which increases the income of savers and therefore the income inequality. The implication for most
developing countries with low financial depth is that capital account liberalization will increase
the income inequality (Bumann, Lensink, 2016 p. 161).

According to Das and Mohapatra, there is a positive, statistically significant relationship
between liberalization and income shares of the upper quintile. The middle class is negatively
associated with liberalization (2003 p. 219). There is no statistically significant relationship
between the lowest quintile shares and liberalization. This demonstrates that there is
simultaneously an increase in the income distribution and a “squeezing out” of the middle class.
Liberalization seems to simulate a recession where the incomes of the lowest middle quintiles are
falling, with the financial conditions of the quintile falling into the lower quintile. Although the
“pie grew” (Das, Mohapatra, 2003 p. 220) the wealth was disproportionally reallocated.

In developing countries where institutions and financial development are relatively
weaker, financial liberalization comes with more risk. Concerns regarding liberalization included
the effects of promoting capital flows into economies which are transitioning, and introducing
more effective laws and institutions. In the instance of a contractionary external shock, the
economy is increasingly vulnerable to the spillover effects or the contagion brought on by the
shocks amid liberalization. Financial liberalization leave the economy open to increased damage
due to capital flight as investors speculate against the economy’s health. This results are
institutions struggling to enforce effective laws and policies to combat the contraction of the
economy, as was seen in the East Asian crisis and the emerging market crises of the 1990s.
Financial liberalization itself does not necessarily have a negative effect on income inequality,
but it is a facilitator for economic factors that exacerbate the income distribution.

3.1.2 Effects of Capital Controls on Income Inequality
Based on the neoclassical theories in the previous chapter, neoclassical economists believe that capital controls are beneficial. They promoted capital flows with the belief that they would stimulate economic growth, encouraging increased participation in the global economy and economic development. Foreign capital flows as an investment opportunity into the domestic economy would provide economic stability in economies that had experienced lasting periods of economic instability.

Capital controls are restrictions placed on the inflows of foreign capital. According to Azis and Shin (2015), almost all emerging market economies enforce capital controls either directly or indirectly when there is a large volume of foreign capital inflows. These restrictions are either in the direct form of taxes or indirectly through a sterilized market intervention (Azis, Shin, 2015 p. 85). Either way, their main goal is to restrict the amount of capital inflows into the economy because a high volume of capital flows into a developing economy, in certain circumstances is not necessarily beneficial. Especially in weak countries, governments use capital controls “because foreign borrowing could undermine the government’s ability to control domestic funds and exchange rates” (Bumann, Lensink, 2016 p. 144).

There are concerns that the inflows will cause the exchange rate to appreciate, resulting in a loss of competitiveness of exports in the global market. In which the appreciation can have lasting damages on certain industries (Chamon, Garcia, 2016 p. 164). There may also be concerns in the utilization of the foreign capital in the domestic economy. Foreign capital is most beneficial when it is used in domestic projects that target the social welfare, and for technology (Chamon, Garcia, 2016 p. 164). That is not to say that foreign capital is immediately used in these sectors.

In circumstances of high volume, capital controls restrict the inflows. This includes
income flows which are concentrated in the top income shares of the economy, as these agents are more closely connected to the financial market. As a result, they reap the benefits of an increase (decrease) in the money supply first. In the case of a decrease in the money supply, these agents are made aware of the decrease first and as such, they are better prepared for the effects of it. Capital controls are a useful tool that also restricts the concentration of flows into the top income shares, protecting the bottom and middle income shares from harmful after effects of capital on the domestic economy.

Lagarda, Linares and Gallagher surmise that capital controls are more beneficial for high income countries who have strong institutions capable of adapting to possible external shocks and are financially developed (2012 p. 25). But, the implication of this is that countries who have weak institutions cannot effectively enact capital controls as policy measures to counteract or proactively protect the domestic economy. In contrast to neoclassical economists, there are several economists who advocate for capital controls to be used to maintain the global economies health. Capital controls have become effective macroeconomic policy tools to use in circumstances when the volume of foreign capital flowing into a domestic economy is overwhelming and unsustainable for emerging market economies like Brazil.

3.2 Effects of Capital Flows and Capital Controls on Income Inequality in Brazil

The effects of capital flows and capital controls on income inequality in Brazil have been influenced by the policies of the Washington Consensus in which Brazil and other emerging market economies were required to increase financial openness, financially liberalize, and re-integrate into the global economy. Brazil reassumed its outstanding debt from the debt crisis in the 1980s in addition to managing the high volume of capital flows which were due to the high
interest rates that were maintained to combat the high domestic inflation rate. The Washington Consensus policies and economists promoted capital flows which were attracted by the possibility for high yields from hyperinflation driven high interest rates.

3.2.1 Effects of Capital Controls on Income Inequality During the Global Financial Crisis in Brazil

When there is a high concentration of capital inflows into emerging market economies, their response is to impose restrictions on the foreign capital either directly or indirectly (Azis, Shin, 2015 p. 85). Because of the Global Financial Crisis, and as a preventative macroeconomic tool, Brazil imposed restrictions directly on the amount of capital inflows into the country through taxation. In the aftermath of the crisis, the United States’ monetary policy was quantitative easing which forced the United States’ exchange rate to appreciate with significantly low interest rates. Because of the low interest rates the Federal Reserve set, domestic investments did not offer high returns and as a result, investors turned their attention back to Brazil. Brazil ‘s interest rate remained relatively high throughout this period to combat inflation (Chamon, Garcia, 2016 p. 164), and this enticed foreign investment with the promise of higher yields than in the United States. This brought in an influx of capital flows back into Brazil, in which the Brazilian state was concerned with the fact that the significant degree of flows which were unsustainable, would overwhelm the economy. There were also concerns that the inflows would result in a currency appreciation which would lessen the competitiveness of tradeable goods. And they would fuel first the consumption boom and asset price bubble as they were not being directed towards productive sectors (Chamon, Garcia, 2016 p. 164). The concern for the latter, is that the cause of the crisis was the United States’ housing bubble burst and the spillover effects
into other domestic sectors. It would not be beneficial for Brazil’s domestic economy, if as a result of the crisis and global recession, for a domestic asset bubble to form and then later to burst. Therefore, as proactive measures to ensure that the economy would avoid exacerbating the effects of the crisis domestically, restrictions on foreign capital flows were enforced.

The Brazilian government restricted capital flows by taxing any exchange rate transactions through the IOF tax (Chamon, Garcia, 2016 p. 166). It includes taxes on stocks, income, portfolio equity, and borrowing abroad (Chamon, Garcia, 2016 p. 167), with the intention of protecting the economy after a decade of positive economic growth. This was a step in preserving the balance of the economy. With an influx of capital flows, there is a possibility that the inflows will affect the income distribution disproportionately. Agents that actively trade in the financial markets are affected by the changes in the money supply prior to other agents within the economy (Lagarda, Linares, Gallagher, 2017 p.9). Typically, agents who are closest to the financial market are the “capitalists”, those who are profit-earners within the top income shares of the economy (Lagarda, Linares, Gallagher, 2017 p. 9). As the money supply increases, those who are the most active will receive the benefits of the increase, redistributing or maintaining the wealth back towards those agents. Therefore, increasing the disparity in the income distribution results with the agents that are not as actively connected to the financial market, reaping the benefits last.

3.2.2 Effects of Capital Flows on Income Inequality in Brazil

Capital flows in Brazil have been the root cause for crises in the past. There is limited regulation in the volume and trajectory of inflows, which has proved to be an issue with the crises from the last three decades as evidence. There are still economists who believe that a high
magnitude of capital flows are beneficial for developing economies. The IMF has recently changed its stance on capital controls, now in favor of them but only in the short term. It argues that, “capital controls should be temporary and that their aim is precisely to have a short-term effect on the volume of capital inflows” (Jinjarak, Noy, 2013 p. 4).

In the 1980s, the debt crisis was a result of an unmaintainable debt which created economic instability. Leading up to the crisis there were no regulations on the amount of capital flows nor the extent of debt that was permissible. Eventually, economists had to admit that there was a debt crisis that spanned the entirety of Latin America. This event was replicated in the 1999 crisis in Brazil which was a result of contagion effects and spillovers due to high volume of capital flows which were eventually reversed in the initial period of the crisis. Speculations on the possibilities of contagion resulted in investors fleeing and the state selling their foreign exchange reserves to ease the burden of debt in the contractionary period.

Both instances were direct results of little regulation in the foreign capital market. And as a result of these crises the domestic economy’s income inequality was exacerbated. In cases where capital is flowing into an emerging market economy with weak formal institutions and is susceptible to crises, there is usually an exacerbatory effect. Because capital was flowing into the economy at a high rate and volume, the effects were ultimately negative for the economy and the income distribution. The capital is meant to trigger domestic investment to stimulate economic growth in which GDP increases. With GDP’s increase, Brazil and in other emerging market economies, the focus shifts towards primarily commodity exports, with the capital being used to expand the industry. This expansion in the commodity sector comes at a cost, other export and import industries suffer and it creates an imbalanced current account with a surplus in the liability side of the balance sheet, proving to be risky for the economy. With these factors, the
currency appreciates and result in a decrease in competitiveness for exports. This creates instability within the economy by way of a commodity boom. In Brazil, the capital flows which are meant to stimulate domestic investment to trigger economic growth instead result in a consumption boom. The foreign direct investment artificially stimulates the economy so consumer’s income is artificially increased, leading to an increase in consumption and to economic growth.

Therefore, the relationships that exist between capital flows and income inequality in emerging market economies can be applied to Brazil. Capital flows have affected Brazil’s economy, mostly negatively. In the last three decades, Brazil has not experienced capital flows that are not considered high volume. In a crisis or a contractionary period, capital flows exacerbate the income disparity. Figure 8 illustrate the effects capital flows have on income inequality. There appears to be a negative relationship which becomes apparent beginning in the early 1990s, which can be attributed to the period before the Real Plan and the benefits from it. During an economic crisis, the bottom and middle incomes are more vulnerable to external economic shocks, and as a result, they are generally the last to recover from a downturn. It is because in the economy, the top incomes and the government actions come at a cost, and the cost in the past, has been predominantly paid by the lower and middle incomes. They are also the shares of incomes that maintain the smallest ratio of per capita income shared amongst the population included in the income share. The fact is, that capital is trickled down from the top income shares to the bottom, with the bottom and the middle income shares receiving the least. These shares, particularly the bottom income, are reliant on social welfare programs and the effects of decisions made by the state and the members of the top income shares.

The effects of the Stolper-Samuelson Theorem and the Factor Price Equalization
Theorem is not what is expected in theory. Factor Price Equalization Theorem and the Stolper-Samuelson are both underlying theories for the Washington Consensus’ policies promoting capital flows to better benefit emerging market economies. Their purpose was not only to stimulate economic growth which in turn should aid in economic development, but as to justify the high volume of capital flows which benefitted investors with higher returns than if invested elsewhere. In a sense, developed countries were taking advantage of Brazil’s capital resources as well as the physical resources, i.e. commodities for cheaper prices.

In a country who has continuously perpetuated inequality, capital flows have served only to exacerbated the effects of income inequality during a crisis or a contraction. Within the last 15 years, income inequality in Brazil has decreased. Reasons as to how the decrease in income inequality is examined further.

3.3 Income Inequality in Brazil

The previous chapters offered insights into Brazil’s income inequality and the influences that have impacted the initial trajectory from the ISI model to the present, including criticisms of mainstream development and trade economics. This resulted in the analysis of a common belief, specifically in articles authored by neoclassical economists. Throughout the 1990s and 2000s, the global income inequality has increased with most developed countries and low-income countries facing this trend. This current trend of inequality has miraculously been the contrary in Latin America, with an overall decrease in inequality. Brazil’s decline in income inequality has by far been impressive to the developed countries and institutions, i.e. the World Bank and the IMF. Although this statement is not an outright lie, it is quite misleading. Literature up to and within the past decade has corroborated this narrative. The literature on this has attempted to create a
certain reasoning of this through specific lenses or focus on specific aspects within the economy. Gobetti and Orair’s (2017) article considers the effects of taxation on income inequality in Brazil through the lens of personal income and its relationship to inequality through redistribution. Ferreira, Firpo, and Messina analyze mechanisms that might have caused the decline in the income inequality in the period 1995-2012. They suggest five factors, (1) human capital; (2) labor market institutions; (3) demographic characteristics; (4) spatial segmentation; and, (5) sectoral distribution of labor force, and moving forth in their paper, they concluded that both the change in the structure of remuneration in the labor market and the experience premium, both had downward effects on the income inequality (Ferreira, et al., 2017 p. 4).

Recently, studies have presented a slightly different case in which Brazil’s total income inequality has decreased overall, but the degree is not as significant as initially led to believe (Morgan, 2017 p. 4). A significant decrease was seen in the years subsequently following the initial period of macroeconomic stability in 1994 (Ferreira, et al., 2017 p. 34). Of the latest studies published is Marc Morgan’s paper in the World Income and Wealth Database’s working paper series which is associated with the work that Thomas Piketty does with income inequality and capital. Morgan’s (2017) paper, “Extreme and Persistent Inequality: New evidence from Brazil Combining National accounts, surveys and fiscal data, 2001-2015” provides an improved understanding of the events and economic factors that resulted in a decline in Brazil’s income inequality. Francisco H. G. Ferreira, Sergio P. Firpo, and Juliàn Messina’s (2017) paper, “Ageing Poorly? Accounting for the Decline in Earnings Inequality in Brazil, 1995-2010” concluding remarks offer supplementary information, more so on the development of the earned income.

3.4 Historical Trends of Income Inequality
Morgan (2017) gives a brief historical context of the events that were notable in the perpetuation and lasting trends of income inequality. His historical account spans from the abolishment of slavery all the way to the early 2000s, which is where the historical narratives of this paper and Morgan, overlap. Since the colonization of Brazil, systematic inequality has been a chronic issue which has been continuously perpetuated as seen with economic development that slowly unfolded, there was an emphasis on a small group with high skill and capital premium which was preserved by the decentralization of power well into the 1930s (Morgan, 2017 p. 20). The 1930s brought to Brazil a transition of developmental catch-up and the subsequent years following formalized social security, increased spending on education, infrastructure investment, state government banks, nationalization of railroads, subsidies to commodity production, large public industrial enterprises, universal suffrage, decreased illiteracy, and deindustrialization (Morgan, 2017 p. 20). All brought about through the semi-erratic transitioning from the political right to the political left.

This led to the political regimes of the 1980s. They corresponded with the debt crisis that spanned Latin America and the contagion from an unstable period for the Brazilian economy which marked the 1970s to the 1980s. The 1990s were the years immediately following the debt crisis and are associated with the neoclassical policies that both successfully stabilized the economy at all costs, and those which altered the trajectory of the income inequality in the economy. They negatively affected the relationship between economic growth and income inequality through subverted exploitation and liberalization in several sectors, i.e. financial, capital, trade. The Real Plan in 1994 signified hope for the future which brought with it macroeconomic stability. The success of it initiated the increased attractiveness of domestic investment via foreign investors, culminated in an increase in foreign direct investments (FDIs).
FDIs flowed into the country with the intention of expanding domestic investment, instead it produced a commodity boom organized around exports (Kregel, 2000 p. 4). This evolved into a consumption boom which artificially triggered economic growth and thereby macroeconomic stability that is owed to the Real Plan propelling Brazil into the 21st century.

In the 1990s, Fernando Cardoso’s regime, the Workers Party (PT) emphasized social welfare, devoting and investing in social welfare institutions and programs aimed at the absolute and relatively impoverished (Morgan, 2017 p. 22). It was used as a mechanism for inducing positive economic growth and development from the bottom up. The bounds that were made in increasing educational attainment were successful, but it increased the supply of educated workers with little change in the demand which resulted in the decline of the wage skill premium (Morgan, 2017 p. 21; Ferreira, et al., 2017 p. 4). This summary of the historical events that occurred is to offer context for better understanding of the trends of income inequality in the past to better understand the trajectory of income inequality.

3.5 Morgan’s Analysis of Income Inequality

Income inequality in Brazil began to decline as early as the early 2000s, resulting from the success of Cardoso’s third stabilization plan, the Real Plan, which brought macroeconomic stability and an export-driven commodity boom. Simultaneously, Cardoso reallocated government spending to education and introduced programs targeted towards the reduction of poverty, acknowledging the relatively significant degree of inequality that existed. Inequality has continued to decline progressively throughout the 2000s and into the 2010s which is evident in Figure 10 which demonstrates the income inequality in relation to GDP. Throughout the Global Financial Crisis, the income inequality in Brazil continued to decline, not deterred by it, which
had a significant impact on the rest of the world. Even with the progressive measures taken to ensure growth within the Bottom 50 percent, the gap remains to be wider than reported, when the shares of income are analysed. Figure 11 illustrates the disparity between the Top 10 percent, Bottom 50 percent and the Middle 40 percent. The data covers the period 2001-2015, revealing the stagnation of all income shares. In Figure 11, there is also evidence of a gradual increase in the shares of the Bottom 50 percent and a tendency for the Top 10 percent’s shares to fluctuate more. Two things to bring attention to are, firstly there is a significantly rapid decline in the Top 10 percent’s share in 2005. Secondly, the Middle 40 percent’s shares, instead of increasing along with the Bottom 50 percent are decreasing, suggesting, according to Morgan, the middle class is being “squeezed out”\textsuperscript{15} (Morgan, 2017 p. 15).

Figure 11 is consistent with the results that Morgan emphasized, the income of the Top 10 percent, the smallest group, is far more than the income of both the Middle 40 percent and the Bottom 50 percent. With the richest 10 percent in the population receiving over half of the total national income, the portion of the total national income that the Middle 40 percent receive is less than one third. The Bottom 50 percent, earns five times less than the Top 10 percent’s earned income of the total national income (Morgan, 2017 p. 15)\textsuperscript{16}, revealing the Top 10 percent and Bottom 50 percent’s income increased at positive rates at the expense of the Middle 40 percent. The rise in the Bottom 50 percent’s income can be partially attributed to the massive spending programs the Workers Party (PT) had undertaken with reallocation to education and

\textsuperscript{15} A middle class being “squeezed out” is evident in other developed countries. The middle class is continuously shrinking, with an increase in government spending going towards programs aimed at the lower class, the benefits the lower class receive do not translate to the middle class. As the lower class increases, it is at the expense of the middle class.

\textsuperscript{16} These results and the subsequent results that are important in this sub-section are sourced from Morgan’s (2017) manipulation of the national accounts data and the fiscal data. His use of the survey data (PNAD) will be used in later results that are essential to his conclusions.
human capital through an increase in the minimum wage (Morgan, 2017 p. 22). Both factors specifically affected the Bottom 50 percent more so than the other shares. The national income shares only allude to where the flows are directioned towards, not the magnitude of them.

To further understand the degree of Brazil’s inequality, Morgan includes in his analysis evidence of the degree of concentration of national income which is an additive to the growing narrative from data that was forming. “Surveys say that inequality fell over the last 15 years while national income shows an increase in concentration at the Top, less of an increase at the Bottom, and an “ever-squeezed” Middle over the period” (Morgan, 2017 p. 16). These results can essentially be interpreted, as the flow of income in Brazil throughout the period, is concentrated in the Top 10 percent evident in the amount of national income flowing into the share. The increase in the Bottom 50 percent, which is less than the increase in incomes in the Top 10, speaks to both the effectiveness of the increased government involvement in the economy. This includes objectives of redistribution and increased bargaining power, and the fact that the incomes of the Top 10 percent are larger than the incomes of the Bottom 50 percent. The effectiveness of the policies are only marginally effective. Brazil’s reported trend of inequality continues to hold with the consideration of the concentration of income. Figure 12 illustrates the Bottom 90 percent compared to the Top 10 percent and the degree of disparity that is apparent, especially in the last 10 years of the study. In 2005, there is indications of a rapid decline in the shares of the Top 10 percent, but in the last decade both shares have once again diverged. Basically, both Figure 11 and Figure 12 clarify where the decline in inequality is originating from, the decrease in the income inequality originates within the increasing income shares of the Bottom 50 percent more so than the Middle 40 percent, when the Bottom 90 percent is split to include the middle-income households.
3.5.1 Labor Income Shares

Morgan decomposes income by isolating labor income shares and how they have functioned as an additive to his argument. Morgan (2017) discovered that labor inequality decreased when he combined the survey and fiscal data. Specifically, the Top 10 percent’s labor share declined by more than the value of the fiscal share, in contrast, the Middle 40 percent’s labor share increased. In the Bottom 50 percent, the share increased by more than the fiscal share’s increase (Morgan, 2017 p. 16). How Morgan estimates the labor share is via the “raw estimates” from the surveys corrected by combining with the fiscal data which he utilizes to construct the variable, fiscal income. These results that Morgan gets suggest that the income of the Top 10 percent are primarily flowing from the capital incomes which are derived from the fiscal income of the stock market and other market transactions. The Middle 40 percent’s data indicates that there is an increase in the labor share. The income that is originates in the returns from labor is increasing at a higher rate than the flows from capital incomes. This trend in addition to the trend of the national account income, indicates a decrease of the disparity between the value of shares of national income that flow to both the Top 10 percent and Bottom 50 percent. Further, there is an expansion in the gap between the Top 10 percent and the Bottom 50 percent’s value of shares of fiscal incomes simultaneously with a reduction in the gap of labor flowing to those shares.

3.5.2 Global Context

In Morgan’s analysis, he puts his data in terms that are relative, by comparing in the global context. International comparisons put the results from the data into perspective with the
income shares that are comparable. The figures that are being examined only include comparisons between Brazil, the United States and China. Morgan also, briefly includes France in his international comparisons. The Top 10 percent income shares of Brazil are compared to the corresponding shares in the United States. Figure 13 represents this relationship, with the Top 10 percent share in Brazil is marginally higher than the Top 10 percent share in the United States, on average by 10 percent. Figures 14 and 15 are remarkably similar in illustrating the degree of concentration in the top shares in context with the corresponding top shares of a developed country like the United States. Proving that Brazil is dealing with a higher concentration in the incomes of the Top 10 percent and the Top 1 percent. But even among the Top 10 percent and the Top 1 percent, there is a large gap that indicates that there is also a large amount of inequality among the top income shares.

Brazil’s Top 10 percent and the Top 1 percent are significantly higher than the equivalent shares in the United States and China, respectively, by at least 10 percentage points (Morgan, 2017 p. 17). Brazil’s Bottom 50 percent shares are increasingly converging to the levels that of the United States which is evident in the results that Morgan saw in the data, with the consistent increase in the income and growth rates. The Middle 40 percent is the most interesting in that its growth is the only share that is below the proportional shares of the other countries (Morgan, 2017 p. 17). Figure 16 concurs, showing the surprising products of the comparisons; the Middle 40 percent is compared to the comparable shares in both China and the United States. There is a significant difference in the comparisons of the Top 10 percent and Bottom 50 percent. The Middle 40 percent in Brazil is far lower than the corresponding shares in the United States and China, by at least 10 percentage points for China. All of Brazil’s shares are gradually declining at an equal rate. It is a testament to the initial volume of Brazil’s middle class and the consequential
“squeezing out” that is occurring in both middle income countries and high income countries with the focus solely on inequality on in the bottom proportions of the economies. The comparisons offer further insight into the degree of Brazil’s income shares in relation to the comparable shares in the United States and China.

3.5.3 Decline in Economic Growth

This is the point where Morgan’s analysis diverges from other explanations of the income inequality in Brazil. Morgan continues to solidify his findings by calculating the concentration of growth within the Top 10 percent, Middle 40 percent, and Bottom 50 percent. Between 2001 and 2010, Brazil was experiencing expansionary economic growth due to the lasting impacts that the Real Plan brought, with the macroeconomic stability. A consumption boom was eventually promoted, spurring the Brazilian economy into the 21st century. Morgan includes data results which represent the total cumulated real growth rate, which was approximately 18.3 percent (2017 p. 17). In that period, the Bottom 50 percent’s income growth rate was strong relative to the income growth rates of the Middle 40 percent and the Top 10 percent. In fact, the Middle 40 percent experienced a rate which was less than the average of the population (Morgan, 2017 p. 17), substantiating the earlier results which indicated the decline in the flows of national income to the income group. Although the Bottom 50 percent had the strongest growth performance, the bulk of the growth was disproportionately captured by the top income shares of the distribution. It remains that the Bottom 50 percent has significantly low levels of incomes and low shares of income, which was why a remarkable amount of growth was associated with the top income shares (Morgan, 2017 p. 17). Dividing the period into two sections, 2001-2007 and 2007-2015, in the years that followed the financial crisis (2007-2015), there was an evident decline in
growth. This decline can be attributed to the top incomes and their highly volatile incomes (Morgan, 2017 p. 17) which were heavily reliant on the capital markets. Capital markets are the most vulnerable to a crisis or external shock. This was evident in the incomes of the richest 100,000 individuals, which was higher in 2007 compared to 2015 (Morgan, 2017 p. 17). Ultimately, through data analysis, Morgan has reached the conclusion that previous, less extensive reports on the inequality in Brazil underestimated the levels of income at the top. Which caused an overestimation of the decline in the income inequality which Morgan has clarified by breaking his data up into the shares proportional to the income brackets. This presented a fuller and more detailed understanding of what groups were benefiting versus being harmed and which groups were the cause of the decline.

Conclusion

The income inequality that has been present in Brazil has been affected by the high intensity capital flows promoted by the Washington Consensus and the capital controls which were put into place during the global financial crisis as an economic tool to maintain the economic stability. The high influx of capital flows have for the most part, negatively impacted Brazil. They are exploitative and can be causes for an economy’s vulnerability to external shock.

Capital flows in the past have only served to exacerbate the income inequality that is present for several reasons. Firstly, foreign direct investments and other forms of capital flows are not necessarily utilized in the sectors that would benefit the most from them, i.e. welfare, infrastructure, development; instead going to causes that serve the government officials interests. Secondly, as was evident in Morgan’s analysis, there is a disproportional concentration of capital income that flows towards the top income shares. The result is a top down trickle of income,
where the top incomes benefit first and foremost from the capital flows and the market actions. From there the middle and bottom income shares receive second-hand benefits from the capital. Thirdly, specifically in a period of contraction, asymmetric information is an issue. Those who are closest to the capital market reap the benefits of the knowledge of a downturn and can negotiate the impacts with better resource capabilities and are the first to know/speculate, therefore are better prepared. Fourthly, in the newly vulnerable economy, external shocks can rapidly affect the economy resulting in an economic crisis which was what happened in Brazil in the past. Crises generally are more detrimental for the bottom and middle income shares. In the recent crises, they are the last to recover as the sectors of the economy that the crisis affects, impacts the middle and bottom income shares the most. With a disproportionate resource allocation, the capacity for the middle and bottom income shares to recover is limited without government intervention.

In Brazil, the government intervention which came with the Bolsa Família being restored was the turning point for income inequality. In the early 2000s, the Bolsa Família was revived and it specifically targeted the bottom income shares. During that same period, Brazil was experiencing a decade of economic stability which also proved to be beneficial for the income distribution. Both these factors combined, are reason enough as to why the Bottom 50 percent’s income share had increased from 2001 to 2015.

In Brazil, it can be said that either way, eventually, the high influx of capital flows into the economy have led to either a crisis or a recession. The neoliberal policies only served to exacerbate this. In periods of crisis and a contraction in the economy, capital flows only exacerbate the income inequality. In expansionary periods, capital flows are beneficial in they promote domestic investment which triggers economic growth and development, which is
partially true for Brazil. They also increase the vulnerability of the economy, especially in economies which have to some degree financially liberalized.
Conclusion

Income inequality in Brazil remains to be a pervasive issue as the income inequality is among the highest globally. Most of the literature that attends to income inequality focuses on the relationships between income inequality and investment into human capital. This paper has analysed the mostly negative relationship between capital flows and income inequality in Brazil within the past 35 years, from the 1980s debt crisis to as current as 2015.

The historical analysis gave context to the Washington Consensus’ policies and the resounding consequences of the policies. By forcing developing and emerging market economies to financially liberalize simultaneously while reintegrating into the global capital market in a period of recovery has lasting effects. The inclusion of the descriptions of the neoclassical trade theories, the Stolper-Samuelson Theorem and the Factor-Price Equalization Theorem and the alternative theory initially proposed by Hyman P. Minsky, applied in the global context provided a further understanding of the generalizations made by the Washington Consensus. It illustrated the flaws within the theories, in that they are no longer a reflection of how the economy functions and the mechanisms and factors within it.

Minsky’s Theory of Financial Fragility, provided an alternative to the neoclassical theories predominantly enforced in trade policies. It offered a brief policy suggestion that there should be reforms in financial institutions that reflect the degree of financial liberalization and financial openness. And there should be an awareness of the harmful effects that capital flows may have on developing countries and as such, there should be restrictions in place on an excess amount of capital inflows.
The effects of capital flows on income inequality in Brazil have been illustrated. Brazil’s income distribution has been deconstructed in the period 2001-2015 using Morgan’s initial research. There is a progressive “squeezing out” of the middle income shares via the bottom income shares gaining whilst the top income shares are stagnant. This has resulted in the reduction of the overall income inequality in the economy and to a singular conclusion. Eventually, the high influx of capital flows into the economy have led to either a crisis or a recession. The neoliberal policies only served to exacerbate this. In periods of crisis and a contraction in the economy, capital flows only exacerbate the income inequality. In expansionary periods, capital flows are beneficial in they promote domestic investment which triggers economic growth and development. They also increase the vulnerability of the economy, especially in economies which have to some degree financially liberalized. While income inequality has reduced from the late 1990s to as recent as 2013, the income shares of the Bottom 50 percent and the Middle 40 percent have decreased significantly in the recession. The recession has been believed to be the worst recession in Brazil’s history with the length of the recession and contractionary policies having a significant enough impact, deepening poverty to such an extent that it makes it more difficult for the impoverished to improve their conditions. President Tremer’s intended policies to increasing returns for foreign investments and thus capital flows are shifting the country away from the political left like his predecessors President ‘Lula’ and President ‘Rouseff’ and back towards the right and neoliberalism with the possibility of the past mistakes returning.
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Appendix: Chapter 1

Figure 1: Brazil’s Reserve Accumulation (1975-2016)

Source: World Bank
Figure 2: GDP per capita (1960-2016)
Source: World Bank
Figure 3: Income Inequality (1981-2015)
Source: World Bank
Figure 4: Interest Rate (1997-2016)

Source: World Bank
Figure 5: International Transactions

Sources: World Bank & Banco Central Do Brasil
Appendix: Chapter 2

Figure 6: Capital flows in Brazil (1975-2016)

Source: World Bank
Figure 7: Domestic Investment in Brazil (1980-2016)

Source: World Bank & Quandl
Figure 8: Capital Flows and Inequality

Source: World Bank
Figure 9: Gross Capital Formation in Brazil (1975-2016)

Source: World Bank
Figure 10: Income Inequality (1975-2016)

Source: World Bank
Figure 11: Income Inequality (2001-2015)

Source: WID database
Figure 12: P90/P10 (2001-2015)

Source: WID database
Figure 13: Income Inequality at the Top (2001-2015)

Source: WID database
Figure 14: International Comparison of the Top (2001-2015)

Source: WID database
Figure 15: International Comparison of the Top 1 percent (2001-2015)

Source: WID database
Figure 16: International Comparison of the Middle 40 percent (2001-2015)
Source: WID database