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The Role of Private International Financial Capital Flows in Support of
Development for Emerging Market Countries

A Thesis

Presented to
the Faculty of Social Sciences
University of Denver

In Partial Fulfillment
of the Requirements for the Degree
Masters of Arts

by

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Abstract

Economic growth and development are critical issues for emerging market economies as they seek increase their standards of living. Financial globalization, innovation and international financial capital flows are prominent factors influencing macroeconomic stability and the pace of growth and development around the globe. This dynamic has become even more pronounced since the Asian Financial Crisis at the end of the 1990s and the Global Financial Crisis starting in 2008. In the wake of these two global economic events, the need for reflection on the drivers of growth and development as well as impediments to these activities is warranted. This thesis explores the perspectives of orthodox and heterodox economists on the impact of international financial capital flows from both a theoretical as well as empirical perspective. The pace of financial globalization and innovation challenges institutions and policymakers in increasingly complex ways. Concepts such as financial capital controls, financial threshold levels and communication take on prominent roles in impacting the speed and effectiveness of financial capital deployment within emerging market economies.

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INTRODUCTION

Financial capital refers to money in the form of securities (stocks and bonds), financial derivatives, loans and claims to bank deposits used by entrepreneurs in the financing of business activity. Financial capital has been an important component of economic development for centuries. As human economic activities have evolved, the need for financial capital to fuel the redesign and application of production techniques has been a familiar pattern. It was evident in the activities of the colonial powers of Western Europe during the 14th to 19th centuries. These countries, predominantly the United Kingdom and other Western European nations expanded their commercial activities into many African, North American and South American regions in search of raw materials, minerals and other basic commodities to fuel further economic growth within the domestic market. Financial capital provided the means to conduct further economic activity in these new regions and the establishment of expanded supply chains. The last decades of the 20th century and the beginning of the 21st century have seen a surge in the search for new financial capital and the ability to deploy it to support entrepreneurial activities around the globe. Technological advances reshape the way economic activity is conducted, especially in regards to financial capital flows. Centuries ago the transfer of financial capital could take weeks if not months to finalize (North,

1991). Today, the same activity can be conducted in seconds. The speed of such powerful economic transfers can provide significant benefits for both agents to a transaction when they are properly aligned. In contrast, when the capabilities, goals and objectives of each agent differ, impediments to the successful flow of financial capital can occur. As always, details matter when it comes to successfully aligning parties to a transaction in an increasingly globalized world.

From the WWII period into the 1970s, the global economic system was characterized by the influences of Keynesianism (Peterson and Estenson, 1996). This period saw massive post-war reconstruction in various parts of Europe as well as Japan by means of the Marshall Plan as well as the beginnings of the international funding of multinational development banks – the International Monetary Fund (“IMF”) and the World Bank organization – became prominent. Both institutions were established in 1944 to govern international financial systems – monetary, exchange rate and balance of payment policies in the case of the IMF and assistance to development in the case of the World Bank (Burton and Brown, 2009).¹ In conjunction with the evolution of mass development and reconstruction efforts, the international financial system was governed by the Bretton Woods Accord. The managed system instituted from the Bretton Woods Accord utilized the US dollar as the global base currency by which other industrialized countries managed their currencies. It had the effect of providing a highly structured and controlled conversion of international trade exchange, but also facilitated a period of low

¹ The formal activities of these institutions are tangential to the focus of this thesis as they represent public interaction in the flow of financial capital and this thesis will be focusing on the role of private financial capital.

relative international financial capital flows across borders (Burton and Brown, 2009). One contributing factor to the lower levels of international financial capital flows was the large number of financial capital controls in place, on a unilateral basis, within many economies. The Bretton Woods system existed until 1971, when the US suspended the conversion of dollars to gold. The growth of global inflationary pressures in the 1960s and early 1970s posed a problem for monetary management within many Central Banks around the globe. The suspension of the Bretton Woods system ushered in a financial system of floating exchange rate systems, whereby individual countries have the ability to allow their currencies to float against each other but still maintain the ability of Central Banks to intervene in the currency markets and “manipulate” the exchange rate via central government transactions. A floating exchange rate system is characterized by an environment where macroeconomic factors such as interest rates and inflation rates across participating countries direct the prevailing market exchange rate. If a particular country faces unfavorable terms of trade in the currency market, its Central Bank can affect the market price of the currency by purchasing/selling its own currency. Outside of direct Central Bank activity via open market operations, interest rate differentials and the setting of interest rate policy has an effect on exchange rates as well. Exchange rates can be heavily impacted by both direct and indirect Central Bank policy.

A prominent factor influencing an increase in financial globalization was the rise of neoclassical economic tenets as a reaction against the perceived failings of Keynesian policies during the stagflation period, particularly in the United States, of the 1970s (Peterson and Estenson, 1996). Research and academic discussions explored the benefits

of competition and the role of free market mechanisms as a macroprudential tool of regulating economic activity. Market fundamentalism, or neoliberalism, claimed efficiency of free markets to allocate financial capital and other resources to its most productive use (Singh, 2003). This belief in the efficacy of market forces supported the introduction of liberalization of international trade, reduction of government intervention and privatization of public activities. Many proponents of market fundamentalism attained prominent roles in policy forming entities of governments, supra-national organizations (the IMF and the World Bank) as well as multinational corporations. Neoliberalism in the 1980s also ushered in a period of deregulation for many economic sectors in the US and certain Western European countries, particularly financial markets. This had the effect of providing fertile ground for financial innovation to take root and expand with little government oversight. The benefits as well as the costs of financial innovation soon extended beyond the borders of the US and into countries seeking to solidify economic ties with the US.

At the end of the 20th century, significant disruptions in financial capital flows occurred within the countries of East and Southeast Asia as a result of the currency crises in countries such as Malaysia, South Korea and Indonesia. Throughout much of the 1990s, the countries experienced sustained financial capital inflows. In the late 1990s, these economies were subjected to massive and swift outflows with significant impact to the business environment within those countries (Sundaram, 2006). In the wake of outflows, these countries instituted tools such as minimum stay periods or a moratorium on repatriation to try to minimize disruptions to their stock of foreign exchange. Others

sought the assistance of global financial institutions, such as the IMF and the World Bank, to bridge the financing gap created by the mass exodus of private financial capital. Assistance from the IMF was conditional on financial liberalization and structural reforms in support of free markets (Lee, 2003). This approach of conditional assistance has evolved since the Asian Financial Crisis as empirical studies continue to be discussed among practitioners in development financing. After the Asian Financial Crisis, the IMF started to reconsider the optimality of immediate full financial account liberalization. Since the Global Financial Crisis beginning in 2008, the IMF has revised directives on global financial capital controls as well as recommendations on dealing with structural reforms during periods of instability (Gallagher, 2012). Discussions on the net benefits of financial account liberalization are being challenged on grounds of disruptions caused by economic instability, disruptions in financial development and other economic growth impacts associated with possible sudden financial capital outflows. This continues and builds on policy discussions and research following the Asian Financial Crisis in 1997 and 1998 whereby a variety of approaches were undertaken to alleviate the crisis with some pursuing strict financial capital controls and others following prescribed structural and financial account liberalization measures. Whatever options were chosen for dealing with volatility in international financial capital flows, the result was a period of years of lost external private financing as well as severe disruptions to the trajectory of domestic economic growth.

Because of the complexity and variety of approaches to financial account liberalization and financial account management since the end of the 20th century,

significant interest in academia, policymaking institutions and investment professionals to the flow of financial capital among countries continues to be a topic of great importance. With the Global Financial Crisis starting in 2008, the flow of financial capital among developed and developing countries has contributed to the level of macroeconomic instability within the world (IMF, 2012). Various countries and organizations have sought to coordinate global monetary actions, while others have sought to institute unilateral tools to “protect” from the volatility of flows on domestic markets. For instance, the recent economic crisis has seen a rise in prominence for emerging market countries within global policy discussions. The G-20 has taken a leading role in global responses to the Global Financial Crisis. This is due to the combination of weak economic fundamentals within developed countries, but is also a function of the relatively strong financial positions of some emerging market countries such as China, India and Brazil. This is evidenced by the G-20 meetings at the outset of the Global Financial Crisis and the Communiqué from Sao Paulo in November 2008 focusing on restoring macroeconomic stability while also acknowledging the needs of emerging economies (G20 Communiqué, September 2008). The mutual needs of both developed and developing countries are being actively considered in global responses as financial stability is sought for developed countries but not at the expense of recent achievements in poverty reduction and economic growth for emerging market countries.

Countries or regions that are categorized as developing or emerging face vastly different decision sets than those considered developed. Financial account liberalization in developed countries may provide greater net benefits due to significant financial

development and expansive credit markets. In emerging market countries, however, greater liberalization may create more volatile financial capital flows and subsequent economic disruptions (Prasad and Rajan, 2008). Greater liberalization for emerging market countries may not be beneficial until further financial development is achieved. Developing and emerging market countries are faced with the challenges of structural inadequacies in their institutional framework. Often their legal systems do not have the same breadth of coverage and protections sought by international investment providers, such as established case law for judicial usage, legal opinions on collateral security and netting agreements or mature bankruptcy codes and other creditor rights. The challenges of immature institutions can be compounded by a strong need for foreign sources of financial capital as the social and economic needs of developing countries demands greater resources (Todaro and Smith, 2012). Many of these countries have pressing health service needs, infrastructure & transportation expansion requirements. Access to greater private financial capital to finance entrepreneurial activities is easier met through international financial capital as opposed to greater public debt or higher taxation on the domestic populace. The appeal for foreign sources of financial capital is understandable for governments in emerging and development markets. Unfortunately, there are costs and dangers to relying too heavily on a source of funding that can reverse quickly.

While institutional infrastructure differences continue among developed and emerging market countries, other factors compound and complicate the economic environment. Starting from the mid-90s, financial innovation continues to evolve at a rapid pace. Expertise or experience to help private economic agents or policy-makers to

fully comprehend product complexities can be inadequate. Financial instruments have the ability to smooth or exacerbate the performance of the economy. Instruments such as credit default swaps, collateralized mortgage obligations and other asset-backed investments have the ability to reallocate the risk of investment from one class of economic agents to another. Insurance companies and commercial banks, for instance, can exchange cash flows to enable either party to optimize their balance sheets and risk profiles. Insurance companies that take-on credit risk from a commercial bank can now gain exposure to the performance of a credit asset in hopes of achieving long-run capital gains in their portfolio to ultimately have a pool of capital to service their insurance obligations over time. The commercial banks that have excess credit risk are unable to perform basic lending functions if their capital is tied up in concentrated credit risk. By exchanging credit cash flows with an offsetting economic party, commercial banks are able to have the capital flexibility to continue providing their primary economic role – the facilitation of credit provision within the economy.

In theory, this redistribution of risk can enable economic agents to accept the risk they seek and to dispose of the risks they do not want to accept. When financial innovation is involved, however, numerous other factors complicate the transaction and create unintended consequences with serious challenges for participants to the transaction, policy-makers, regulators, tax-payers and other stakeholders within the affected economy. The global credit crisis starting in 2008 is a good example of the fast pace of financial innovation outpacing the tools and understanding of policymakers and regulators. While this redistribution of investment and risk is an important issue in the

wider discussion of financial capital flows, it is only one component. Many factors affect the flow of financial capital, both on the demand and on the supply-side in the international financial system - financial innovation is one component, albeit a dynamic and complex factor in the equation.

Financial capital is a critical component to inciting economic growth. Economic growth is the expansion of a nation's capability to produce the goods and services its people want (Peterson and Estenson, 1996). As incomes increase, the means to invest in human capital ("knowledge accumulation") and in physical capital increases. In addition, the ability to expand infrastructure as well as provide for greater levels of nutrition and care for society become possible (Romer, 2001). Higher levels of income become the means for creating a virtuous cycle of increase in social welfare. While the distribution of income within society is also a critical component to attaining a healthy and broad-based level of development, economic growth is considered the primary factor.

This thesis focuses on the *role* that financial capital flows play as a *driver of economic growth*, primarily in *emerging market countries*. For purposes of this thesis, emerging market countries or economies are middle-income countries with an above-average growth trajectory, relative to developed and developing economies. China, Brazil and India are some of the current notable emerging market countries. Their economic standing is of importance for analysis as the extent of financial development is still evolving and the impact on the distribution and use of financial capital can have substantial variation on economic growth. Chapter 1 will introduce orthodox economic arguments for the full liberalization of the financial account as a means of driving

economic growth and indirectly development. Chapter 2 will present the heterodox argument for the use of financial capital controls in emerging countries. In Chapter 3, a survey of the empirical literature will be undertaken in order to assess the empirical results associated with the effects of financial account liberalization. Within the discussion of the varying results relative to theory of different studies, I will focus on the impact of the institutions in place for recipient and source countries and their role in facilitating financial capital flows for emerging market economies. Chapter 4 will discuss the tools at the disposal of respective policymakers in light of challenges of international financial capital flows and the unintended consequences of financial product innovations as well as conclude the findings of this paper. The conclusion will suggest additional avenues of research could be devoted to spur the conversation of international financial capital flows in the next phase.

CHAPTER 1: ORTHODOX ARGUMENTS FOR FULL FINANCIAL ACCOUNT LIBERALIZATION

Orthodox economics is heavily influenced by an overarching philosophy of economic freedom. This philosophy traces back to Adam Smith and the concepts of “the invisible hand” and “self-interest,” whereby individual economic agents seek to maximize their best interests within a construct of market systems leading to an economically efficient allocation of limited resources. In the international trade discussion, this is evidenced by the theoretical and empirical results of expanding both economies’ production possibilities frontier. Countries that remove trade barriers and seek out trade partners with different comparative advantages from their own will enable each country to expand by specializing in the activity in which it has a comparative advantage (or lower opportunity cost). In approaching the topic of financial account liberalization, the main precepts hold, in the minds of many orthodox economists – free flowing capital is most productive when impediments to its flow are removed. Financial capital has the power to transform less developed and emerging economies by means of its ability to provide low cost capital to entrepreneurs in any country (Henry, 2007). This enhancement in productive capabilities will usher in greater economic growth and provide the financial means for developing and emerging economies to consume the

products most important to them whether that is health services, better food staples, education or any combination of goods/services that maximizes individual consumer utility. It is also a mutually beneficial relationship as the provider of the international financial capital has the ability to earn a higher rate of return than otherwise available. This mutually beneficial and stimulating activity is at the heart of the argument for many orthodox economists in advocating for capital account liberalization globally.

This chapter will introduce some important components and principles applicable to the analysis of international financial capital flows. The balance of payments and the financial account itself will be described. The rise of quantitative investment management practices and the increase in financial innovation in investment product offerings will be presented. I will propose some of the core tenets of neoclassical economics as it relates to the flow of international financial capital and the effects of full financial account liberalization. The chapter will conclude with a short discussion of some immediate impacts of full financial account liberalization and the benefits for global policymaking.

1.1 Balance of Payments and the Financial Account

In the case of an open economy, the role of global interactions becomes a prominent factor in international exchanges. To discuss international economic exchange it is useful to outline the flow of international finance. This discussion is formalized by the concept of the *balance of payments*. In the IMF Balance of Payment Manual (5th

edition, 1993), the criticality of the understanding and usage of the balance of payments is summarized by:

Because of the important relationship between external and domestic economic developments, timely, reliable, and comprehensive balance of payments statistics based on an appropriate and analytically oriented methodology are an indispensable tool for economic analysis and policy making.

The balance of payments can be summarized by a simple identity:

Balance of payments = current account + capital and financial account + statistical discrepancy = 0

The current account is a summary of the import and export activity for goods and services of a particular country. The capital and financial account is a representation of the activity of net private foreign investment as well as public grants and loans flowing into/out of the country. The statistical discrepancy encompasses activities that don't fit into the definition of current or capital account activities for various reasons, including valuation or timing differences in activities.

A current account surplus (deficit) represents a net positive (negative) in the export of goods and services relative to imports. In order to finance the current account activity, a country would need to receive (disburse) of monies into (out of) its financial system. For an economy with a current account deficit, there will be a capital account surplus as there will be a needed foreign capital inflow to fund the excess of imports over exports. The reverse holds true as countries that export more than they import have an excess from the current account and will send more money out of the country via the capital account than they receive into the country.

The capital and financial account is divided into two sub-categories the capital account and the financial account. For the purposes of this thesis, much of the focus will be on the financial account. The capital account covers all transactions that involve the receipt or payment of capital transfers and acquisition or disposal of nonproduced, nonfinancial assets. The financial account covers all transactions associated with changes of ownership in the foreign financial assets and liabilities of an economy. The financial account is represented by four broad types of investments: Portfolio investment, Direct Investment, Other Investment and Reserve Account. These different types of investment are defined as follows:

Portfolio Investments consist of such security types as cross-border equity and debt securities as well as financial derivatives and money market debt.

Direct Investment represents a means of obtaining a controlling management or substantial equity claim on an enterprise. Direct Investment is typically provided by multi-national corporations but can encompass any investor who provides an extraordinary amount of equity capital in an enterprise.

Other Investments consist of many bank oriented instruments such as bank loans, trade credit, currency and deposits. There are also official development assistance funds that flow from agencies such as the International Monetary Fund and the World Bank².

² These funds are for development and financial crisis management purposes by means of public multinational agency channels. The use of these funds is often driven by and for political, economic and social purposes while private financial capital flows are driven predominantly by economic investment reasons. The use and performance of funds from multinational organizations is a lengthy and complicated analysis and is outside the scope of this thesis.

The Reserve Account is a means of accounting for the activities of the domestic monetary authorities.

This thesis will focus on activities within portfolio investments and direct investment. It is by means of these two accounts that a significant amount of cross-border financial flows are conducted. Within the portfolio investment account, the instruments of this account represent many of the tradable financial assets common within global capital markets. These tradable financial assets are securities useful to institutional investors, particularly in the developed world, and will be critical to understanding the mechanisms by which “speculative” financial capital flows into and out of countries. Direct investment is often motivated by a multinational corporation’s strategic plan in conjunction with tax incentives, exchange rate levels and business cycle factors. Other entry opportunities can be to gain local market share or to exploit sales or production networks (Todaro and Smith, 2012). As it relates to host countries, direct investment is the avenue in which technology spillovers and other collateral benefits to a country can most tangibly occur.

1.2 Supply Side Factors of Financial Capital Flows

Within an open, two-country neoclassical model, financial capital is expected to flow from countries with a low marginal product of capital to countries with a high marginal product of capital. Over time, capital will flow until the marginal product of capital equalizes across the two countries, *ceteris paribus*. It allows countries that have a deficiency of domestic savings to obtain the requisite savings via foreign financial capital

flows (Todaro and Smith, 2012). This dynamic is the result of the owners of financial capital seeking the most productive use of the financial capital. Typically, the driver of this “**push**” of financial capital from a low product country is the rate of return that the financial capital owner may obtain on his/her investment.

The investor is motivated to invest in an opportunity by the return that the investment will provide over the investment horizon. As the risk of a failure of a return to capital as well as a return of capital increases, the rate of return that the investor demands on the investment increases.

This can be demonstrated by the following identity:

$$R = i + \Delta K$$

where R is the return on the investment, K is the value of the financial capital invested and i is the rate of interest.

This identity states that return on an investment is a function of the amount of capital and the rate of interest that represents an alternative use of the capital. In the absence of any other considerations, an investor will allocate financial capital to the activity that maximizes the return of the financial capital and provides meaningful interest to offset the corresponding usage of the financial capital during the investment timeframe. For instance, if fixed income security a has a return of 10% over a year (composed of 2% capital gain and 8% interest income) and fixed income security b returns 6% over a year (composed of 1% capital gain and 5% interest income) a means exists to compare investments by their relative return. All else being equal across these

two investments, fixed income security a is preferred to fixed income security b because it produces a higher return for the investor.

Modern Portfolio Theory (“MPT”) explains the investment framework by means of a risk/return analysis.³ MPT was developed in the 1950s and 1960s, with significant credit given to Harry Markowitz for his publication of a paper entitled “Portfolio Selection.” Markowitz summarizes the crux of the framework he explores by stating:

We first consider the rule that the investor does (or should) maximize discounted expected, or anticipated returns... We next consider the rule that the investor does (or should) consider expected return a desirable thing *and* variance of return an undesirable thing (Markowitz, 1952, page 77).

From establishing the desirability of returns and the dissatisfaction of variance of expected returns, Markowitz demonstrates the role of diversification within a multi-asset portfolio by means of correlation of the assets. This leads to the key identities of the mean-variance framework of Markowitz:

$$E(R_p) = w_d E(R_d) + w_f E(R_f)$$

where the expected return of the portfolio is equal to the average expected return of the asset classes and

$$\sigma_p^2 = w_d^2 \sigma_d^2 + w_f^2 \sigma_f^2 + 2w_d w_f \text{COV}_{d,f}$$

³ Modern Portfolio Theory is a sophisticated investment decision approach that permits investors to classify, estimate and control both the kind and the amount of expected risk and return. Its growth and use by investment professionals around the globe is a contributing factor to the proliferation of private international financial capital flows around the world. This is due to a search for global asset classes and investment types with diversification benefits relative to a domestic country only asset class universe.

where σ_p^2 is the variance of the portfolio of assets, $w_d^2\sigma_d^2$ is the squared weight of the investment in asset d multiplied by the variance of asset d, $w_f^2\sigma_f^2$ is squared weight of the investment in asset f multiplied by the variance of asset f and $w_d w_f \text{cov}_{d,f}$ is the product of the weights of the assets multiplied by the covariance of the same assets (Solnik and McLeavey, 2003).

What the portfolio variance formula reveals is that total risk (variance being the measure of risk, in this case) will always be smaller than the average of the two variances: $w_d^2\sigma_d^2 + w_f^2\sigma_f^2$. The only condition under which total risk will be the same occurs when the correlation among the individual securities is equal to 1.0. This leads to the powerful insight that by combining a portfolio of securities with some measure of less than perfect correlation among the holdings will lower the amount of total risk within the portfolio. For instance, if fixed income security *a* and equity security *b* have an historical correlation of 0.60, while equity security *c* and equity security *b* have an historical correlation of 0.90, an investor will be able to reduce the total risk of the portfolio with a pairing of fixed income security *a* and equity security *b* over the combination of the two equity securities. Diversification benefits vary over the economic cycle as correlations among asset types continually change. For instance, the correlation matrix below shows the long-term correlation of major stocks and bonds in the United States.

Correlations among US Stock and Debt Returns: 1926-1999					
	<u>S&P 500</u>	<u>US L-T Corp</u>	<u>US L-T Govt</u>	<u>US T-bill</u>	<u>HY Corp</u>
S&P 500	1.0000				
US Long-term Corp	0.2368	1.0000			
US Long-term Govt	0.1784	0.8488	1.0000		
US 30-day T-bill	(0.0200)	0.1008	0.1159	1.0000	
High-yield Corp	0.6536	0.4282	0.3257	0.0192	1.0000

Source: DeFusco, McLeavey, Pinto and Runkle (2001).

In the correlation matrix, a survey of the data during the time period sampled shows investment asset classes with negative or low correlations to each other indicating significant diversification benefits of investing across these asset classes.

In considering the diversification benefits of portfolio selection in isolation, one makes a critical omission – expected return. As Markowitz (1952) states:

The portfolio with maximum expected return is not necessarily the one with the minimum variance. There is a rate at which the investor can gain expected return by taking on variance, or reduce variance by giving up expected return (Markowitz, 1952, page 79).

In the previous example, if fixed income security a offers an expected return of 6%, equity security b offers an expected return of 10% and equity security c offers an expected return of 12%, an equally weighted first portfolio will yield an expected return of 8% while an equally weighted portfolio in the second case will yield an expected return of 11%. The benefit of lower risk, in this example, comes at the expense of lower expected return for the portfolio. Because of the trade-off nature of the asset pairings, the investor undertakes an optimization analysis to identify the highest portfolio expected

return with the lowest level of variance. This process is called mean-variance analysis, and is a standard practice applied in institutional portfolio management.

Mean-Variance analysis is undertaken with the following five assumptions:

1. All investors are risk averse; they prefer less risk to more for the same level of expected return.
2. Expected returns for all assets are known.
3. The variances and covariances of all asset returns are known.
4. Investors need only know the expected returns, variances and covariances of returns to determine optimal portfolios. They can ignore skewness, kurtosis, and other attributes of distortion.
5. There are no transaction costs or taxes.

For purposes of this discussion, assumption four is critical to the analysis as it defines the parameters of the argument by means of expected returns, variances and covariances. In essence, with available information to calculate expected returns and measurements of variance, an informed investor is able to construct combinations of assets to compile an optimal portfolio. With this information at hand an investor constructs an efficient frontier of all possible investment combinations and selects an efficient portfolio that will offer the highest expected return for a given level of risk, as measured by variance. With a greater universe of assets to consider and an increasing number of diversification opportunities, the efficient frontier of possible investment combinations expands (DeFusco, McLeavey, Pinto and Runkle, 2001).

The growth of Modern Portfolio Theory and its application to portfolio construction gave rise to an increasing amount of investment opportunities. Investors in developed countries with sophisticated and deep financial markets had the means to expand the inventory of investable assets to create larger efficient investment frontiers. The desire to find additional investment opportunities led to an increase in demand for investments of different countries and currencies to enable greater diversification options for portfolio construction (Solnik and McLeavey, 2003). The listed equities of international companies, local currency denominated bonds of sovereign governments, interest rate swaps between rates of two countries and many other investment types created a deep pool of investable assets for institutional asset managers, governments, wealthy individuals and other owners of financial capital.

1.3 Demand Side Factors of Financial Capital Flows

Developed countries often are characterized by a more stable macroeconomic environment (low interest rate, low inflation rate and less volatile balance of payment account) as well as a more robust legal and financial infrastructure (sound legal system, mature financial markets and banking institutions, depth of credit providers). Due to these factors, returns on capital and economic growth rates are often lower, but more predictable relative to developing countries. In contrast, developing countries are more likely to operate in volatile macroeconomic conditions as well as immature financial infrastructures (Prasad, Rajan and Subramanian, 2007). Because of this, the incentive of the return on capital and the ability to put the capital to highly productive use creates an incentive for an inflow of capital (“**pull**”) from developed countries.

Cost of capital becomes a significant factor influencing the flow of capital around the world. As previously discussed, financial capital flows from low return opportunities to higher return opportunities. One of the factors that influence the return environment of a country is the risk of return of/to capital. The greater the risk of return to capital, the greater the required return demanded by the investor as a risk premium is added to the return expectation (Koller, Goedhart and Wessels, 2005). This increasing risk premium increases the cost of capital for the inflow country and demands growth from the investment/country in order to justify the continued investment. If the growth prospects fail to materialize, an outflow of financial capital is possible, in the absence of controls restricting the outflow of the financial capital.

The Capital Asset Pricing Model (“CAPM”) is a financial theory critical to the process of quantitative investment management. CAPM seeks to construct a framework for the outlook and volatility of investments relative to a risk-free investment option, typically the short-term debt of the local sovereign government. For an equity security, the cost of equity is the return of a risk free asset plus the risk premium. The risk premium consists of the expected market level return minus the risk-free rate of return and this net difference is multiplied by the beta of the security being analyzed.

$$E_s = R_f + \beta_s (R_m - R_f)$$

where E_s is the expected return of a security, R_f is the risk free rate of return (typically the sovereign government short-term debt instrument), β is the beta (or sensitivity) of the

security to movements in the market and R_m is the expected market rate of return (DeFusco, McLeavey, Pinto and Runkle, 2001).

If the expected return of an investment opportunity is less than the predicted attributes of the CAPM model, an outflow or shorting of the particular investment will occur. Where the investment being contemplated is an equity security in a foreign country, an outflow of portfolio investment will occur in the financial account. On the other hand, if the components of the CAPM signify that the investment prospects of the instrument are favorable, an inflow of portfolio investment will occur in the financial account of the country. For investments of emerging market countries, the risk premium is the components of the CAPM model where country specific factors can affect the expected return of the instrument. If the political or macroeconomic risk of a country increases, relative to the investor's country, the investor will expect a correspondingly higher expected return to entice the flow of financial capital to the emerging market countries. For orthodox economists, a country that embraces a liberalized financial account and creates an environment hospitable to all forms of financial capital can see the benefits reflected in a decreasing cost of capital. Deeper and more liquid financial markets, greater access to credit and other collateral benefits of financial development produce meaningful cost savings for entrepreneurs relative to less developed countries with narrower capital markets.

The institutional framework of the investment process provides a direct means for financial capital to flow to opportunities that warrant financial capital and away from activities which do not justify an investment of financial capital. This is the market

mechanism advocated by many orthodox economists for the efficient flow of financial capital. Both MPT and CAPM are reflective of this flow of funds analysis and are heavily impacted by expected return directing investment activity. As realized returns match expected returns, financial capital inflows will occur, as expected. If expected returns are not realized, the scenario arises whereby financial capital outflows can occur as financial capital is redeployed to other investment opportunities. With regards to CAPM, the same result can occur with the misapplication of investment decision based on the inputs to the model. Specifically, if the equity risk premium is inaccurately modeled and quantitative investment decision-making is founded on this inaccuracy, an unintended flow of funds can ensue. Strict adherence to the efficacy of the models can have material impacts to the flow of financial capital.

1.4 Rational Expectations and the Flow of Financial Capital

In the 1970s, with the declining influence of Keynesianism in academic and policy circles, a reemergence of neoclassical economics took root, particularly in the United States. Within this reemergence of neoclassical economics, a new hypothesis gained prominence during the period – the rational expectations hypothesis (Peterson and Estenson, 1996). This idea, which became prominent through the work of Robert Lucas, posits that economic agents are able to quickly and fully incorporate new information into their decision-making process. This has the effect of bringing greater predictability to forecasting and deviations from the forecast are not statistically biased. On average, the expectations of economic agents in aggregate will be accurate, even if at the individual level there may be inaccuracies. In short, the impacts of new information can

be quickly and efficiently absorbed in market decision-making implying that systems that are open, transparent and highly competitive will maximize benefits for participants.

A financial market representative of one that allows for the rapid incorporation of new information into decision-making is the foreign exchange market. Foreign exchange markets, particularly for deliverable currencies (like the US dollar) are composed of many buyers and sellers with the financial resources to transact in exceptionally large units. This composition of many agents and deep resources enables rapid execution on new information or to exploit any perceived arbitrage opportunities. Interest rate parity is a theoretical, arbitrage-free construct that defines the difference between a spot rate and forward rate on a foreign currency transaction as reflective of the differences between interest rates in the domestic and foreign currency.

$$(1+i_{DC}) = E(S_{t+k})/S_t*(1+i_{FC})$$

i_{DC} is the interest rate of the domestic country, $E(S_{t+k})$ is the expected spot exchange rate in the future, S_t is the current spot exchange rate and i_{FC} is the interest rate of the foreign country (Solnik and McLeavey, 2003)

The above identity defines the difference between the spot currency rate and forward currency rate as the expected interest rates in the two countries. If the interest rate in the domestic country of the investor is less than the predicted forward/spot pricing differential and the expected interest rate in the foreign country, an investor can profit by borrowing (“short”) in the local market and investing (“long”) in the foreign market. As investors carry out this activity of borrowing and investing, the pricing of the spot and

forward currency pairs will adjust quickly to account for this difference in interest rates between countries. Just as implied by the rational expectations hypothesis, this difference will quickly be absorbed into market prices insuring that any deviations in expected interest rates and currency prices will be short-lived.

1.5 Core Orthodox Arguments for Full Financial Account Liberalization

Full financial account liberalization in a country complemented by institutions critical to the ability to independently assess the safety and security of the investor's financial capital is often an important environment for institutional investors in analyzing the feasibility of deploying their financial capital. These market access institutions entail forums as corporate governance standards, creditor rights, transparent auditing and accounting standards, equitable bankruptcy and insolvency procedures, macroeconomic stability, fiscal discipline, flexible exchange rate regimes and well supervised financial institutions (Kose, Prasad, Rogoff and Wei, 2006). This type of institutional development for emerging market economies has mutually beneficial spillovers for foreign investor and domestic country alike. Foreign investors apply a lower risk premium to the investing environment in emerging market countries that develop strong institutions. This lower level of uncertainty is valued by foreign investors and is financially beneficial to domestic institutions as the cost of capital to all sectors of the domestic economy is expected to decrease. In addition, when development of these institutions is accompanied by the investment in human domestic capital to perform these functions this can provide the means for the expansion of higher paying skilled labor within these same sectors (OECD, 2002). The avenue exists for employment expansion in higher wage sectors, increasing

income tax revenues and aggregate household wealth within the economy. As emerging market economies synchronize customs, standards and practices in these institutions that support the financial capital process, an avenue also is created whereby human capital can flow across borders as well. Experts in accounting, financial regulation, legal services and other financial professionals will be attracted to new opportunities in emerging market countries. As the cross border flow of knowledge in support of financial liberalization occurs, the means also exists for people in emerging market countries to migrate to other countries. Their ability to enter labor markets in other countries can provide the opportunity for additional human capital accumulation activities and for the possibility of remittances to return to the emerging market country (Todaro and Smith, 2012).

Some emerging market countries and developing economies operate in economies characterized by extensive government intervention. This can take the form of monopolistic control over aspects of the real goods economy and in the financial system, particularly in the banking sector. The tools that these governments can utilize to weaken competition in the banking sector are large reserve and liquidity requirements as well as interest rate ceilings on lending activities (Agenor and Montiel, 1999). The strategic aim of some of some of these governments is to restrain domestic lending and domestic saving activities. Banks are incentivized by reserve requirements to hold as capital the debt of the sovereign government. This provides the most regulatory capital relief for the bank and because of the depressed lending activity; banks are unable to offer meaningful rates of interest for its depositors. Low savings rates mean that potential savers also will be incentivized to seek higher rates of return by purchasing the

debt of the sovereign government. The government utilizes the low savings rate environment to fund its activities for development, expand government activity in the economy or other politically driven agendas, including directing state support to constituency activities (i.e. corruption). Command-style governments operate in an economic environment where persistently low levels of interest rates give them the ability to fund activities by means of issuing debt. Additionally, they can take the policy initiative of overtaxing sectors that are not politically favorable aiming to subsidize the sectors or firms that are politically connected. To discourage or subvert international financial capital from entering the country to fill a savings/investment gap, these governments impose quantitative restrictions if not absolute capital controls over international financial capital flows (Agenor and Montiel, 1999).

Advocates of full financial account liberalization point to the distortion of economic activity created by government intervention and direction of the investment decision. Instead of being subjected to authoritarian control of economic activity, they argue for the proliferation of financial liberalization to open up the banking sector to foreign competition and provide a means for market driven activities to dictate the investment climate as opposed to the personal agendas of the ruling government party. According to this argument, if emerging market economies instituted full financial account liberalization, domestic savers would have the opportunity of investing in domestic savings institutions, foreign financial institutions, investing in the debt issued by their sovereign government or even investing in higher yielding assets around the globe. Freedom of financial capital flows would be available to the institutions of the

domestic country as well as the populace, at all income levels (Agenor and Montiel, 1999). For low income economies, the ability to save even the smallest amount of income in higher yielding assets is an enticing proposition.

An additional benefit of full financial account liberalization is the international credibility that the domestic country enjoys as impediments to free financial capital flows are removed. This lowers the risk profile for the domestic country and reduces the risk premium assigned by the global financial markets to investing in the domestic country creating a supply incentive for financial capital to flow to the domestic country (Todaro and Smith, 2012).

If some emerging market and developing countries continue to operate by means of extensive government intervention in the financial sector, a dual credit system can evolve. In such a system, those who operate within the official government sanctioned sector receive the benefits of institutions and those who operate within the informal credit sector do not. Individuals and institutions that have demand for credit and the inability to access it due to government control will search for it in other forms. As international trade activities provide a means of acquiring foreign exchange, there exists an avenue for certain trade related sectors to get access to capital by means of affiliated trading activity. As many emerging market economies often have more open trade sectors than financial sectors, this can prove difficult to control in the case of government regulators. More importantly, the proliferation of informal credit markets within emerging market countries has the effect of reducing the impact of macroeconomic policy tools. By operating outside of official channels, when business cycle and macroeconomic

conditions warrant policy action by fiscal or monetary authorities, a segment of economic agents will be excluded from the positive or intended effects of the policy action. This can be disastrous for the government of emerging market economies in periods of heightened economic vulnerability (Agenor and Montiel, 1999).

Technology and production technique spillovers from Foreign Direct Investment (“FDI”) in emerging market countries and access to a global R&D network are additional benefits to a more liberalized financial account for emerging market countries. With a greater awareness of the ability of technology and innovation to transform industries, the case for FDI is compelling from a theoretical perspective as well as from a policy standpoint. From a policy perspective, encouraging FDI is a means to bring foreign expertise and financing to enable greater growth in strategic industries. This method of funding growth is financed not by means of government expenditures, but in the form of a tax incentive for the foreign investor to partner with a domestic company. In return, the domestic company receives expertise in industry specific R&D as well as the human capital network applicable to the R&D, access to new production techniques and a clear means of implementing the practice, increase in human capital for employees trained in the new techniques and skills as well as numerous other spillovers from knowledge enhancement activities (OECD, 2002). The means of encouraging FDI is also beneficial because the investment costs of building or expanding on production techniques in a particular sector are born by the investor. Emerging market economies often have insufficient domestic savings or investment (public as well as private) with the inflow of

foreign financial capital a means of filling an investment gap in support of economic growth and development within the country.

1.6 Benefits for Global Policymaking

According to proponents of full financial account liberalization, greater financial capital market mobility enables better tools for macroeconomic management, which should benefit emerging market countries. Greater liberalization within aspects of the financial account also brings emerging market economies' policymakers closer to global regulatory and policymaking institutions. This deepening of institutional relationships, just as in the case of the deepening envisioned in the flow of financial market expertise at the micro-level, creates spillover benefits in the policymaking circles. Central bankers of emerging market economies have a greater ability to access their counterparts in the developed world. This could occur by means of bilateral emergency lending facilities, such as currency swap lines, as well as participation in multinational forums such as the G-20.

Liberalization of the financial account, specifically with regards to the portfolio investment account, brings a level of external discipline onto the policymakers emerging market economies. As foreign investors prioritize greater certainty for an investing environment, they will reward emerging market economies which prioritize low inflation policies as well as transparency within the host country. This is also reinforced by the investor's home country as many developed country governments have extensive anti-bribery and corruption laws. For instance, in the United States, the Foreign Corrupt

Practices Act of 1977 (“FCPA”) places numerous penalties on US citizens who engage in making payments to a foreign official. If an emerging market country has customs or traditions of unsolicited payments to facilitate business activities this puts the foreign investor in a disadvantageous position – open to the risk of bribery enforcement regimes by its home country. To minimize this risk, foreign investors advocate robust rules against bribery and other forms of corruption in the legal codes of emerging market countries. Similar legislative rules exist in the UK (UK Bribery Act), the Organization for Economic Cooperation and Development (OECD) with its Convention on Combating Bribery of Foreign Officials in International Business Transactions as well as the work of specific multinational agency interaction with countries, most notably the IMF and the World Bank.

According to neoclassical theory, another prominent reason to embrace full financial account liberalization, particularly with respect to portfolio investment is the ability to provide a market mechanism that also provides feedback to policymakers on their economic policies. Governments that are disciplined and prudent will be legitimized by market flows. If an emerging market country follows a prudent macroeconomic course, the previously discussed benefits will become evident: lower cost of capital, industry spillovers and greater access to external credit. This will lead to economic growth. Because emerging market economies have fewer social programs relative to their developed counterparts, sound and consistent monetary and fiscal policies are imperative to social welfare.

Orthodox economists highlight many of the beneficial results of economic freedom in support of financial account liberalization, free trade, market driven mechanisms and the positive externalities that accrue to society. A belief that markets and individuals, in aggregate, are the best means of development for all is the philosophical underpinning of neoclassical economics. Orthodox economists do not dismiss the existence of negative short-run effects associated with financial account liberalization for emerging market countries such as volatility in financial capital flows. They claim, however, that over the long-run these positive contributions to economic systems will outweigh the costs to individuals and institutions that are displaced or usurped in the process. In the aggregate, society is made better. For those individuals and institutions that are negatively impacted during the transition, compensation structures and other financial remuneration can be utilized. Of primacy is instituting a framework whereby allocative efficiency can be enabled.

1.7 Conclusion

Neoclassical economics with its belief in the power of markets to direct resources to the most productive use has played a prominent role in the construct of the global financial system. Full financial account liberalization is a representation of this philosophy applied to the flow of international financial capital. According to neoclassical theory, this system enables a mutually beneficial relationship for suppliers of international financial capital as well as the recipient countries. Suppliers of international financial capital benefit from a greater number of financial instruments that expands the opportunity set for investment decision-making. For emerging market countries, access

to foreign financial capital, an ability to lower the cost of capital and to acquire foreign expertise by means of direct investment are some of the prominent benefits of financial account liberalization. While there are costs imposed on a society, such as more volatility within financial capital flows in the aggregate the benefits exceed these costs.

CHAPTER 2: HETERODOX ARGUMENTS FOR FINANCIAL ACCOUNT MANAGEMENT

Proponents of financial account management have a different perspective on the capacity of financial transactions to help increase social welfare than mainstream economists. This differing outlook is based on a belief that markets are imperfect and are best utilized when complemented by a strong regulatory or governmental influence to overcome various imperfections. For proponents of heterodox economics, the flow of private international financial capital on the global markets, if left unregulated, can lead to a system that transports risk from one location to another. In addition, private financial capital flows can be a means of transmitting shocks and instability to regions in a relatively short period of time. Private international financial capital can also be a conduit for introducing specialization to a developing economy. This can take the form of specialization in the financial product offerings in emerging market capital markets, as in the case of credit derivatives during the Global Financial Crisis. It can also occur by means of direct investment activity whereby an emerging market country establishes real business activity in a particular sector without the experience of understanding the positive and negative impacts from the particular business activity. The establishment of business activity within a sector with exceptional balance of payment impacts relative to

the size of the economy could create exchange rate challenges for the Central Bank in the future. If this system is not complemented with a regulatory framework to alleviate risk intensification, it can put economic systems in jeopardy of being overwhelmed with volatile and destabilizing financial capital flows.

Heterodox economists advocate a system of financial account management that takes into account not only the benefits but also the risks associated with financial capital flows. This framework seeks to maximize the collateral benefits of financial development and the deployment of financial capital within an economy with the dangers of insufficient financial institutions to support the use of an inflow of financial capital. Furthermore, consideration is given to actively utilizing policy tools to support financial development and its potential positive impact on economic growth for emerging market economies.

Within this chapter I will explore the analysis of John Maynard Keynes and his followers working in the Keynesian tradition with respect to the role of expectations and the flow of financial capital. I will then introduce the role of institutions in coordinating and facilitating the flow of financial capital. This chapter will also explore the risks faced by emerging market economies that liberalize their financial account to the flow of portfolio investments, specifically. Hyman Minsky's Financial Instability Hypothesis will be introduced as an explanation for the volatility and destabilizing impact that the financial system can create. Finally, I will present the heterodox critique as it relates to the use of foreign direct investment and the asymmetric benefits that can accrue from the relationship between multinational corporations and emerging market economies.

2.1 Keynes and Speculation Relating to the Flow of Financial Capital

John Maynard Keynes theorized extensively on the nature of financial investment flows in his famous work *The General Theory of Employment, Interest and Money* (1936). As it relates to financial investment flows, Keynes postulated that there are multiple factors impacting the direction, intensity and volatility of financial capital flows: the rate of interest, the marginal efficiency of capital and long-term expectations for investment. The role of expectations, as we will see later, is critical to the investment decision-making process. In classical economic theory pre-dating Keynes, savings and investment were deemed to equal each other by means of a flexible interest rate as explained by the loanable funds theory. A flexible interest rate was considered to be the balancing force which brought the financial market into equilibrium so that the demand for investment and the supply of investment funds would clear in the market. Within the global economy at the time of Keynes' drafting of *The General Theory of Employment, Interest and Money*, severe dislocations in both the real goods and financial sectors were widespread. In looking at the role of financial markets, Keynes stated that the role of professional investors had changed materially over time to more of a speculative activity. Entrepreneurs should be occupied with crafting an investment demand schedule and understanding the enterprise value building activity of the deployment of financial capital. Instead of conducting this activity, many agents within financial markets occupied their time with trying to speculate what the market would value the investment.

As Keynes wrote in the General Theory, investment markets and financial capital formation became subverted to the forces of speculation.

Thus the professional investor is forced to concern himself with the anticipation of impending changes, in the news or in the atmosphere, of the kind by which experience shows that the mass psychology of the market is most influenced. This is the inevitable result of investment markets organized with a view to so-called "liquidity." (Keynes, 1936, Chapter 12 page 155)

Keynes believed that markets formed to perpetuate the speculative impact of investment flows was a dangerous development. It led to his strong belief in the post World War II global framework that capital controls be a component of the international financial system. As an architect and principal to the Bretton Woods system, Keynes advocated the introduction of the International Monetary Fund and the World Bank as conduits to facilitate the flow of international financial capital outside of private market activity. As he points out:

Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirl-pool of speculators. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done. (Keynes, 1936, Ch 12 page 159)

According to Keynes, spontaneous optimism in conjunction with speculation plays an important role in the psychology of the economic system. This spontaneous optimism is separate from the ability to compile mathematical assessments of costs and benefits to spur action when the calculus is favorable. Instead, Keynes highlights that just as an environment of speculation can lead to periods of frothy economic excess leading to instability, so too can the positive merits of spontaneous optimism direct investment to a productive and industrious pursuit. When a substantiated investment

analysis has been conducted and complemented by spontaneous optimism, investment (i.e. financial capital flows) can be apportioned to useful projects and help create a virtuous economic cycle. Within the discussion of financial capital flows, Keynes underscores the positive and negative effects that expectations can play in the role of directing financial capital flows and an awareness to the complex nature that both forces can play in the direction of economic activity. He writes:

We should not conclude from this that everything depends on waves of irrational psychology. On the contrary, the state of long-term expectation is often steady, and, even when it is not, the other factors exert their compensating effects. We are merely reminding ourselves that human decisions affecting the future, whether personal or political or economic, cannot depend on strict mathematical expectation, since the basis for making such calculations does not exist; and that it is our innate urge to activity which makes the wheels go round, our rational selves choosing between the alternatives as best we are able, calculating where we can, but often falling back for our motive on whim or sentiment or chance. (Keynes, 1936, Ch. 12, page 163)

While Keynes ushered in the theory of expectations and the animal spirits into the investment decision making process, his views on the factors driving expectations has not been accepted by many mainstream economists. In the 1970s, as the influence of Keynesianism began to wane, neoclassical theorists revisited the role and influence of expectations on the economy (Peterson and Estenson, 1996). One of the most prominent threads of economic theory to emerge from this period was the Rational Expectations Hypothesis. Keynes had posited that something more than a mathematical tabulation drives the direction of expectations but the theory of rational expectations rejects that hypothesis and instead frames the activities of economic agents as a continual refinement of the recent past by means of a mathematical calculus. As new information is

disseminated and incorporated into decision-making, agents digest and adapt their expectations in light of this new information. In this way, expectations are being recalibrated for changes in the investment thesis and are being acted on in a rational manner. This maximizing behavior, while being conducted by means of individual economic agents (microeconomic approach), ensures rationality prevails in the aggregate. By incorporating new information efficiently into the decision making process, rational expectations supporters argue that forecasting and predicting economic behavior can be sufficiently modeled by means of mathematical techniques (aside from those factors that are deemed of a random nature and unable to be predicted).

The rational expectations hypothesis is based on several key assumptions that many Keynesians and other heterodox approaches to economics do not accept, the most important of which is the concept of instantaneous market clearing. Perfectly competitive markets, where neither buyers nor sellers within the market have the ability to influence the price, are a precondition for the rational expectations hypothesis. This would require that every supplier and buyer in a market is unable to influence the price of the product, an assumption that rarely holds up in the real world. As it relates to emerging market economies, the assumption of perfectly competitive markets in any sector is tenuous at best. Often emerging market economies have monopolistic domestic market sectors, sometimes as a direct result of previous governmental monopoly assignments. This can be the case in such activities as the oil sector where governments in emerging market economies may have previously granted monopoly or oligopoly status to one or a few firms. Sometimes, a nationalized oil entity may have been

privatized or removed of its governmental protection only recently so the sector is still immature from a competitive standpoint. In the case of Brazil, Petrobras SA was formerly the legal monopoly oil producer in Brazil from the early 1950s up until 1997.

As it relates to the financial capital flows and international investment activities of finance theory, the field of behavioral finance has begun to build a framework for discussing reasons for impediments to rational activities by economic agents. The heuristic driven concepts utilized by behavior financial theorists include representativeness, overconfidence, anchoring and adjustment, and aversion to ambiguity (Shefrin, 2002). Representativeness refers to the phenomenon of utilizing stereotypes in decision-making. In the broad look at the flow of private international financial capital, during times of global uncertainty, institutional investors and other owners of financial capital will be tempted to withdraw portfolio investments from emerging market economies based on the perception that they are less safe than the portfolio investments of developed markets, most particularly the United States and the largest members of the European Union. Overconfidence refers to the fact that many owners of financial capital believe that they are better able than other investors or market participants to predict short-term investment results. When the results of their predictions fail to materialize, usually short of their oversized expectations, they are stunned at the outcome. Anchoring and adjustment is the process whereby investors formulate a thesis on the investment project they undertake. As new information on the investment variables is revealed over the investment horizon, instead of fully processing the information to recalculate the outlook (as rational expectations theory would suggest), there is a tendency for investors

to utilize their original investment thesis as an anchor and adjust (usually too little or too much) to the presentation of new information (Shefrin, 2002). This can be seen in tests of probability calculations conducted by psychologist Ward Edwards in 1964 as well as other subjective probability anomalies as the Allais paradox and the Ellsberg paradox (Varian, 1992). In each of these studies, it has been demonstrated that given certain situations and probabilities assigned to various outcomes, when confronted with differing predictions, people often incorrectly apply probabilities to their decision-making deeming risky events as less risky even in the face of the appropriate information. Finally, aversion to ambiguity describes the circumstance where people tend to prefer a lower certain return to a higher potential return but coupled with uncertainty of return. In short, people prefer the familiar to the unfamiliar.

As much as proponents of rational expectations would like for economic agents to immediately and accurately incorporate new information into their decision-making process, the anomalies of behavior finance highlight that the emotions of fear, hope and aspirations in the investment process play a factor in the flow of financial capital. Consistent with Keynes' view, not all investment related activity is directed by rationality, even to the point of outright speculation. Instead, investment decision-making is conducted by individuals, who at times have flaws that affect their actions. This is a theme that Shiller (2000) explained as follows:

Solid psychological research does show that there are patterns of human behavior that suggest anchors for the market that would not be expected if markets worked entirely rationally. These patterns of human behavior are not the result of extreme human ignorance, but rather of the character of human intelligence, reflecting its limitations as well as its strengths. Investors are striving to do the right thing, but they have limited

abilities and certain natural modes of behavior that decide their actions when an unambiguous prescription for action is lacking. (Shiller, 2000, page 136)

Human behavior is imperfect and this imperfection can and does affect the functioning of markets.

2.2 Institutions and their Role in Facilitating Financial Capital Flows

Keynes, Shiller and others have analyzed the role that expectations and psychological factors play in economic systems. Another prominent impediment to orderly markets in developing and emerging market economies are well established economic institutions. Economic institutions are humanly devised constraints that shape interactions in an economy, including formal rules embodied in constitutions, laws, contracts, and market regulations, plus informal rules reflected in norms of behavior and conduct, values and customs (Todaro and Smith, 2012). Institutions are imperative to the operation of economic activity and have evolved over centuries. From the 15th to the late 19th century, international capital flows used to be safeguarded by contracting with a family member or other secure confidant to ship the financial capital from one country to another under the guard of armored ships and other mercenary companions (North, 1991). In the 21st century, the same activities can be governed under international banking standards and moved within seconds via computerized bank transfers. North states the importance of institutions to our economic activities by saying:

What makes it necessary to constrain human interaction with institutions? The issue can be most succinctly summarized in a game theoretic context. Wealth-maximizing individuals will usually find it worthwhile to cooperate with other players when the play is repeated, when they possess complete information about the other player's past performance, and when there are small numbers of players. But turn the game upside

down. Cooperation is difficult to sustain when the game is not repeated (or there is an endgame), when information on the other players is lacking, and when there are large numbers of players.” (North, 1991, page 97)

North’s analysis of institutions in the context of providing for the framework of supporting international financial capital flows is insightful. The decision to invest is complicated and to think of financial capital flows as a one-time investment to a developing country, the impediments would often be too large to overcome without the support of appropriate institutions. The role of a synchronized banking transfer to enable the transfer of funds to one country and the receipt of those funds in another country removes settlement risk within the transaction. Ensuring that the investment is seamless and traceable is a benefit to the process. Uncertainty can be minimized when standards and practices exist within the transaction process, especially in consideration of the market value of some financial capital movements today which can equate to billions of USD into and out of countries on a daily basis. This same thought process is relevant as it relates to the role of legislative actions, judicial case law and accounting standards. Institutions are a prominent factor in the global financial system.

The role of institutions is not necessarily in dispute between orthodox and heterodox economists, but the sequencing of institutional development and the role of economic oversight in support of development is contested. Many proponents of financial account liberalization do not deny the existence of short-term negative effects of liberalization on segments of the domestic country. They acknowledge that investment portfolio inflows can affect the monetary strategy of the domestic Central Bank, change the competitive landscape of horizontal competitors in industries where FDI flows in and

negatively alter employment patterns in some sectors of the domestic economy to name a few. These impacts are deemed transitory and are outweighed by the positive impacts, especially in the long-run, of financial account liberalization. In addition, neoclassical economists advocate the development impacts of liberalization and the governance role that markets play in that advancement. Competitive markets are the best means of spurring innovation and development in financial markets. Government policies and programs are deemed too slow or subject to corruptive political practices while markets are viewed as an efficient, inexpensive and tactical means of spurring financial development (Prasad, Rajan and Subramanian, 2006). The spillover effects, in the aggregate, will dwarf the negative externalities of liberalization. Furthermore, the more effective means to combat any negative externality would be by means of a compensation mechanism for impacted parties, as opposed to hindering the evolution of a competitive market environment.

In contrast, critics of full financial account liberalization argue that liberalization prior to sufficient institutional development diminishes the impact on the domestic economy in a material way (or may actually hurt the economy) and would be better managed by supporting delayed implementation until a responsible institutional framework can be implemented (Singh, 2003). For example, a well functioning and deep securities market can be beneficial for many sectors of the real economy. It can be a mechanism for raising domestic capital and expanding a domestic insurance market. These activities can be beneficial for many sectors of the real goods economy for emerging market countries. In the case of domestic farming, the implementation and

evolution of a domestic insurance market and prudentially regulated securities markets could be beneficial in providing a framework for risk-sharing in a historically vulnerable sector of developing and emerging market countries. Insurance markets provide the means for broad access to risk mitigation products such as farm insurance, life insurance and property insurance. Securities markets provide a means of hedging agricultural price risk as well as facilitating re-insurance risk-sharing among institutional investors. Critics of full financial account liberalization point to the negative externalities that these activities can produce in the absence of proper institutional support. Securities markets require a robust regulatory framework, skilled regulators, sophisticated technology capabilities and financial industry trade groups to create an effective system in which to operate. In the absence of strong institutions for securities markets, problems of insider trading, financial collusion, investment advisor fraud and other issues of moral hazard can usurp the benefits and undermine confidence in the sector. For policymakers in emerging market economies, the risks can be increasingly complex as the potential for real financial loss to its populace can be even more devastating than for policymakers in developed countries owing to the lower level of incomes and the inability to withstand a severe loss of wealth from moral hazard activities.

2.3 Hyman Minsky and the Financial Instability Hypothesis

While neoclassical economists in the 1970s were developing the theory of rational expectations, Minsky elaborated on an analysis of decision-making that differed significantly. Minsky, a Post Keynesian economist, introduced a perspective on financing investment that highlights the complex role of modern financial capital and its

infusion with real capital assets to construct an unstable and volatile investment framework (Peterson and Estenson, 1996). In his “Financial Instability Hypothesis,” Minsky posits that:

A capitalist economy with sophisticated financial institutions is capable of a number of modes of behavior and the mode that actually rules at any time depends upon institutional relations, the structure of the financial linkages and the history of the economy (Minsky, 1978, page 26).

Minsky believed that money as well as preferences for certain liability types, available capital asset combinations and the supply of financial assets create the framework for the pricing of capital assets. In short, the current mix of capital assets in conjunction with the capital structure of real capital firms as well and the financial capital system creates the incentive system for real capital firm production. Prices for capital assets and current output are comprised of two different pricing systems governed by varying time horizons: long-run expectations for capital assets and short-run expectations for output. Firms create their overall capital structure based on their perspectives of their own internal investing decision as well as the demand for their output. This dynamic embeds speculation and uncertainty into the financing structure of firms that is dependent on expectations. Expectations are also rooted in the most recent past experience, ignoring historical cycles, and helps drive the immediate financing decision for the firm in the short-term. As prices are bid up from one period to the next, firms benefit from borrowing and repaying the funds in a continual rising price environment. Debt securities and leverage in the capital structure benefits and continue to accrue as time progresses. Ultimately, the rising price environment abates and firms that have been financed in greater proportions by debt securities with fixed debt payments are unable to

service the debt leading to financial instability and failures. Because of the rolling nature of output prices and capital asset prices, the firm's financing decision and the business cycle coalesce into the Financial Instability Hypothesis. This framework was heavily influenced by Minsky's Wall Street experience and the cyclical nature of the financial capital business.

Investment demand, according to Minsky, is critically different from consumption demand – it is financed by the long-run expectations of **both** firms as well as the investment community. If profit generated by business activities meets expectations the cash needs of the firm are met and the long-term financing expectations of the investment community are justified. As economic fundamentals fluctuate, the long-term financing expectations of firms and the investment community will change dramatically. This change in financing dynamics follows a process that, according to Minsky is driven by the profit expectation for firms. These financing positions are expressed as Hedge finance, Speculative finance and Ponzi finance. Hedge financing is depicted as the situation where incoming cash flows (or profits) to the firm are sufficient to fund the liability structure of the firm throughout the short-term and the long-term of its operations. Speculative finance is evidenced by a shortfall of near-term cash needs for a firm that are covered by the expected long-term payoff of its future assets. Finally, a Ponzi finance position occurs when the cash flows of the firm are insufficient to meet either the short-term or long-term liability needs of the firm, including its future assets unless altered by an unreasonable assumption in the investment thesis (i.e. exceptionally long payback period or unreasonably low interest rate, etc.). The short-term interest rate

can become a mechanism for moving the economy from hedge to speculative to ponzi finance units. This is due to short-term interest rates increasing as the demand for short-term financing exceeds the supply. As the economy progresses through each stage, the sensitivity of interest rates becomes greater and the financing position of the economy becomes increasingly unstable. A widespread Ponzi finance situation can only persist as long as an investor believes someone will pay a higher price than the investment cash flows model predicts. Once the investment thesis is no longer accepted, the flow of finance to ponzi units within an economy ceases and credit no longer flows within the financial system. The mix of firms characterized by each of the financing stages is driven by the history of the economy, the expectations of investors and the financial health of firms. The longer the time period that the economy functions within a stable state, the greater the tendency for the price of risk to dissipate within the market mechanism and the greater the sensitivity of the investment thesis is to the rate of interest.

As the business cycle continues for an extended period of time, the profit capabilities of firms begin falling short of expectations and hedge units become speculative units which ultimately can become ponzi units setting the stage for a financial crisis. This pending shock to aggregate investment and the potential to spur a financial crisis can be alleviated by the intervention of policymakers using both fiscal and monetary policy. It is at this point that the role of institutions becomes a remedy for a market system that is prone to instability. Central Banks can alleviate the impact on aggregate demand by pursuing inflationary policies with the aim of supporting employment as a counter to the expected reduction in aggregate investment spending. By

acting as a lender of last resort, Central Banks sustain profit flows and positively affect the long-run expectations within the economy. An inflationary policy also has the benefit of minimizing the burden on profits that excessive debts do on the balance sheets of firms. As inflation increases, the servicing of long-term debt utilized to accumulate capital assets decreases and the potential profitability of the firm begins to rebound, albeit slower than during the boom period build up. This can be combined with expansionary fiscal policy that seeks to support aggregate demand by expanding public debts as private debt creation contracts. Central Bank activity as lender of last resort creates an environment where inflationary factors are prominent. This is due to its impact on the profit flows. As profit flows continue, this impacts the wage input into the process. This creates wage inflation. Expansionary fiscal policy also induces inflationary pressure as increases to consumption activity as a result of government spending flows to profits and increases prices for all manner of business spending activity. These activities create bigger investment spending in businesses and as businesses get bigger, an explosion in policy transfer payments builds larger inflationary pressures. Institutions provide the mechanism and infrastructure for support to the financial system during both periods of tranquility and even more importantly during episodes of financial trauma. As Minsky (1978) states:

Thus uncertainty, in the sense that there is a need to decide and act on the basis of conjectures about future economic and political situations which in no way can be encompassed by probability calculations, enters in an essential way into the determination of today's effective demand that is derived from investment behavior (Minsky, 1978, page 35).

Minsky's summary of the role of uncertainty and its volatility is appropriately suited to emerging market countries, which are often characterized by a less stable economy as well as unstable political situations relative to high income countries.

In the context of private international financial capital flows, Minsky's Financial Instability Hypothesis and its focus on volatility of finance and the role of institutions dovetails with the experience of the global economy in the wake of the outbreak of the Asian Financial Crisis in 1997 and 1998 as well as the Global Financial Crisis beginning in 2008. Financial globalization and liberal financial accounts throughout the world provided the mechanism for transmitting increasingly unstable financial units throughout the globe. As financial markets and speculative activity involving housing markets, commodity prices, stock market valuations, etc. continued to accelerate rapidly and deflate, the financial capital was transmitted throughout the globe by means of liberalized financial accounts, particularly throughout high income countries and emerging market economies (Rosser, Rosser and Gallegati, 2012).

Prolonged bubble activity can be particularly insidious for economies. It can be difficult for policymakers to implement tools designed to alleviate the build-up of assets during periods of heightened speculation due to the strong backlash and creativity exhibited by economic agents in the face of regulators and policymakers. For instance, alternative financing vehicles exist that circumvent intended regulatory limits, such as synthetic financial instruments and units of hedge fund and private equity pools. The lure of capital gains and the plethora of investing markets provide the incentive for professional investors to deploy excess financial capital. The financing needs of

emerging market countries and the ability to utilize international financial capital to spur investment activity makes for an enticing partnership for both sides of the investing equation.

2.4 Risk and Destabilization of Financial Portfolio Investments

The primary argument of critics of the neoclassical economic school as it relates to financial capital flows involves a perceived destabilizing effect of volatile international financial capital flows. Particularly, short-term portfolio flows have been found, in some empirical studies to contribute to macroeconomic instability (Ghosh, Kim, Quereshi, and Zalduendo, 2012). This is significantly a result of the globalization of the investment business, and the corresponding short-term measurement of investment performance. Large global investors, particularly with an income generating mandate, will seek to move (or borrow) in low yielding countries and invest in higher yielding countries by means of a *carry trade*. The carry trade is not an arbitrage exploiting activity, but rather a search for yield by means of instruments of international portfolio investments. In our current environment, an institutional investor might borrow in US dollars with its low interest rates and invest in an emerging market economy, such as China with its higher interest rate environment as well as higher growth prospects for its economy. The thesis of the carry trade is that nothing will change fundamentally and in a material way in the relationship of the borrowing and investing countries during the investment time frame. If nothing changes, the carry trade will pay off for the investor and the “borrow” can be repaid from the proceeds of the higher yielding asset in the emerging market country. In

this analysis, the benefits accrue disproportionately to the supplier of financial capital, at least according to critics of full financial account liberalization.

For many heterodox economists, this fundamental aspect of short-term portfolio flows creates a destabilizing dynamic for emerging market countries, which cannot be easily managed. As described by means of the carry trade, short-term portfolio flows can surge in when the global financial market pricing is in the favor of a domestic emerging market country but can quickly retreat once the global financial market pricing is no longer favorable. Furthermore, this aspect of international financial capital flow has been shown to be pro-cyclical and can create a compounding of risks for policymakers to account for in their analysis (Ocampo, 2003). Financial capital is flowing in and out at the same time as other macroeconomic factors are fluctuating (exchange rates, interest rates), creating a magnified effect on the domestic economy. As such, economic expansions as well as recessions are subject to amplification. Policymakers seeking to minimize the volatility of the business cycle are facing a headwind of international financial capital flows sometimes working against the intended scope of the policy adjustments. This is further complicated by the effects on the domestic credit market during such times. With fluctuations in lending markets and capital requirements, domestic banks can be limited in their lending capabilities during periods when demand for credit is outstripping the supply of credit. Credit constraints are now impacting the real economy based on factors that originated in financial markets outside of the country's border (in addition to other credit constraints that can exist in emerging market economies due to insufficient domestic competition in the financial industry). According

to proponents of financial account management, these are powerful and volatile factors that have wide-ranging macroeconomic implications for emerging market economies. The fact that emerging market economies are still developing effective institutions throughout their economies also means that governmental agencies focusing on social safety net programs do not have sufficient means (if any) to assist vulnerable members of the populace. As a result, private household income is sometimes the sole means to alleviating financial distress for the most at-need citizens. With few governmental programs in emerging market economies to assist the lower income populace during economic downturns, the greater impact that contractionary economic activity has on this segment of the populace. Household income is of primary importance to these people and any government policy seeking to minimize the volatility of the business cycle amplified by private international financial capital flows can have a devastating effect on their livelihood. For instance, if monetary policy is utilized to deter financial capital inflows by raising the prevailing interest rate, the access to credit or affordability of that credit could disappear for low income individuals. Furthermore, government spending focused on building effective institutions for long-term growth and development also reduces the availability of resources in the short-term for social assistance to low income individuals.

Heterodox economists highlight the vulnerability for emerging market countries that liberalize their financial accounts to the flow of international private capital flows. These risks come in the form of mutually-reinforcing risks- currency, flight, fragility, contagion and sovereignty risk (Gabel, 2003). Currency risk is attributed to the supply

and demand for emerging market country currencies subject to volatility within a floating exchange rate regime. Severe financial capital inflows or outflows can cause currency appreciations or depreciations, which can create additional and unintended pressures on the trade sector of the domestic economy. In addition, the monetary authorities of the emerging market economy may be forced to utilize foreign currency reserves to intervene and stabilize the domestic currency. The effects associated with the use of currency reserves to stabilize currency volatility due to financial capital flows creates economic distortions as the cost is borne by domestic institutions and the benefits accrue to foreign private international providers in the form of the return of the investment.

Flight risk is a reflection of herding behavior and of significant concern with financial capital flows. As the prospects of an investing environment deteriorate, there is a tendency for cascading departures of financial capital. This can compound with currency risk as the departure of foreign financial capital induces a massive depreciation on the domestic currency. While the effects of a depreciation of the currency will over time lend support to the activities of domestic exporters, the immediate and dramatic reduction in investment outlook overwhelms the economy in the short-term with potentially substantial negative economic consequences.

Fragility risk is pertinent for emerging market economies owing to the evolving nature of their domestic financial institutions. Volatility in the flow of international financial capital as well as the imperfect competitive environment and the bottlenecks to domestic capital formation that exist in emerging market economies creates a fragility to the credit markets for businesses and consumers in these countries. Compounded with

crisis and currency risk, the cost of capital and amount of capital available to the real goods sector of the domestic economy can be severely restricted or subject to revolving short-term loans to evaluate the credit considerations during a tenuous macroeconomic time period. Credit rationing within the financial system and its downstream impacts to the domestic real goods and consumer sectors is of significant concern for emerging market economies looking to capitalize on access to credit to fuel above average growth expectations.

While fragility risk can be domestically created, contagion risk refers to the vulnerabilities that exist for emerging market economies that are connected to the rest of the world by means of more open international financial capital markets. Because of this connectivity and its benefits during stable periods of global economic activity, a similar dynamic exists during periods of global economic downturns. In the current credit crisis, economic instability can be transported from a region suffering from contraction or a negative economic outlook to a region of perceived economic strength. Financial capital can flee from regions of the European Union suffering from numerous economic challenges to economies that have been stalwarts of economic growth over the past decade – Brazil, China and India, for instance. This can create significant inflows of international financial capital during a short-period followed by a significant outflow as global economic forecasts change. What started from one country can quickly infect an emerging market economy due to its openness.

Finally, the last risk to consider is the impact that international financial capital flows can have on the functioning of the sovereign government. The interconnectedness

that liberalized financial accounts can create for the flow of financial capital also can be a mechanism for the transportation of influence from the developed world and its institutions to emerging countries. Previous crises in the emerging market countries have seen the influence that developed institutions, both political and economic, can have on sovereign governments. Recipient countries of international aid during the Asian Financial Crisis were subjected to extensive conditionality from international lenders, most notably the IMF (Sundaram, 2006). This conditionality put restrictions on the currency strategy and independence of emerging market countries in policy formation. Moreover, while orthodox economists highlight the role that financial markets can play in governing sovereigns and their implementation of macroeconomic stability policies, heterodox economists underscore the fact that these same financial market participants can gain outsized influence and exploit inefficiencies for their own purposes. Financial speculation is the aim of these economic agents as opposed to sequential development or public good seeking activities.

Along with the risks highlighted, there is also the view among heterodox economists that many of the benefits that are perceived to exist with short-term portfolio investment flows are received by a narrow segment of the domestic economy and to large international institutional investors (Todaro and Smith, 2012). This financial windfall will create income inequality where it does not exist in large part and exacerbate income inequalities for countries already struggling with the socio-economic consequences of it. Proponents of financial account management support the ability to utilize policy tools as a means of protecting segments of the population with limited institutional representation.

This can take the form of explicit financial capital controls in order to avoid using broad policy tools to stem financial capital flows and preserve more of the fiscal budget for the social needs of the low income population. It can also take the form of activism in the regulatory process as a perception exists that large multinational corporations and institutional investors will carve-out oversized benefits in the political process, money that could be better utilized in enhancing the social welfare capabilities of the emerging country (Todaro and Smith, 2012).

It is important to note the distinct differences in international financial capital flows, namely portfolio investments and foreign direct investment. Portfolio investments, theoretically, impact the economic outlook for a country by means of affecting the cost of capital directly and the credibility of its institutions indirectly as its financial markets become deeper, more liquid and able to absorb the influx of financial capital more efficiently. Foreign direct investment is often a means of establishing a foothold for domestic production of a particular strategic sector. It can be supported in a material way by policymakers via the incentives offered to the multinational corporations they partner with for a particular investment. FDI can also be a better conduit to impacting the real goods sector of the domestic economy. It can positively impact it via spillovers in support of horizontal and vertical industries but it also can negatively impact it via the same channels.

2.5 Foreign Direct Investment in Emerging Market Countries

For many opponents of full financial account liberalization, there also exists a fundamental distrust of the concentration of power perceived to exist within the corporate structure of multinational corporations (“MNCs”). This concentration of power and influence is present in the activities of foreign direct investment as well. The large financial influence of MNCs exerts pressure on sovereign governments to assist in the furthering of the MNCs agenda primarily and to the benefit of the emerging market country secondarily.

MNCs and their activities have the ability to influence the domestic savings rate. While MNCs infuse financial capital into specific industries, critics of private financial capital flows argue that there are negative repercussions to this activity. They cite that there can be a crowding-out effect of private domestic savings when multinational corporations enter an emerging market country. While orthodox economists view the infusion of foreign competition as beneficial to the industrial organization of the domestic country, critics view the entrance of the MNC as an anticompetitive entrant as they often come with exclusivity agreements with the host country and have mixed results in re-investing the profits of their activities in the host country (Todaro and Smith, 2012). Furthermore, they contend that these MNCs institute vertical integration of production with other foreign firms and less so with domestic firms, minimizing the possibility of positive externalities in supply chains. This limits the technological spillover effects from permeating throughout associated industries to the activities of the MNCs. It also

minimizes the spillover that could occur in human capital development for emerging countries.

Heterodox proponents criticize the outsized and overgenerous incentives given to MNCs in the realm of FDI. This can be in the form of lower tax rates, subsidies, tariff protections and other welfare reducing mechanisms. This critique often coincides with the philosophical argument that it is fundamentally unfair to give additional benefits to the “rich” at the expense of the “less rich or poor.” Instead of fully deploying limited resources for development enhancing activities, sovereign governments with ties to MNCs grant too much discretion to the MNCs within the framework of FDI agreements. Moreover, among critics of FDI deployment, there is a level of skepticism of the actual benefits of industry spillover from FDI. Much like the criticism of competitive benefits, there is skepticism about accrued benefits to the local labor force in terms of skill enhancement, transfers of R&D as well the impact on innovation within the domestic market (Todaro and Smith, 2012).

Another critique specific to FDI claims that profits for multinational corporations that drive the investment often will be repatriated disrupting the balance-of-payments for the domestic country and putting pressure on the domestic currency. MNCs are in the business of profit maximizing behavior (especially when incorporated in countries that have a strong culture of maximizing shareholder value as opposed to stakeholder value). As MNCs grow larger in revenues and market-share, their repatriation activity can have outsized impacts on the currency market for emerging countries with insufficient depth to absorb the impact. This activity, when successful, has the possibility of seeing a large

relative outflow of domestic currency when repatriated back to the country of incorporation. For emerging market economies whose reliance on a particular MNC is outsized relative to its domestic economic activity can experience challenges in maintaining a policy of orderly currency management. For economies with a flexible exchange rate system, the volatility in exchange rate movements create uncertainty for a wide-range of business activities dependent on foreign currency transactions. This uncertainty can permeate the domestic economy as trade sectors, financial sectors and other businesses with global interactions cease to move forward with economic transactions due to the destabilizing impacts of currency gyrations.

Heterodox economists also highlight the potentially harmful environmental impacts that can arise within the FDI process, which might not be accounted for in the regulatory space of the domestic country in terms of cost capture. Developed economies have struggled to develop a cost benefit analysis that aims to accurately incorporate the impact on the environment into the decision-making process. This problem can be more extensive in emerging market countries, where regulatory and legal institutions can also be underdeveloped or even completely lacking from the standpoint of environmental protections. In addition, regulators of industrial by-products in emerging market countries might not have enough data to monitor and effectively govern the environmental activities of MNCs, particularly those involved in heavy machinery and other chemical or natural resource intensive activities. The challenges of environmental degradation and incorporating into economic modeling constitute a problem for both developed and developing countries.

In addition to the challenges of identifying and measuring environmental degradation, there are often inadequate institutions to minimize the negative impacts and maximize the positive impacts on an emerging country. There are potential problems that exist for emerging market economies that have not created the correct institutions and infrastructure to provide a foundation for the dissemination of spillover benefits throughout the country. For instance, the hypothesis of FDI creating human capital spillover benefits for emerging market countries best applies when there is an adequate educational infrastructure to train and create human capital for its populace in a large scale. Countries that have inadequate access to public education at all levels will struggle to provide the foundational skills necessary for the dissemination of spillovers from technology imported by MNCs. Emerging economies that do not have sufficient educational institutions should prioritize this investment by means of domestic policies or by soliciting financial capital from official development assistance channels (i.e. the World Bank and other development entities). Only after a meaningful level of educational dissemination has been achieved should policymakers in emerging market countries prioritize a strategy of encouraging foreign direct investment, particularly in high-tech industries. This can be particularly challenging for many emerging and developing economies, as it takes time for international financial aid to flow and support development. Domestic government programs can also be inadequate, as revenues are insufficient to make a concerted push in establishing educational institutions or building an expansive educational network in all parts of the country without financial sacrifices in other portions of the fiscal budget. The policy challenges for emerging and developing countries are extensive and impact countries' development prospects.

Finally, critics of FDI inflows argue that financial capital flows primarily to emerging and advanced economies, ignoring the needs of many less developed countries. This continues to be an issue in sub-Saharan Africa where FDI is lacking throughout the region. According to the IMF, the amount of net direct investment in sub-Saharan Africa in 2011 amounted to \$32.5b, while similarly developing regions of Asia and Latin America have received net direct investment of \$168b and \$133b, respectively (IMF, 2012).

There is also a strong belief among certain heterodox proponents that FDI and MNCs are vehicles for antidevelopment that seek to exacerbate a dualistic world shaped by the outgrowth of the colonial period of world history. It is their belief that many former colonies, which are represented primarily by the developing world, are still beholden to their predecessor empirical connections continuing the pattern of dependence. Furthermore, the aim and goal of investors of FDI is focused on maximizing corporate profit, while the aim of policymakers in emerging market countries often is in increasing domestic income for its populace.

2.6 Conclusion

Whether owing to behavioral factors, differences in the development of institutions or the instability of uncertainty & risk on an evolving economic system, heterodox economists highlight the numerous downside aspects of fully liberalized financial accounts for private international financial capital flows. The short-term nature of many instruments of portfolio investments and the compounding risks that they can

impose on emerging market economies warrant an active and wide-ranging tool kit for policymakers to mitigate for their respective economies. As Minsky points out though, it can be difficult to implement such tools as the length of a speculative build up persists owing to the perceived financial gains to be realized. Both Keynes' and Minsky's ideas on instability have relevance for financial capital flows of emerging market countries. This is due to the above average growth experienced by some emerging market countries and the potential for speculative financial capital inflows seeking to capitalize on the opportunity. As rapid financial capital inflows occur, investment supply can outstrip demand. As profit expectations moderate, the mismatch between demand and supply of investment can induce a rapid outflow of financial capital. This surge in financial capital inflows and outflows can be destabilizing for emerging market countries and their policymakers.

Foreign direct investment, while an avenue for human capital advancement and industrial development, also pose unintended consequences. Proponents of financial account management argue that FDI is not the economic panacea that ardent proponents of neoclassical economics would espouse. Overall, there exists an avenue for the responsible and effective deployment of private international financial capital for emerging market countries. Heterodox economists seek to guide and monitor this deployment with a focus on the impact that unintended consequences of financial capital mobility plays on society, the financial system and the economic trajectory of emerging countries. This focus on the monitoring of financial capital flows is further affected by a rejection of the neoclassical assumption that perfectly competitive markets exist in a

widespread fashion. In contrast, imperfect markets, especially within financial and credit markets, are often the dominant competitive structure exhibited within many emerging economies. In this framework, an activist regulatory and policymaking setting is essential, as financial markets are dynamic environments subject to rapid changes within an increasingly integrated global economy.

CHAPTER 3: FINANCIAL LIBERALIZATION & DEVELOPMENT: AN OVERVIEW OF THE EMPIRICAL LITERATURE

The recurrent financial crises experienced since the early 1980s led to the proliferation of empirical studies aiming to empirically assess the linkages between financial account liberalization and economic performance.⁴ Extensive empirical research has been conducted in the study of financial capital flows to such variables as economic growth and development. The results of studies have been mixed to financial capital flows exerting a positive influence on growth and development. Mostly, in the aggregate, the recent empirical literature finds a negative influence of *full* financial account liberalization on economic growth.

This chapter will provide an overview of the empirical literature on international financial capital flows with a particular focus on the impact on economic growth and development for emerging market economies. As the literature is vast, this chapter aims to highlight some of the studies that focus on such factors as push versus pull issues in international financial capital flows, the role of volatility and its effect on international financial capital flows, threshold levels of financial development and collateral benefits

⁴ The Latin American debt crisis beginning in 1982, the Asian Financial Crisis in 1997-1998, the Russian Financial Crisis in 1998 and the Global Financial Crisis starting in 2008 are the most notable of these crises

from financial account liberalization. The impact of direct investment and several country case studies relating to sector level analysis will be analyzed in hopes of identifying some key factors common across emerging countries.

3.1 The Benefits of International Financial Capital Flows: A Neoclassical Defense

In defense of the neoclassical argument for full financial account liberalization, Peter Blair Henry (2007) argues that much of the literature and the construct of the empirical work have been misapplied to the interpretations of neoclassical theory. He argues that neoclassical theory does not posit that financial account liberalization will achieve a *permanent* effect on long-run differences in long-run growth rates across countries, but rather that financial account openness for a closed country can lower the cost of funds and *temporarily* increase the growth rate of GDP. It is this temporary increase in growth, which leads to a larger capital base from which to apply the long-term steady-state level. The steady-state level does not create a permanent increase in long-term growth rates, but a larger base for GDP to increase from relative to the pre-liberalization base. He suggest other economists look at the impact that openness of financial account has in temporarily raising the investment rate and growth rate in the short-term relative to when the country was closed to such tools. This is a means of increasing the trajectory of growth for emerging market countries and is worth considering tools that explore capital accumulation.

Another prediction of neoclassical theory as it relates to international financial capital flow is the positive impact that a deepening of the financial system has on the cost of capital. Ross Levine and Sara Zervos (1996) conducted a regression study of stock

market development and its role in economic growth for emerging market countries. In their regression they utilized measures for size, liquidity and risk diversification as variables for stock market development and demonstrated their positive correlation to economic growth. They studied 41 economies, including notable emerging market economies Brazil, India and South Korea as well as some developed economies and some developing economies over the 1976-1993 time period. Their findings give support to the neoclassical belief that financial account liberalization and development is conducive to economic growth. They conclude with a call for more research on specific causal relationships between stock market development and economic growth to aid policy implementation. The investigation into more research into causal relationships is important as their regression findings indicate correlation but correlation is not causation. The reverse of their findings could be accurate as well – economic growth was the impetus for stock market development.

In a critique of the Levine/Zervos study, Zhu, Ash and Pollin (2002) argue that the Levine/Zervos model incorrectly incorporates outliers in the regression analysis leading to inaccurate conclusions. The authors argue that once removing outliers and scrutinizing the composition of the countries utilized in the data, a different story emerges from the results. First, once removing outliers from the results, the recalculated regression results show no discernable influence of stock market development and economic growth. Secondly, the authors posit that the impact of the Asian Tigers of Taiwan, South Korea, Hong Kong, Singapore and Thailand on the results should be interpreted as the result of strong central government involvement in providing strategic

guidance for economic development as opposed to a limited interpretation of stock market development. Their analysis also concludes that the major contributor to the performance of the Asian Tigers was the amount of credit available as opposed to the emergence of stock market utilization.

A substantial amount of research has been conducted in analyzing the flow of international financial capital in the wake of the Asian Financial Crisis of the late 20th century. An important analysis of the performance of emerging market economies in the first part of the 21st century was conducted by Suchanek and Vasishtha (2009). The authors highlight the significant macroeconomic improvements for emerging market economies as a result of lessons learned from the previous crises. Improvements to macroeconomic stability have provided the fertile ground for the responsible flow of financial capital relative to the conditions existing during the Asian Financial Crisis. They highlight the role that emerging market policymakers have done in accumulating foreign currency tools, adopting formal inflation targeting and moving toward more flexible exchange rate systems. This improvement has flowed into the fiscal policy of the countries as well and has provided benefits related to debt usage. Because of the stable macroeconomic environment, international investors have had greater confidence in emerging market economies willing to provide long-term debt funding (at more stable long-term rates) as well as investing in local debt denominated fixed income instruments as opposed to tied to US dollars or other strong international currencies. In addition, corporations in emerging market countries have gained access to international financial markets as the sovereign risks of the countries they operate in have lessened lowering

their overall cost of capital. The conditions have also been positive for the flow of foreign direct investment again. The authors' analyses gives credence to some neoclassical tenets in practice, as it relates to the lowering of cost of capital for the populace of the emerging market countries. For a measurement of the cost of capital, the authors reference corporate dividend yields. Assessing cost of capital by means of an indicative variable and interpreting that variable accurately is a matter of open debate. There can be other macroeconomic factors which separately affect the dividend yield outside of the flow of financial capital such as a worldwide lowering of interest and inflation rates indirectly impacting the corporate dividend yield. The authors do highlight concerns that exist for heterodox economists as it relates to contagion risks. They fully acknowledge that benefits of financial liberalization have accrued for emerging market economies, but that the integration with global financial networks have increased the contagion risk profile for these countries and that the implementation of targeted capital controls may be an appropriate policy response for some sovereigns. While some targeted capital controls could be implemented, they strongly caution that this is a tenuous policy response as an attempt to limit financial capital access into or out of emerging market countries could have unintended consequences on long-term growth in favor of short-term flexibility.

The direction and flow of international financial capital is an important component of the discussion on financial account liberalization. Reinhart, Ricci and Tressel (2010) look at the flow of international financial capital from 1982 to 2006 with an aim of focusing on the role of capital controls in the distribution of global financial capital. Their regression study, in particular, looks at the deployment of capital controls

in emerging market and developing countries. The results of their study show that in general, capital flows from rich developed countries to open, less developed countries, as theorized by neoclassical economists. This also shows that capital controls are effective in slowing the flow of international financial capital. The results also give credence to heterodox economists, who advocate the usage of capital controls as a means of protecting developing or emerging countries from excessive flows or transporting risk from one country to another. Their findings that a statistically and economically large effect of capital account restrictions exists for the flow of financial capital to open economies does nothing to resolve the debate over whether capital controls should exist but it does demonstrate that properly designed controls can be effective in restricting capital flows.

3.2 Push vs. Pull Factors in International Financial Capital Flows

In a study that looks at the causes and consequences of severe international financial capital flows, Ghosh, Kim, Qureshi and Zalduendo (2012) use a regression analysis to evaluate the occurrence and magnitude of financial capital flows and present their findings as a way of instituting better and more refined policies for policymakers. The authors investigate the flow of international financial capital during the three decades spanning 1980-2009 and include 56 emerging market economies. In the setup of the empirical study, the authors seek to investigate how impactful supply-side and demand-side factors are in determining the flows. For instance, the authors investigate the impact of the US real interest rate as a determinant factor for supply of capital to flow to emerging market economies. They also inspect the role that global uncertainty plays in

the flow of international financial capital. In regards to demand-side factors, the authors look at the role that domestic economic performance, external financing needs, capital account openness, and institutional quality play in creating an inflow of international financial capital. Their study demonstrates that supply-side factors, specifically from developed countries, have become more frequent and synchronized in causing surges of international financial capital. These supply-side factors, the US real interest rate and the level of global uncertainty specifically, are primary determinants in whether a surge of capital will occur. Where the financial capital flows is directed by the demand-side factors with the exchange rate regime being a significant factor. This would follow with the proliferation of debt instruments globally and the ability to invest based solely on currencies as an investment vehicle.

The results of the study by Ghosh, Kim Quereshi and Zalduendo (2012) showing that surges of financial capital from developed countries can be predicted based on known exogenous factors (US real interest rate) gives merit for emerging market countries to consider capital controls as a deterrent to unwanted flows. Furthermore, when supply-side factors and demand-side factors create a strong environment for the flow of international financial capital, there exists an opportunity for both host and source countries of financial capital to coordinate the means of the flows. An understanding of the type and intensity of predicted flows should give policymakers in emerging market countries better information to monitor and react to international financial capital flows.

In a presentation of the current debate on international financial capital flows, Prasad and Rajan (2008) argue that numerous regressions in the literature suggest that

inadequate availability of savings is not the primary constraint on growth as orthodox theory would suggest. They suggest that with a little more time behind us and ever more empirical studies, we will be able to revisit the topic of international financial capital flows with a pragmatic perspective. The first step of orthodox theory that savings is a constraint has been largely bypassed for a more important dialog on the costs and benefits to financial account liberalization. They argue that benefits can and do accrue for emerging market countries that received financial capital inflows, but that these benefits need to be received by countries that have achieved a certain level of institutional development to deploy the financial capital in an impactful way. This level of institutional development is an important thread and also has a corollary as it relates to the costs of financial account liberalization. For countries that have not achieved a high enough threshold to achieve the collateral benefits, the costs become greater to the emerging market economies. It is difficult to define what the right level of institutional development would be for a country to achieve. In conjunction, financial capital comes in many forms and increasingly is difficult to fully control with the speed and dexterity of financial innovations taking place globally. As such, open financial accounts are the reality for most of the emerging market world, and finding the right staged approach to financial account control and liberalization should be the aim of policymakers in those countries.

The authors also highlight the nature of the “Lucas Paradox” whereby Robert Lucas (1990) questioned why empirical evidence of financial capital has not flowed from the developed world to the developing world as the orthodox theory would predict.

Prasad and Rajan even show that in the first decade of this century, emerging market economies have been net exporters of financial capital to the developed world. This is further evidence of savings/investment not being a limiting factor for emerging market economies.

3.3 Reaching a Financial Development Threshold for Emerging Countries

As it will be elaborated in the next chapter, Prasad and Rajan (2008) offer more insights into their hypothesis that institutional development and pragmatic policy liberalization is the right course to chart for emerging market economies.

Another study that discusses the complicated nature of international financial capital flows to emerging market countries is done by Kose, Prasad, Rogoff and Wei (2006). Similar to the effort of Prasad and Rajan, the authors highlight the lack of definitive empirical evidence in regression studies demonstrating financial account flows and economic growth. The authors catalog sixteen different studies conducted during 2001-2006 looking at the role of financial account liberalization and economic growth over periods starting as early as 1960 and ending in 2002. Fourteen of the studies find mixed results on the role of financial account openness and economic growth while two studies find a positive relationship. Kose et al (2006) theorize that one of the reasons that regression studies are challenging in this endeavor is that financial account liberalization is also picking up other factors of reform efforts that tend to accompany the liberalization. In looking at the neoclassical argument that financial account liberalization lowers the cost of capital for emerging market countries, they reference a

study by Henry (2000) that looks at equity market performance after financial account liberalization and the increase in stock index levels indicates a lower of the equity premium. Several other studies conducted during that time period offer similar findings. While results of studies focusing on narrow measures of financial account liberalization, like equity market liberalization and performance, show strong positive results, broader attempts at linking aggregate financial account liberalization and economic growth have proven more elusive. As the authors attest, more work needs to be conducted at the micro level of various components of the financial account to uncover where the strong positive linkages are between financial capital components and economic growth. This will provide greater clarity for policymakers when it comes to linking specific policies and structuring the adequate controls to accommodate, if needed.

3.4 The Impact of Volatility on International Financial Capital Flows for Emerging Countries

The debate about the consequences of financial account liberalization often focuses on the unstable nature of international financial capital flows. In a review of the role of international financial capital flow and a link to economic growth and development, Mody and Murshid (2011) incorporate the role of volatility into the equation. The topic of volatility of financial capital flows is paramount to emerging and developing countries. The authors utilize a panel regression to study the influences of financial capital flows on economic growth, while incorporating a variable to capture the level of volatility within the investment environment for the emerging market and developing country. By separating countries into periods of high and low volatility (with

volatility being measured by standard deviation of output growth) and analyzing the effects of financial capital flows during these different periods, the authors seek to demonstrate the importance of macroeconomic stability into the framework of the role of international financial capital flows and growth. Mody and Murshid find that nonlinearities by means of growth volatilities are an important determinant in the analysis. Countries that are characterized by a high volatility regime find a negative correlation between economic growth and financial capital inflows, while low volatility regimes and financial capital inflows have been associated with positive economic growth. It is their assertion as well that it is this pool of high volatility regimes that overwhelm the entire sample that have led other studies to assert that financial capital flows are negatively correlated with economic growth. When separating out for volatility, the results reinforce the neoclassical view that financial capital flows support economic growth. This is due to the belief that low volatility conditions are sought by investors. Because of this positive feature, more private capital flows enabling the recipient country riskier activities to deploy the financial capital and to enhance long-term economic growth. Another interesting conclusion of this paper is the finding that development aid flows are correlated with negative economic growth in both low and high volatility regime. This could be due to the overwhelming economic headwinds that countries accepting official development aid face.

3.5 International Financial Capital Flows for Select Emerging Countries

As indicated by the findings of Kose, Prasad, Rogoff and Wei (2006), when we look at specific case countries or experiences, the stories highlight nuances and the

individual nature that international financial capital flows demonstrate in practice. South Africa is a middle income country with robust legal and financial systems. Owing to the strength of its institutions, South Africa makes for an interesting case study of the financial development threshold level. Tswamuno, Pardee and Wunnava (2007) evaluate the effect of financial account liberalization as it relates to stock and bond market liberalization had on economic growth during the time period 1975-2005. Particularly, the authors highlight the challenges for South Africa at the end of the Apartheid era in regards to its macroeconomic environment and the role of liberalization during this environment. South Africa, in 1994, was in the process of opening up to globalization and providing an inviting framework for foreign investors to provide capital. Tswamuno, Pardee and Wunnava (2007) demonstrate via a regression that liberalization of the stock and bond markets in South Africa did not coincide with economic growth. Their usage of foreign participation in the Johannesburg Stock Exchange (JSE) as a proxy for stock market liberalization is limited when used as a proxy for international financial capital flows. This study is more interesting when viewed in conjunction with the specific circumstances surrounding the South African economy, in the post Apartheid era. South Africa had been isolated from globalization by both internal and external factors. Many countries in the developed world implemented various restrictions on financial capital flows to South Africa in light of the policies of the Apartheid government in South Africa, particularly in the 1970s and 1980s. In conjunction with the external controls utilized by investors, the South African government instituted controls on domestic financial capital flows in order to manage its exchange rate. This was conducted by means of the use of the financial rand (which had

been in existence since 1985), and had the effect of insulating South Africa from the global financial community (Cross, 2003). From 1985 until the end of Apartheid in 1994, private financial capital was non-existent in South Africa. Once the financial rand was abolished, the reintroduction of institution development in South Africa was able to be re-started. The last half of the 1990s was a period of institutional development by means of removing internal financial capital controls, as well as a period of trade openness in the real economy. While the Tswamuno, Pardee and Wunnava regression does not show positive correlation with economic growth, the story of the flow of private financial capital in South Africa seems to fit the thesis of Prasad and Rajan of a need for emerging market countries to attain a certain level of development for financial capital to provide collateral benefits for the recipient countries. In the case of South Africa, the financial reconstruction (as well as trade economy liberalization) in the post Apartheid era marked a considerable threshold to hurdle. From the lens of a pragmatic approach to financial account liberalization, South Africa would appear to be a sound case study to the research and work of Prasad and Rajan.

In exploring the case of South Africa, further Ketil Hviding (2006) highlights some of the financial account liberalization steps conducted by South Africa during the 1994-2003 timeframe. Hviding contrasts favorably the experience of South Africa with some of its emerging market counterparts in terms of the pace of financial account liberalization and the sequencing implemented by policymakers. The financial account liberalization steps undertaken were the following:

March 1995: The removal of the financial rand dual system of exchange controls

July 1995: Institutional investors allowed to invest via swap arrangements with nonresidents amounting to 5% of total assets

June 1996: Offshore investment expansion by domestic corporations under the restriction that they were funded by profits from overseas operations

March 1997: Payments and transfer restrictions for resident use were removed with the exception of travel, study abroad and gift restrictions

March 1998: Direct investment into South Africa from outside of the South African Development Community is allowed up to R 30 million

February 1999: Increases on the limit of foreign investment for resident institutions (i.e. capital outflows) to 15% of South African assets

February 2001: Further increases on direct investment limits

May 2003: Another round of increases on external financial capital flows for residents and domestic institutions

Over the course of eight years, a series of financial account liberalizations steps were undertaken with the aim of retaining the domestic financial wealth that existed within South Africa, predominantly in the hands of white residents. Policymakers were cognizant of the potential harm of both intellectual capital flight as well as financial capital flight in the wake of a political regime change. The intervening years were

focused on building out institutions in support of financial capital development and stabilizing macroeconomic conditions to invite the flow of international financial capital.

The empirical studies on the South African experience have failed to produce strong regression results linking international financial capital flows to economic growth. An approach focusing on the collateral benefits to financial account liberalization within the scope of a staged and pragmatic sequencing provides evidence for a healthier domestic economy overall.

Within the empirical literature, there is an emphasis on viewing the role of portfolio investments and direct investments separately as the motive and driving factors are divergent. According to orthodox and numerous heterodox economists, the role of direct investment has important potential technological spillovers to the emerging market economy while portfolio investment primarily influences the cost of capital. In reviewing the literature on foreign direct investment, there are more positive signs of the linkage of investment on economic growth than compared to portfolio investments.

Robert Sinclair (2010) undertakes an analysis of foreign direct investing in China, particularly as it relates to the investment climate since China became a member of the World Trade Organization (WTO). Sinclair highlights the numerous positive benefits of direct investment as well as some challenges. In relation to the benefits of direct investment, Sinclair notes the rapid expansion of special economic zones (“SEZ”) in China encouraging the inflow of FDI. These SEZs were a strategic decision as a tool in the government’s desire to transform the Chinese economy to a more market oriented

system. Much of the direct investment funds have been funneled to industries in support of the export economy. These funds have been further utilized to support and expand the employment of local citizens. MNCs such as Nokia and Unilever have provided important FDI projects to China and have achieved a measure of technology spillover as represented by different corporate leadership models, openness to change, an awareness of environmental issues from corporate activity and new production technologies. While some of these MNCs have been a source of positive spillovers into the real economy, Sinclair highlights a significant competitive market change due to the openness to FDI – the impact on locally owned business in relation to MNCs. The author demonstrates instances where MNCs have crowded-out production by locally owned businesses and subverted competitive forces. Over time, there has been a trend of FDI flowing into more capital intensive industries, which have often been the purview of the MNCs. In industries where there is a large locally owned business presence, there seems to be a certain amount of crowding out occurring if those sectors do overlap with some MNCs. This is the chief concern of the author in terms of applying the analysis at the sector level as opposed to an aggregate assessment of direct investment in China. The source of funds, the competitive market structure, the role of strategically important sectors to growth & development as well as the necessary infrastructure to attract investment are all factors that recipient countries should consider in an FDI country strategy. This study as well as some of the findings of the author in relation to crowding out of local domestic production of MNCs as well as positive collateral benefits for the local population is typical of micro-analysis of direct investment.

Another consideration in reviewing specific countries and the impact of international financial controls is the impact that targeted financial liberalization can have in practice. In looking at another emerging market economy, Akinlo (2004) conducted a study on FDI and growth in Nigeria from 1970 to 2001. Nigeria does not have the same level of financial market development as China and South Africa, so it offers a contrasting case. In this study, the author utilized a regression to analyze the effect of FDI on economic growth. In extractive sectors, such as oil extraction there were smaller links to growth than sectors that were manufacturing based. The benefits in Nigeria did not accrue without a significant time lag and are indicative of the level of development needed to be attained before spillover benefits could be disseminated throughout the sectors. The author further argues for greater development in infrastructure and other institutions that could help transmit and facilitate the benefits throughout the economy. His final findings highlight many of the themes investigated throughout the literature review as it relates to FDI in emerging market countries and developing countries – policies that facilitate closer integration of the oil sector to the economy, greater openness, and increased private participation will lead to higher exports, greater spillover from FDI inflows and higher economic growth in the country. Akinlo's assertions echo the refrain of neoclassical economists and the net benefits to emerging economies in relation to financial account liberalization.

While much of the empirical review has focused on the theoretical components, methodology can offer valuable contributions to the discussion of financial capital flows. In one such example, Kottardi and Stengos (2010) analyze the role of non-linear effects

of FDI on growth. The authors argue that their approach to modeling non-linearities is different than previous analyses in this area. Furthermore, their findings imply that the benefits of FDI can accrue to any country regardless of the level of development, once accounting for the appropriate modeling of FDI on growth. The data set used for their analysis is comprised of OECD and non-OECD countries covering the 1970-2004 time period. Their study investigated the impact of FDI flows to countries with measurable human capital data to analyze the impact of international financial capital in conjunction with human capital on economic growth. The results of this study failed to establish a connection between FDI and growth for developed countries, but did find a relationship for middle income and non-OECD countries. The authors hypothesize that their results give support to the theory of convergence that as less developed economies grow and converge with the structure and design of developed economies, their growth rates will converge with developed country growth rates.

Furthermore, Kottardi and Stengos (2010) provide a summary of 16 different macro level studies of FDI and the link to economic growth, with 14 of the studies demonstrating positive contributions of FDI to economic growth and 2 studies providing no evidence of the link between FDI and growth. In addition to the macro level studies, the authors provide summaries of 6 sector level studies ranging from an analysis of countries such as Mexico, Venezuela, Morocco, Uruguay and India. As to be expected, the sector level studies were quite varied depending on the level of development, the competitive market environment within the countries and the sectors studied. The Uruguay study uncovered no evidence of spillover from FDI into the local economy.

This is not unexpected as theorized by Kose and Prasad (2008). In a summary of an investigation into the impact of FDI in the Indian economy, a 2001 study noted positive spillovers from the presence of foreign owned firms and FDI with the level of spillover varying from one sector to the next. These studies give credence to the finding that the implementation of international financial capital to emerging market economies and less developed countries is a complex issue.

3.6 Conclusion

Just as the theoretical arguments of orthodox and heterodox economists provide a mixed picture of the net benefits of liberalized financial account openness and international financial capital flows, the empirical literature is equally mixed in terms of the role of financial account liberalization in aiding development. Numerous studies on the aggregate performance of financial account liberalization in regards to portfolio investments and their effect on long-term economic growth have failed to establish a consistent and significant positive linkage. In contrast, certain authors have outlined negative linkages between financial account liberalization and long-term economic growth for emerging market and developing countries. Some of this lack of definitive empirical linkage (positive or negative) is due to an interconnectedness that exists within the financial infrastructure for emerging market countries. Factors such as the negative influences of surges (negative and positive) in international financial capital flows and the volatility this can cause for macroeconomic stability can complicate the analysis. Methodology differences are cited, as in the Peter Henry Blair (2007) study, on the inaccurate application of the study of financial capital flows to economic growth. He

argues that neoclassical theory states that an influx of capital can raise the level at which the steady-state level of growth will be achieved and not a permanent increase in the rate of growth, as some studies seek to uncover.

In regards to foreign direct investment, there exists less of a stark divide between orthodox and heterodox economists on the potential for positive linkages to economic growth from financial liberalization efforts. The empirical records provide numerous examples of theoretical arguments for the promotion of direct investment and its connection to economic growth over some period of time. The variations in the time period of realizing these economic growth benefits and collateral benefits will vary depending on the competitive environment of particular sectors studied as well as a certain level of development or maturation in the financial infrastructure of the emerging market country having been attained. The empirical literature does reveal that individual country situations vary, and the ability to see theory in practice most likely will occur at the country as well as sector level within a particular country.

CHAPTER 4: POLICY CONSIDERATIONS & CONCLUSION

As the arguments among orthodox and heterodox economists as well as the empirical literature demonstrate, there is no easy, universal answer to policymaking in emerging economies in regards to financial account liberalization. Economies throughout the developed, emerging and developing world are dynamic and complex. What may work in one country due to economic structure, culture, level of institutional development, competitive production environment and other factors can differ with another country equally situated. This reinforces the need for domestic policymakers to know their own country first and where they are situated in a global financial market, secondly. Understanding a country's development level and where the trajectory of financial innovation is leading provides the strategic framework to steer an emerging market economy in the next stage. Within this chapter, I will present arguments for the deployment of financial capital controls in conjunction with an articulate strategic roadmap for emerging market countries. I will also advocate for the aggregation, dissemination and widespread study of international financial capital statistics and incorporating this data into a communication mechanism for the appropriate policy setting institutions within the emerging market country. In addition, this chapter will

promote further country level analysis to identify the “threshold level” of development theorized by Prasad and Rajan. Finally, I will conclude the thesis with a summary of the role of international financial capital in promoting economic growth and development within emerging economies.

4.1 Types of Financial Capital Controls

Financial capital controls can generally be considered in two broad category types – price based and quantity based. They can be implemented to stem the inflow of financial capital, outflow of financial capital or both. Some of the explicit tools that policymakers can utilize in the deployment of capital controls take the form of exchange controls that restrict access to a national currency, limits on the volume of international financial assets, transaction taxes, minimum holding period requirements and regulatory approval requirements. In addition, policymakers also have the ability to utilize indirect policy tools aimed at affecting the flow of international financial capital, most notably via monetary policy and the level of prevailing interest rates. The deployment of monetary policy for dealing with volatile international financial capital flows is too broad-based of a tool for a sophisticated problem as well as challenging owing to the wide-spread effect that interest rate management has on the economy. For instance, altering interest rates has the effect of impacting domestic credit access across all industrial sectors as well as impacts on the exchange rate of the currency. Targeted financial capital controls enable greater precision in matching the policy tool to the specific problem.

The deployment and utilization of financial capital controls is controversial from a political economy standpoint, based on the philosophical differences between orthodox and heterodox economists. But there are also those who understand and embrace the complexity of the topic. In 1998, noted Free Trade advocate and neoclassical economist Jagdish Bhagwati opined on the important differences between the effects of free trade and free capital mobility for developing and emerging market economies (Bhagwati, 1998). Free trade is a much simpler theoretical argument than free capital mobility within the international financial system. Free trade enables countries to specialize in activities of comparative advantage and expand production possibility frontiers by means of trade with other countries. The analysis of free capital mobility highlights the fact that panics or manias in financial markets can happen and that there can be substantial costs to countries from these events. The arguments for free financial capital mobility need to be counterbalanced with the costs of this activity. In Bhagwati's view, insufficient empirical work had been done at that point in time to denote any definitive net benefit relative to net cost of full financial account liberalization for developing and emerging market economies.

Bhagwati also emphasized the flexibility that developing and emerging market countries can gain by having financial capital control tools on the books for usage, if needed. He points out that it is better to have financial capital controls to deploy if significant financial capital flows can disrupt the current domestic economic conditions of the recipient countries. There are important messages conveyed for emerging market countries that have fully liberalized and then back-tracked on liberalization, as this can

introduce uncertainty into the investment environment. According to Bhagwati, it is better to focus on the economic strategy of gaining political stability, economic prosperity and substantial macroeconomic expertise and not just transparency and better banking supervision (Bhagwati, 1998). This guidance and expertise dovetails with the research of Prasad and Kose (2008) on attaining a threshold of development within the domestic financial institution base in order to better manage and employ the potential benefits from international financial capital flows. Policymakers cognizant of financial innovation and globalization can pursue a strategy of building up supportive institutions and expertise for the long-run future of the domestic economy. In the medium and short-term, financial capital control tools can be employed, as needed.

Financial capital controls, while controversial when utilized by policymakers at the country level, are actually commonly used by many suppliers of financial capital. Many global institutional investors, whether regulated mutual funds or unregulated hedge fund pools, maintain temporary or permanent fund closures as a tool to manage uncertain fund inflows/outflows. Institutional investors outline these conditions and reasons for instituting fund capital controls in their offering documents. Fund closures are hailed as a prudent fiduciary action as destabilizing short-term fund flows can negatively impact long-term shareholders. A temporary imposition of redemption fees or outright lock-up periods of financial capital are comparable to tools contemplated by emerging market policymakers in managing periods of instability in their financial accounts. A consistent critique should be applied to institutional fund management as well as policymakers.

Ha-Joon Chang (2003) also notes the importance of individuality for emerging market countries in the liberalization of their financial account environment. “There is no one-size-fits all foreign investment policy that works for everyone” (Chang, 2003, page 16). For a country that has a stable macroeconomic environment and favorable setting for international investment activity, the ability to deploy financial capital control tools, when necessary, can be prudent. Some of the most important activities policymakers can undertake are transparency and information sharing to the financial capital markets. This is echoed in a speech that Ben Bernanke gave in 2011 on the legacy of monetary policy and macroeconomic stability in the wake of the Great Recession (Bernanke, 2011). While financial capital controls and its policy framework differ, the heart of his words applies to policymaking in this circle as well. Policymaking is enhanced when it is paired with clear communication on the intent, duration and the measure of success. As Bernanke states:

Forward guidance about the future path of policy rates, already used before the crisis, took on greater importance as policy rates neared zero. A prominent example was the Bank of Canada's commitment in April 2009 to keep its policy rate unchanged at 1/4percent until the end of the second quarter of 2010, depending on the outlook for inflation. This commitment was successful in clarifying for market participants the bank's views on the likely path of policy rates and appears to have helped reduce longer-term interest rates, thus providing additional policy accommodation. In 2010, the Bank of Japan, which faced ongoing deflation in consumer prices, also used conditional forward guidance, saying that "The Bank will maintain the virtually zero interest rate policy until it judges, on the basis of the 'understanding of medium- to long-term price stability,' that price stability is in sight, on condition that no problem will be identified in examining risk factors, including the accumulation of financial imbalances."

Some central banks provide forward guidance directly by releasing forecasts or projections of their policy rate. This practice had already been adopted by the Reserve Bank of New Zealand (in 1997), the Norges Bank (in 2005), and the Swedish Riksbank (in 2007). Each of these central banks used those projections during the financial crisis to indicate that they were likely to keep rates at low levels for at least a year.

Transparency in communication is also highlighted by the IMF in its 2012 analysis of liberalization and management of financial capital flows. The Fund actively promotes transparency in communication in policy objectives and specificity in relation to financial capital flows in order to minimize disrupting market and public expectations (Blanchard, Hagan, Tiwari and Vinals, 2012). With the plethora of policymaking institutions globally in relation to financial capital, the need for accurate, timely and relevant information on policy actions is critical for the effective distribution and analysis of financial capital flows. Orthodox and heterodox theories believe that expectations have a role in the direction and intensity of financial capital flows. Whether it is due to animal spirits or additional information to refine the mathematical calculus for rational agents, policy communication can help alleviate the uncertainty that can encroach on the investment decision-making process.

4.2 Examples of Financial Capital Controls in Action

During the late 1980s and 1990s, the level of international financial capital flowing to emerging market and developing countries increased as new markets became destinations for financial capital flows. While this proliferation of international financial capital was circulating, policymakers in Chile continued to update and refine financial capital controls to stem the volatility of flows into their country. In 1991, the Chilean government imposed a 1-year mandatory deposit with the Central Bank on portfolio flows. This non-interest bearing deposit served two important purposes: it gave the Central Bank free access to foreign exchange currency to augment its own exchange rate

policy, as needed, and provided a deterrent to potentially destabilizing short-term portfolio flows by increasing the hurdle-rate necessary for investment professionals to surpass in order to justify investment in Chile. In conjunction with the mandatory deposit for short-term portfolio flows, the government also reduced the mandatory stay period for direct investment from ten years (that was first implemented in 1982) to one year to incentivize direct investment activities. The aim of these policy tools was to alter the composition of international financial capital flows from short-term portfolio flows to more targeted and potentially long-term value generating direct investment opportunities (Neely, 1999). At the end of 1998, the Chilean government began dismantling the series of financial capital controls as an acute need to manage financial capital flows had abated. For advocates of short-term financial capital controls, the Chilean model is an example of a strategic, comprehensive approach to financial account management with a successful record of achieving its goals (Gabel, 2003).

In September of 1998, during the height of the Asian Financial Crisis, the government of Malaysia implemented stringent financial capital controls, most notably the suspension of repatriation of financial capital for one year. In 1999, the government removed the repatriation restriction and implemented a system of taxation designed to penalize short-term portfolio capital flows and encourage long-term investment (Neely, 1999). The aim of these efforts was to provide the necessary financial market flexibility for structural reforms to be implemented. The short-term results seemed to achieve the intended objective (Gabel, 2005). However, the financial capital controls did not definitively contribute to or against economic recovery in the years immediately

following their imposition. Malaysia appeared to rebound quicker than its immediate neighbors in the region but less so than other Asian countries, notably South Korea (Sundaram, 2006).

In 2012 several emerging market countries implemented reductions to financial capital controls as a means of spurring economic growth. In September 2012, China announced a speed-up of the approval process for foreigners seeking to purchase mainland Chinese securities on the stock markets. In addition, Chinese regulators are lowering the minimum qualification requirements for overseas investors from assets under management from \$5 billion to \$500 million. The aim of this targeted action is to diversify the source of financial capital in the economic system and to boost confidence for domestic investors. India has recently undertaken alterations to its mix of international financial capital controls in hopes of spurring economic activity. The government of India has recently increased the percentage ownership for foreign investors in Indian firms in certain sectors up to 49%. In addition, the government has also announced that a revision to foreign investor debt holding limits may be coming. This increase in the limit will permit foreign investors to boost the amount of both government and corporate debt from \$10 to \$15 billion and \$20 to \$25 billion respectively. India and China have long maintained financial capital controls on the books and have actively supported usage of some controls throughout their economic development over the past 10-15 years. While both countries have maintained financial capital controls and have altered their tactics depending on business cycle conditions, they've followed a plan of financial account liberalization in stages.

4.3 Strategy and Communication in Managing Financial Development

By having the availability of financial capital controls for use in financial account management is no guarantee that they will be utilized appropriately or that there will not be unintended consequences. In fact, the ability to utilize financial capital controls without a proper monitoring and messaging framework from policymakers can be harmful to the short and medium-term investment outlook for the domestic country. Investor confidence in a country's economic environment is a critical factor in the investment decision-making process. Capital lock-up, expropriation of investment funds or other restrictions on financial capital mobility and can result in a loss of investor confidence. Commingled investment vehicles and other venues for facilitating large-scale financial capital flows may suspend future investment activities for substantial periods of time even if the investment prospects of the country improve in the short-term. Financial capital controls are best utilized when they are conducted in conjunction with a clear strategy and communication of the objective. Whether objectives are measured in units of time or achieving financial flexibility, the communication of the strategy is important for framing expectations for economic agents. As reviewed in Chapter 3, the economic literature varies in regards to the impacts, costs, benefits and risks of financial account liberalization. In stepping back from the instrumental variables in the econometric studies and the intent of what they seek to measure, the broader approach of policy construction offers a less complicated picture – identifying critical statistics based on the relevance to the current state of economic activity within the domestic market, effectiveness of channels for distributing financial capital to useful and value-added

activities and the continual monitoring for structural changes and alterations to the monitoring framework. Some relevant avenues of financial capital deployment measurement and monitoring can be amount of bank deposits, net credit to the public sector, domestic credit/GDP, FDI and FDI/GDP, Portfolio inflows and Portfolio inflows/GDP, interest rate differentials, real interest rates, M1, M2 and M3 and more (Goldstein, Kaminsky and Reinhart, 2000). Many of these statistics are currently available from various sources. For emerging market economies, the opportunity exists to aggregate and communicate to the international investing community critical statistics and the role in the economic development strategy that is envisioned by policymakers. The communication can take the form of specific financial capital indices, the publication of selected statistics with management & discussion of the trends particular to a country or some other variant of information dissemination. The clearer the vision, the more effective the tactical imposition of policy tools can be in stabilizing financial capital flows during periods of economic uncertainty.

In November of 2012, the IMF published “The Liberalization and Management of Capital Flows. An Institutional View” (IMF, 2012) whereby the staff promotes targeted and temporary usage of financial capital controls. This is a significant deviation from staff policy in the 1980s and 1990s, where full capital account liberalization was the stance of the IMF. The IMF’s recent guidance acknowledges the substantial changes in thought from the Asian Financial Crisis as well as lessons learned from the beginnings of the Global Credit Crisis of 2008. It is the hope of this author that the IMF will work with emerging economies on the implementation and construction of prudent, temporary

financial capital controls in response to the level of financial development attained within each country. Continued accumulation of financial statistics, the construction of a strategic financial account roadmap and the proper messaging of this activity should also be in order for these consultation activities.

4.4 Threshold Level Identification for Financial Development in Emerging Countries

Domestic policymakers need to understand the appropriate strategy to support a stable macroeconomic environment for high and middle-income countries (particularly emerging market economies) for investors and the domestic economy relative to low income and developing countries. This is the threshold level that Prasad and Kose spoke of in achieving a rate of development and globalization within the financial capital system that creates an environment for mobile financial capital to achieve its intended benefits. Recently, Nouredine Khadraoui (2012) conducted a study of 70 countries, including developed, emerging and developing markets, over the 1970-2009 and identified the rate of private credit to GDP as a significant indicator of financial development for emerging market countries. Countries with private sector credit/GDP ratios of roughly 50% are most vulnerable to macroeconomic instability. This finding coincides with theory that posits that developed countries have a mature enough financial system to distribute and absorb financial capital into the domestic economic system. In comparison, developing countries, with less private financial capital and a greater reliance on supranational funding (i.e. World Bank, IMF, etc.) are more insulated from macroeconomic instability than emerging market countries. Emerging market countries that have an intermediate-level of financial development and insufficient financial capital

controls at their disposal are at the greatest risk of destabilization from volatile financial capital flows (Khadraoui, 2012). This study is one such investigation into identifying a threshold level of financial development. Academics, policymakers and interested economic agents within specific emerging market countries should examine other measures of financial development, particularly as it relates to financial capital flows and their absorption and utilization to guide policy-making, especially as systems change and evolve over time.

This can be supported by a broad-based global regulatory framework and synthesis of legal and financial standards throughout the globe. For instance, the goal of a synchronization of global accounting standards for comparability of data analysis between GAAP and IFAS is an example of such an effort. Other avenues of economic data comparability efforts within the developed and emerging market countries will bring greater benefits to investors and recipient countries alike. Known deviances should be corrected over a period of time to enable the correct adjustments for data aggregation completeness and recalibration by recipients and users of this data (policymakers, academic databases, etc.). This broader based synthesis of a global financial capital system is represented in the policy response within the economic community at the outset of the 2008 Global Financial Crisis and the utilization of the G-20 rather than the G-8 as the forum for policy discussion and action.

4.5 Conclusion

The role of private international financial capital can be a powerful variable for economic growth, when a country is supported by a robust institutional framework. There are numerous factors that affect the direction and flow of investment activity. Some of these factors are quantitative and widely available for all market participants to access, such as tax rates for direct investment projects. Other factors are more elusive to assess, such as psychological factors of investors and the seemingly quick manner in which capital can flow from one locale to another. A financial development threshold for emerging market economies is a critical component for the effective deployment of international financial capital. Certain institutions, like the domestic financial sector, needs to have the depth, breadth and sophistication to be able to facilitate the flow of financial capital within the economy. Finally, many of these variables are interwoven and feed into each other (or against). The financial development threshold level of an emerging market economy impacts the cost of capital demanded within the financial market by international investors. As the number and quality of institutions becomes more robust, the lower the country specific risk attached to investments in the emerging market economy with the result being a reduction in the cost of capital.

With the complexity and countervailing factors at play in the analysis of international financial capital flows for emerging market countries, a case can be made for monitoring and dissemination of economic data as well as the broadcasting of policymakers' strategy to the international financial system. This can take the form of frequent publication of the respective financial capital figures (as well as surrounding

data points integral to the analysis) as well as guidance on trouble spots or warnings in the eyes of the policymaking institution. If this institution is the Central Bank, narrative on how financial capital flows affect the current balance of payment outlook and exchange rate policy is one methodology to be applied. For emerging market countries, an assessment of the outlook can be accompanied by a discussion on the type of financial capital controls that exist in the tool kit and the short-term outlook for the need to apply, refine or suspend the usage of financial capital controls. A review of the financial system development can be produced in regards to a long-term strategy or goal. While long-term strategies or visions can be difficult to achieve, strategies give a fixed point objective that economic agents can identify and incorporate into the decision-making process. The strategy is a means of corralling expectations about the future and direction of economic development and the growth that can accompany it. The international financial capital system, both on the supply and demand-side of the investment process, is a robust means of distributing capital around the world. While a pricing system exists within many financial capital markets, the objectives and goals of suppliers and consumers across developed and emerging economies can differ markedly. For emerging market economy policymakers, the opportunity to “message” the status of economic development, by means of communication and assessments of financial capital environments is critical to the evolution and functioning of these markets. International institutional investors, particularly in the developed world, demand transparency on the investment framework on behalf of their shareholders. A volatile or uncertain risk outlook within an emerging market country diminishes the ability and confidence for the investment manager to deploy financial capital to that country. In addition, the domestic consumer of

international financial capital, whether it is a public-private joint venture, sovereign government issuing debt in the hopes of further developing its country, private domestic company expansion efforts or other investment projects of varying type, current and reasonable information on the investment outlook is equally important. As Keynes pointed out in 1936, the animal spirits in the investment decision-making process can be fickle. This factor calls for an appeal to information dissemination and more transparency on expectations, particularly in emerging market countries.

The study of international financial capital flows is dynamic and complex. Many areas of future research continue to surround this topic. The effectiveness of the G-20 during the current credit crisis is one avenue of future research to assess the cooperative interaction of policymakers in both developed and emerging market countries during periods of financial instability. The evolution of this cooperative effort will provide other institutions the opportunity to seek for ways that complex macroeconomic topics can be jointly strategized for the benefit of the global financial system.

The pace of innovation, communication, trade and wholesale development is changing rapidly with both positive and negative externalities. Continuing research into the mutually beneficial aspects of globalization will only benefit the information available for emerging market policymakers seeking to optimize their strategy for global financial capital integration.

Country specific success stories on identifying the financial account liberalization threshold for emerging market countries is another research area valuable to the

continuing dialog on financial account liberalization and the impetus for economic growth. In addition, any alterations to the global legal framework to assist the evolution of global financial capital integration outside of full financial account liberalization will be of interest to emerging market and developing countries.

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