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Market Volatility and the Risks of Global Integration

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1 Introduction

Financial globalization can bring substantial benefits when it coincides with well-functioning financial markets. Financial globalization helps facilitate greater reallocation of capital from less to more productive uses. While some charge that the benefits of financial globalization are reaped disproportionately by the large advanced economies, in some very important cases just the opposite is true. It is the smaller economies with less developed financial markets that have the highest concentration of their citizens' assets invested in national enterprises, thus making these assets highly vulnerable to national shocks. The exposure of these assets to national risks can be mitigated substantially through global diversification.

Another concern that is often raised is that only the most economically favored individuals in developing countries will be able to take advantage of the benefits provided through increased financial globalization. The richest and most politically connected individuals in developing countries already have access to global opportunities. While it is unlikely that the poorest individuals will be able to reap the benefits of financial globalization (at least in the near and medium terms), there is great scope for gain among the middle classes, which form the backbone of stable democracies.

Prasad et al. (2003:5) reveal that the benefits of financial globalization are more likely to be realized under conditions where developing countries possess "certain levels of absorptive capacity." They further bring out that while having sound macroeconomic policies in place is essential, variables such as improved governance and institutional credibility strongly increases a given developing country's ability to avoid "volatile capital inflows," thereby reducing its exposure to financial crises (Prasad et al. 2003:5.)

The financial crises that have surfaced across the globe in recent decades vividly illustrate the point that increased financial liberalization and globalization can also come with enormous costs, sometimes exceeding potential benefits. That said, we do not advocate "turning back the clock" on globalization and reverting to a course of financial repression. Rather, we should pursue wiser and more prudent financial liberalization strategies in the future that reduce risks while at the same time continue providing most of the benefits. We argue here that the strategies we pursue are shaped in large part by the ideas, beliefs and doctrines that we hold.

The doctrine of "free market fundamentalism" is rooted in the false belief that the finance sector can discipline itself. While this belief has been largely discredited, it does not however, undermine the basic case for a liberal approach to financial globalization. And despite assertions to the contrary, removing government oversight over the financial sector was never part of the

IMF (International Monetary Fund) agenda or its underpinning neoclassical economic policy paradigm known as the "Washington Consensus." Moreover, Adam Smith (the father of liberal economics) never advocated complete laissez-faire of all sectors of the economy. Economists are highly conscious of how externalities and other factors can hamper markets from operating efficiently when they are left completely unfettered to do as they wish. It has therefore, long been a core tenet of mainstream economics that segments of the financial system require official management and oversight.

This chapter begins by outlining the conditions that must be satisfied in order for us to maximize the benefits of financial liberalization. The most important conditions involve having the appropriate policy ideas and implementing them in the right political environments. From there, we turn to our discussion of how international dynamics can affect the size and shape of financial policies and processes. We complement the conceptual discussions in sections 1 and 2 with an examination of a set of short case studies in section 3. In this section, we examine financial crises that occurred in Argentina, Greece and the Eurozone before winding-up this section with our discussion of the US sub-prime crisis. These case studies provide us with compelling accounts of how things can go terribly wrong when officials and investors behave and act on the basis seriously flawed mental models and where the conditions briefly referred to above (and further discussed below) are wanting. In the case of Argentina and Europe blind adherence to the doctrine known as "fixed rate fundamentalism" led officials and investors to ignore the importance of sound fiscal systems and other critical political and economic factors in contributing to the overall health of its markets. In the case of the US subprime crisis, the adherence to the doctrine known as unfettered "free market fundamentalism" led officials and investors to ignore the important role that regulatory checks and balances play in contributing to well-functioning competitive markets. While there have been a number of important financial crises that have spread internationally and even globally over the last 20 years (including the Mexican, East Asian, and Russian crises to name a few), we have elected to narrow our focus to the three cases outlined above because of their particular relevance in helping us explain how the adoption of false mental models contributed to financial catastrophe.

2a Conditions Required for Maximizing the Benefits of Financial Globalization

Two essential conditions must be met if the benefits of financial globalization are to be maximized and the severe costs are to be avoided. The first is that both public officials and private economic agents must view financial liberalization and the operation of financial markets through the appropriate "mental models" or "theoretical lenses." The second is that the liberalization processes and related policies that are adopted must be crafted and maintained within sound political environments that are capable of supporting well-functioning markets. Such political environments are usually shaped and governed by public-seeking officials who are not captive to special interests. Even if these critical conditions have been met however, they must be satisfied in tandem with a number of other international dynamics. These dynamics are briefly explored below.

2b Conceiving the Correct Processes and Policies through the Appropriate Mental Models

There has been a great deal of attention paid recently in economic policy circles to the *process* of financial liberalization. Adopting the most effective financial liberalization policies and processes is dependent upon our ability to select the appropriate mental models which we use to view and assess them. According to Arthur T. Denzau and Douglass C. North (1994) mental models are shared cognitive frameworks (or beliefs systems) that groups of individuals possess and use to interpret the political and economic environment in which they operate. They also involve prescriptive lenses as to how that environment should be structured. Not all mental models are similarly accurate or equally valid in the way that they conceive the "actual" or "real" political and economic world. In fact, many mental models that people adopt are often plagued with fundamental flaws that cause them to misinterpret that world and hence may lead them to make poor economic choices and policy decisions. In fact, Denzau and North caution that "people [often] act upon the basis of myths, dogmas, ideologies and 'half-baked' theories" (Denzau and North 1994:3-4) in the way that they interpret the world and construe the political and economic incentives that shape it. Consistent with this line of reasoning, they suggest that "it is impossible to make sense out of the diverse performance of economies and polities if one confines one's behavioral assumptions to that of substantive rationality in which agents know what is in their self-interest and act accordingly" (Denzau and North 1994:3-4.) Denzau and North (1994:3-4.) insist however, that "once we open up the black box of 'rationality'" we are better positioned to see that the so called "axioms" or "self-evident truths" that we may hold about the world and how it operates are directly informed by our beliefs about how it is structured. Simply put, our interests are derived from our beliefs and underlying core assumptions (mental models) about what is in our interests and what is not. Therefore, the behaviors of political and economic actors are directly undertaken in accordance with their mental models of what they believe will maximize their benefits and minimize their losses. As a result, Denzau and North (1994:3-4) suggest that "the performance of economies is a consequence of the incentive structures put into place; that is, the institutional framework of the polity and economy."

It is clear that well-functioning banking and financial sectors develop and thrive in environments where trustworthy institutions (such as the rule of law) are respected by both borrowers and lenders alike. All too often however, even when governments in developing countries had access to the best economic and financial advice, their domestic officials adopted some of the prescribed reform measures when it suited their own interests and dismissed other important ones when they did not. In many instances, the process was dominated by special interests who favored selective reforms that had perverse consequences (Willett et al. 2009). Such "perverse liberalizations" were characterized by the privatization of profits that when combined with the continued socialization of losses, predictably ended in crises. While more astute financial experts cautioned against these conditions, many governments and international organizations often ignored such warnings, instead proceeding on the basis 'that any form of liberalization was better than have none at all.'

It was widely believed by those in the advanced industrial countries that such perverse financial liberalization was a problem solely limited to developing countries. A series of related crises that swept the so called "global north" in recent years however, has shattered that false mental model. We concede that there is no "single-one-size-fits-all" theory or mental model for both analyzing or reforming financial markets and financial regulation. And we certainly do not

believe that we or anyone else can claim exclusive knowledge of such a theory or mental model. That said, we do believe that the prevalence of costly financial crises that have spread across the globe in recent times are the result of poorly conceived policies and processes that themselves were rooted in faulty beliefs that policymakers and investors held (and continue to hold) about the world and how it operates.

Examples of such faulty mental models include the false belief that "advances" in mathematical modeling underpinning modern risk management strategies and financial engineering have made financial systems much safer. The most devastating of these however, was the false view famously promulgated by former United States Reserve Bank chairman Alan Greenspan that competition among financial institutions was sufficient to make the financial system self-regulating and sound (Willett 2012: 41-57). Admittedly, our criticisms of these defective mental models are hardly novel. Indeed most of them have been addressed by some economists and financial experts well before the crisis even surfaced. Unfortunately, however, these warnings were widely ignored. While some of the flaws woven into the mental models that contributed to the crisis have become widely acknowledged, the deliberations of the G-20, the Financial Stability Board, the Basel Committee on Banking Supervision and the United States financial reform bill have not sufficiently addressed these defective views or gone far enough in rooting them out.

We do not claim that the defective mental models discussed here are completely to blame for the crisis. Recent studies have shown that a wide range of factors contributed to the breadth and depth of the crisis. Davies (2010) for example, discusses over thirty factors that have been argued to have contributed to the crisis. Indeed the specific causes of economic crises often vary widely from one country to the next. For these reasons it would be naïve to expect that we will ever be able to eradicate the threat of financial crises entirely. We do believe however, that by systematically revising and replacing the false belief systems or mental models that contributed to these crises with ones that more accurately reflect how financial markets actually function and operate in the real world, we will be better positioned to reap the benefits of financial liberalization and globalization without having to endure the very high costs that we have experienced in recent years.

Unfortunately, most discussions and debates over solutions for averting crises before they happen (and addressing crises once they occur) are framed in mutually exclusive ideological terms such as 'governments versus markets.' These types of dichotomies fail to provide us with an accurate or useful basis for identifying problems and therefore, leading us to pragmatic solutions. On one extreme are those that adhere to the ardent laissez-faire view that markets always operate efficiently and competition is always perfect. On the other extreme are those who hold the view that financial markets are highly irrational and exploitative. Rather, we ought to be focused on exploring more enlightened and comprehensive solutions that involve the role of governments in creating and supporting the institutional frameworks required for the development and maintenance of well-functioning markets. Our approach proceeds on the basis that financial markets work well most of the time, but that they cannot manage themselves perfectly in all cases. Under certain conditions financial markets can be susceptible to bouts of "over-optimism" or "irrational exuberance" which can quickly turn to market skepticism thereby

creating boom-bust economic conditions. In the international sphere such behavior is often referred to as the problem of "capital flow surges and sudden stops."

Government-sponsored supervision is necessary because fundamental divergences often exist between individual and social rationality in the way that financial markets operate at both the domestic and international levels. The operation of banking and financial markets provides an excellent example where the "invisible hand" of Adam Smith needed to be guided by the "visible hand" of government. For the invisible hand of competition to work in the interests of the general public, appropriate incentive structures must be in place. And as Adam Smith himself conceded, a necessary role for governments is to make sure that they are. Competition alone may be sufficient to provide such incentives in instances where no important externalities are at play. Unfortunately, such externalities are a particularly salient concern in the international and global economy and we cannot therefore, afford to assume that they will be managed exclusively through market mechanisms.

While many innovative financial instruments can play a useful role in diversifying risk when utilized in the appropriate contexts, the excessive faith placed in them by both major financial institutions and their regulators actually resulted in increasing (rather than reducing) the risk to financial systems. For example, the sophisticated mathematical techniques utilized in modern risk management models in the period leading up to the recent global crisis failed to take into account the fact that the statistical relationships that tend to hold-up during good times can fall apart during bad times. These models proceeded on the false assumption that all important relationships are linear to a reasonable approximation. The new field known as "complexity economics" offers us a number of important tools for explaining how the financial system can behave quite differently at various points in time. This emerging field emphasizes that a variety of social as well as physical behaviors have important elements of nonlinearity. Exploring such nonlinearities can help us better understand why financial systems become exposed to excessive risks, and therefore, how financial booms can turn to sudden busts.

A number of the factors emphasized in the recent literature on behavioral finance (that draws heavily on research in cognitive psychology and neuroscience) have helped us better understand the widespread tendencies toward "over optimism" and "over confidence," hubris, and confirmation bias that cause us to see only what we want to see. These factors also help to explain why financial markets generally failed to detect the early warning signs of such emerging problems and why they neglected to follow through with the discipline required to limit excessive risk taking. These same factors also contributed to the failure of the financial markets to provide the necessary discipline against private sector excesses such as the real estate bubbles in Europe and the United States as well as the fiscal excesses assumed by governments in countries such as Greece. In both types of cases the outbreak of a crisis served as "a wake-up call" that triggered abrupt changes in the behavior of financial markets.

2c Domestic Political Dynamics

The second essential condition required for countries to maximize the benefits from financial liberalization is that they have well-functioning political systems in place that genuinely serve "the public interest" and operate above the fray of narrow special interests. Generally speaking,

stable and prudent financial systems tend to coincide with public-seeking political systems that are characterized by transparency and accountability. By way of contrast, poor economic performance is often associated with rent-seeking political systems that tend to be dominated by avaricious politicians. Therefore, we argue that it is important to analyze how ruinous political systems and processes helped contribute to financial crises.

In light of the above, we argue that for a well-functioning global financial system to exist, it is essential to get domestic financial systems right, or at least not too far wrong. And globalization presents major issues that cannot be dealt with adequately with national policies alone.

As brought out above, in most industries competitive conditions are sufficient to spur innovation, promote quality control, and keep prices down to reasonable levels consistent with the logic of the invisible hand. Where there are important divergences between private and social costs however, the establishment of competitive conditions is not sufficient. Where negative externalities such as environmental degradation are produced, collective action exercised through government intervention, may be warranted to bring private costs more in line with social costs.

It has been understood by economists for more than a century that banking systems are subject to important externalities that should be mitigated through government involvement. A major function of the banking system for example, has long been to provide maturity transformation between depositors who want to be able to access their funds quickly and those who borrow to finance investments and require the security of longer-term financial commitments. Since under normal circumstances only a fraction of depositors will want to withdraw their funds at any given time, economies of scale allow the banking system to use the majority of deposits to fund shorter term loans. Normally this process works quite well and allows for a much more efficient allocation of resources toward productive investments. But the maturity transformation on which this process is dependent makes the banking system vulnerable to liquidity crises. This is especially so in instances where fears concerning the soundness of financial institutions may cause depositors to rush for safety and pull out their money. And often speculative doubts about one institution can spread to others and the resulting contagion can wreak havoc throughout the entire financial system. While deposit insurance has greatly reduced the frequency of old fashioned bank runs, in cases where the financial institutions also rely heavily on short-term borrowing, the markets for such lending can seize-up—often with devastating consequences. This is precisely what happened in case of the global financial crisis.

In order to prevent such crises from spreading or deepening in their intensity, almost all countries have chosen to arm their central banks with the ability to act as a "lender of last resort" to provide emergency liquidity to the financial system when needed. The existence of such backstops can lead to problems of moral hazard where the partial socialization of the costs of financial crises gives banks incentives to take on high-risk investments. Thus as a quid-pro-quo measure, governments take actions to offset these incentives for over-lending to risky activities through the use of capital requirements and other regulations.

Where such regulations are poorly conceived and structured or regulators fail in their duties of oversight, investors are more likely to engage in excessively risky behavior. If the financial system becomes fraught with excessive risk-taking, the odds of a financial crisis occurring are

substantially increased. An unyielding faith in the power of the invisible hand (as held by former Federal Reserve Chairman Alan Greenspan), could lead one to the false conclusion that the forces of market competition coupled with the desire of investors to protect the long run viability of their financial institutions would be sufficient to keep any tendencies towards over-expansive lending largely in check. As it turned out however, pressures exerted by a highly competitive economic environment to produce quick yields on investments and maintain market share led to just the opposite result— a tendency to expand risky activities in order to keep-up with the competition. Blind faith in modern mathematical techniques for measuring and assessing risk (which in fact substantially understated the true level of those risks but were nonetheless blessed by the regulators) led banks to assume considerably larger risks than they and their regulators had assumed. These operational models had not only been adopted by commercial banks but investment banks such as Bear Sterns and Lehman Brothers and the insurance giant AIG. Unfortunately, neither the banks nor their investors questioned the underlying assumptions built into these highly complex financial engineering models. The absence of any kind of independent financial analysis to check the validity of these models constitutes a massive systemic failure that ultimately helped fuel the "Global Financial Crisis."

2d   International Dynamics

If all major financial markets behaved efficiently and national systems of regulation and supervision of financial sectors were universally sound, then financial globalization per se would be an unlikely cause of financial instability. Such logic implicitly underlay the beliefs of the designers of the Eurozone. They believed that there was no need for the European Central Bank (ECB) to be given "lender of last resort" power or to regulate multinational financial institutions. Their view was that if fiscal deficits could be kept under control then a combination of sound national financial regulations coupled with well-functioning private financial markets would obviate the need for the ECB to have such powers.

The main argument in favor of international collective action governing financial regulation is premised on the fear that the imperatives imposed by global competition would spur nations on a "race to the bottom" to relinquish their regulatory safeguards. The existence of tax havens is evidence that this can be a problem and presents a case, at least in principle, for the international harmonization of financial regulation. However, the strength of this case remains a matter of dispute. Distinct national views persist over which aspects international harmonization should focus on. Indeed while a major focus of the EU's efforts at financial regulatory reform has been on establishing minimum levels of capital requirements, the UK has been fighting to retain its power to set distinctly higher capital requirements in order to bolster London's economic reputation.

Establishing an international-level financial regulator is much easier said than done. To do so first requires that national governments agree on who is responsible for creating and enforcing the regulation as well as who should cover the financial costs in the event of crisis. But in our view such an undertaking would certainly be worth the effort. Arriving at an agreement over the establishment of international guidelines for such responsibilities could help significantly reduce international financial disputes. A good example of this is the recent dispute involving Iceland and the UK over who is responsible for funding the deposit insurance of entities of Icelandic

banks operating in the UK. The standard rule is that Iceland would be responsible for the branches of Icelandic banks operating abroad and the host country would be responsible for subsidiaries. However, this division of responsibilities is not always accepted in practice, thereby creating uncertainty over the process.

Financial regulators have begun refocusing their attention on the broader issues related to large multinational banks that run into serious trouble and may be on the brink of insolvency. In that process, most major national regulatory authorities have now been requiring banks to develop so-called "living wills" which outline a comprehensive process for "winding them down" in the event that they are confronted with a bank's eminent failure. In developing these plans multinational banks originally assumed that the regulators in the different countries in which they operated would co-ordinate their actions. In early 2013 however, the Federal Reserve was forced to announce that the banks could not count on such co-ordination. Similarly, while the member countries of the Eurozone have agreed in principle to the idea of an area-wide banking union, substantial differences have been voiced by their governments over what functions and operational authority banking unions should exercise as well as over the best means for implementing them.

Sadly international regulatory policy is lagging far behind what is required to avert another global crisis. Fortunately not all international financial issues must be dealt with at the international level. While borrowing and lending in foreign currencies by national institutions does present special problems for risk management, these can generally be dealt with at the national level. There is strong evidence to support the claim that high ratios of foreign currency liabilities relative to a country's international reserves make countries more vulnerable to currency crises. In effect, short-term foreign currency borrowing, while often quite productive for the country in question, also generate a negative externality by making that country more vulnerable to a run on its currency. To avoid increasing its exposure to such risk, a country would need to increase its holdings of international reserves. Failure to impose the cost of such increased reserve holdings on borrowers would lead to greater levels of foreign borrowing than would be optimal. Therefore, it is essential that these externalities be taken into account in both the design and implementation of any new financial regulations.

In conditions where international capital flows are a particularly salient issue, national central banks will have limits on their ability to carry out lender of last resort operations. This presents a case for having an international lender of last resort. Both swap lines among major central banks and the International Monetary Fund help partially provide the services that would be offered by an international lender of last resort. The IMF has undertaken substantial reforms in its lending procedures that would allow it to play more of this role. Whether and if so, how the IMF practices should be further reformed and its resources increased are major areas of further international debate.

Having examined the conditions that must be met for financial liberalization to be successful in a highly complex and potentially volatile global financial system, we will now look at how blind adherence to "fixed rate fundamentalism" and poor domestic political-economic processes contributed to the Argentine and European crises. We will then continue by examining how

"free market fundamentalism" and domestic political failure contributed to the United States sub-prime crisis and how financial globalization processes helped it go viral.

CASE STUDIES

3a Fixed –Rate Fundamentalism and the Argentine Financial Crisis

"Fundamentalism" of any kind is rooted in the blind adherence to a given set of ideas, beliefs, doctrines or mental models irrespective of context. The narrative behind Argentina's financial crisis, much like Mexico's crisis that occurred a few years earlier, is a classic example of fixed rate fundamentalism run-a-muck. In both the Argentine crisis as well as the Mexican crisis that preceded it, officials had bought into the then popular theory that exchange rate-based stabilization would provide a quick and relatively painless way to regain price stability (Willett 1998). While this strategy frequently worked in the short run, initial success was often accompanied by increasing overvaluation of the currency, ultimately culminating into a currency crisis. While investor optimism prompting the capital flows into Argentina was initially quite justified, investors failed to detect the early warning signs of mounting exchange rate disequilibrium.

The story is often said to begin when President Carlos Menem adopted an IMF structural adjustment package to help deal with Argentina's persistent hyperinflation problem that had gripped the country throughout the 1990s. As part of that initiative, Menem appointed Finance Minister Domingo Cavallo who instituted a currency board regime that pegged the peso directly to the US dollar. In the immediate years following the implementation of the Convertibility Law, the country experienced low unemployment rates, monetary stability, and strong foreign investment (Steger and Roy 2010:104). The strategy initially worked brilliantly as economic productivity skyrocketed while exports soared.

As noted above, Argentina's success in conquering inflation, however, was not accompanied by control of its fiscal deficits. The success story of defeating inflation led investors to largely overlook the other economic problems that were emerging and finance continued to flow in (Willett 2002). By the middle of 1998 a severe recession took hold of Argentina's economy. The strength of the US economy pulled the value of the US-backed Peso up along with it. Most international investors initially ignored these problems. As Argentina's budget deficits persisted in direct violation of agreements it had made in exchange for receiving a series of IMF bail-out packages, investors finally began responding by dumping their assets, ultimately leading Argentina to default on its $140 billion debt (Blustein 2006.) The resulting Argentine crisis was not caused by global financial integration per se, but it did afford Buenos Aires easy access to new sources of foreign capital thereby enabling the government to continue financing its large (and otherwise unsustainable) fiscal deficits in the short term. That said, let us unpack the causal factors that are most directly responsible for the crisis.

Domestic politicians and policymakers who once claimed credit for creating the "miracle" quickly turned their strategy to the "politics of blame avoidance," (Weaver 1986) by pointing

fingers at international institutions and "avaricious global investors." Those on the political left were keen to blame the entire financial catastrophe (both the devaluation and the subsequent default) on domestic fiscal austerity and greedy global investors (Willett 2002.) The real causes however, could be traced to at least two distinct, but reinforcing, crises (Willett 2002.) The first was ignited by the insolvency of the government itself, which ultimately led it to default on its debts, many of which were owned by global investors (Willett 2002.) The other cause was the overvaluation of the currency which ultimately forced the now infamous devaluation. Undergirding these crises was both short-termist domestic and international politics. For reasons of domestic political expediency, rent-seeking politicians in Buenos Aires supported policies and programs that they ultimately could not pay for. Despite their better judgment, international financial institutions (IFIs) caved under global political pressure to step in and offer a string of bailout packages. Unfortunately, these interventions ended up only postponing the crisis.

The subsequent economic meltdown of 1999 was the result of the inability of domestic politicians, international policymakers and global investors to correctly grasp what was happening to Argentina's economy in the lead up to the crisis. The mental models adopted by these various groups were laced with serious flaws that preventing them from correctly comprehending the true causes of the crisis and hence the complexities involved in fixing it. The adoption of the convertibility policy itself was the wrong policy prescription for addressing Argentina's deeper political and economic systemic problems. While it appeared to offer a quick fix to Argentina's hyperinflation problem in the short run, it was not sufficient to address the country's burgeoning problems over the long-run.

A crucial insight of modern international monetary theory, developed under the label of the theory of optimal currency areas, is that there is no single exchange rate regime that is best for all countries. The theory lays out the characteristics that make fixed versus flexible exchange rates more desirable for individual countries (Salvatore and Willett 2003.) While Argentina possessed some of the characteristics that would cause it to favor a fixed exchange rate regime, it did not boast some of the other most important ones.

Currency convertibility regimes tend to work well for small countries whose globally exposed economies are heavily dependent on trade with larger ones. Under circumstances where one economy is heavily linked to another, the currency convertibility regime makes sense. But Argentina is a relatively large country boasting a sizable domestic economy with a quite low ratio of international reserves. Indeed trade with the United States accounted for only about one per cent of Argentina's economy (Willett 2002.) Therefore linking its currency to the US dollar was extremely inappropriate.

The second problem with the currency convertibility plan was that the Argentine government believed it would address all of Argentina's other economic shortcomings. But as noted above, inflation was hardly the only problem plaguing the country. Buenos Aires confronted grave budgetary issues. The government simply did not have the political capacity to collect sufficient taxes to pay for its social spending commitments and special government projects that were lavishly doled out to political supporters. Spending continued to spiral out of control in the country's provincial areas where local politicians refused to exercise fiscal restraint consistent with the IMF's requirements (Willett 2002.) The failure of policymakers and global investors to

grasp the fuller story behind Argentina's economic troubles ultimately resulted in a full-blown catastrophe in which financial globalization played only a passive, rather than an active role as is often depicted. That said, no one doubts that the consequences nonetheless were devastating. This is especially true for the innocent Argentine citizens.

3b Greece and the Euro Crisis: "Monetary Unions are Not Enough"

The concerns we have raised in regards to fixed rate fundamentalism should not be construed to mean that we are against the idea of the Euro. Rather, we aim to expose the false assumption that fixed rate regimes are a panacea for resolving all the complex macroeconomic challenges involved with economic convergence. Indeed there are several potential advantages that can be reaped from adopting a common currency, such as reducing the transaction costs associated with exchange rate uncertainty. But if any common currency area is to function properly and provide the expected benefits to all the member countries, monetary convergence must be implemented and maintained in conjunction with other macroeconomic considerations. In order for monetary unions to function smoothly, it is essential that member countries adopt similar fiscal policies and have some kind of sovereign mechanism in place to ensure that this continuity is maintained. This should have been especially apparent at the time when the Southern European countries of Spain Portugal and Greece were entering the Eurozone. At that time, these Southern European candidates possessed highly dissimilar business cycles and discrete tax and spending practices from their German and Austrian partners. Given these circumstances it would have been unrealistic to expect monetary convergence on its own (as provided through the adoption of a common currency) to be able to cover the wider macroeconomic divergences that existed between the Northern and Southern European candidates.

The Greek crisis was similar in many ways to the Argentine crisis. Just as the fixed exchange rate regime of Argentina's currency board generated excessive confidence among foreign investors toward Argentina, Greece's entry into the fixed rate Eurozone fueled exaggerated expectations about the small European country's economic prospects. In both cases exuberant speculators helped these governments fund their fiscal deficits at relatively low costs, which in turn, helped facilitate their continuations.

As with Argentina, there has been a tendency for European officials to blame speculators for the Euro crisis. French officials were perhaps the most imaginative, suggesting that speculators conspired together to bring down the Euro. Less strident, but more frequent, were charges that the financial markets were so blinded by fear that they were incapable of seeing reality. Hedge funds and other speculators were especially demonized and often accused of profiting at the expense of the general public and their governments. Less guilty according to this view, but equally destructive, were the impulsive actions taken by the blind herd of less sophisticated investors who reacted with "unjustified" panic.

A superficial look at the spread of the crisis would seem to support the various views above. Muck like the 1997 East Asian Crisis, panic undoubtedly did play a role in the spread of the Euro crisis. Similar to the Asian crisis prior to its outbreak, investors and borrowers had been far too sanguine. Times were good and were expected to remain so. The initial effects of entry into the Euro had been highly favorable for the late joiners from Southern Europe. But these countries generally possessed less secure macroeconomic fundamentals as compared with their northern neighbors, who had formed the initial core of the Eurozone.

As prospective member countries began meeting the Maastricht requirements for joining the Euro, their noble efforts were initially interpreted as a sign that their governments had mended their ways. As a result, their economies enjoyed a huge boost in confidence as new waves investments began pouring in. While their economic prospects appeared to be much-improved in the short run, the highly positive reaction from financial markets was based on excessive optimism about the longer run. Also contributing to this over-optimism was a belief by many that despite the explicit language contained in the "no-bail-out" clause in the Euro treaty, if any problems arose, the strong Euro countries would not let their weaker partners fail. This logic fueled perceptions that Greek bonds were somehow almost as safe as German bonds. These views were further encouraged with the adoption of international rules by the Basle Committee that allowed the debt of all governments in the OECD to be treated as though they were risk-free in so far as regulatory purposes were concerned.

While such investments initially performed well in the short run as expected, most investors paid little attention to the longer run problems that would emerge if the reforms were not fully carried out as initially promised. As a number of economists had predicted, political obstacles imposed by privileged groups overwhelmed endogenous pressures for genuine reform that the optimists had been hoping for (Willett et. al. 2010.) As time went on "reform fatigue" began to set in. Not only did public efforts to continue the reform process slacken, but in several of the southern countries as well as in Ireland, private markets became caught in the same types of real estate bubbles that led to the subprime crisis in the United States. In these cases, easy financing from banks in France and Germany helped drive the conditions surrounding the bubble. Still in a state of economic euphoria, optimists paid little attention to early warning signs of impending trouble.

The collapse of the real estate bubbles in the United States and the United Kingdom coupled with statements issued by the newly elected government in Greece that the country's budgets were in much worse shape than had previously been reported, put an abrupt end to the euphoria. As the crisis spread from Greece to Portugal before ultimately moving on to Spain and Italy, some politicians referenced shark feeding frenzies in an effort to portray " opportunistic" investors as voracious predators that had begun violently attacking the assets of economies as they fell into distress. While a number of hedge funds took advantage of this dire situation, they were neither the cause of the contagion nor the distress that resulted. Emerging evidence revealing the true financial positions of the countries at the center of the crisis is mainly to blame. As evidence surfaced daily revealing the actual severity of bad debt that been issued and circulated, market confidence in government leaders and Eurozone officials quickly evaporated.

In a number of countries, fears of contagion in the financial markets led desperate governments (with the support of the Eurozone institutions like the European Central Bank) to issue bold, but

unsupportable, statements that holders of bank debt (and initially even holders of Greek government debt) would suffer no losses despite the seriousness of their financial positions. Many economists believe that such fears were exaggerated and the eventual Greek default generated only mild repercussions. Government policies aimed at making bank investors whole shifted the problem of bank insolvency into fiscal drains on the public budget, thereby converting private sector problems into public sector liabilities. The most extreme example of this was the Irish government's ill-conceived agreement to assume all of the bad debt of its entire banking sector. In taking this radical action, the country's enviable budget surplus that it enjoyed before the crisis was instantaneously converted into a massive deficit, comprising almost one third of the country's GDP. The decision to socialize these private liabilities had been based on assurances from both the banks and their regulators that losses would be limited to no more than a few billion Euros.

Initially markets reacted very favorably to government assurances that they would be able to contain the crisis. In this initial period market skepticism was temporarily suspended and markets rallied around these assurances. But when governments failed to contain the damage, confidence began to plummet as markets felt that they had been misled. Market optimism and pessimism therefore, ebbed and flowed according to the raised and diminished expectations that were based on what governments had initially promised and later failed deliver on.

Not all countries suffered from the same shortcomings. Spain for example, possessed a relatively moderate government debt to GDP ratio while Italy had only a small budget deficit. Spain however, hid a considerable budget deficit and had assumed fiscal responsibility for the country's bad banking debt which was massively larger than what the government had initially stated. Italy too had a large debt to GDP ratio which meant that as interest rates increased, its deficit would continue to expand. As it turns out however, these conditions were merely symptoms of much deeper systemic problems that directly reflected the highly dysfunctional political systems from which they came. As markets grew wise to these realities, confidence in the ability of these countries to adopt sensible policies to address these deeper systemic issues diminished even further. As market confidence dwindled, low or negative growth rates were projected for the foreseeable future, thereby eliminating the possibility of growing out of the problem.

Charges that the markets were blind to differences across countries are also belied by the evidence. For example, as Ireland began to actually implement substantive reforms (rather than merely announce them), the interest rates on its debt began to fall substantially while those for a number of the crisis countries were continuing to rise. It is impossible to say with any degree of certainty what the justified interest rates should have been for each country as information and circumstances shifted dramatically from one day to the next. Thus undoubtedly market rates at times reflected risk premia that may have seemed excessive when viewed with the benefit of hindsight. These conditions are more reflective of prudent investors trying to cut their losses than any kind of market manipulation on the part of profit-scouring hedge funds. In fact hedge fund purchasing kept risk premia from skyrocketing when regular investors quite rationally jumped ship and dumped their assets.

3c Free-Market Fundamentalism: U.S. Subprime Crisis Goes Global

The United States subprime crisis was primarily the result of domestic failures rather than the instability of international financial markets. Many government officials blindly followed a free market fundamentalism which ran counter to the principles and teachings of mainstream neoclassical economics. In adhering to this faulty mental model, they adopted a series of excessive deregulation measures as well as failed in their duty of care to adequately enforce the laws and regulations that remained in place. In so doing, they created the perfect financial conditions for moral hazard on an unprecedented scale.

The process began with the widespread deregulation drive of the Reagan administration that covered everything from airline travel, to telecommunications and ultimately carried through to the financial services industry. Perhaps the most well-known policy reform was the Banking Act which reversed the Glass-Steagall Act that was passed in the wake of the Great Depression of the 1930s prohibiting commercial banks investing their assets in the stock market. Over the course of the next two decades following the Banking Act, large commercial banks such as J.P. Morgan, Citicorp, and Chase Manhattan were gradually permitted to underwrite securities (Steger and Roy 2010: 60.) By the late1990s with one dramatic stroke of a pen, President Bill Clinton signed the Financial Services Modernization act thereby dismantling the last remaining vestiges of the Glass-Steagall Act (Steger and Roy 2010: 124.) In the absence of sufficient regulatory safeguards that tempered investment institutions' propensity to engage in high risk investment activities, they were free to run amuck.

The 2008—9 Financial Crisis first broke with the collapse of the housing bubble in the United States in 2007. But this as sociologist Saskia Sassen has noted "was just the "tip of the iceberg." In that process, financial markets seized up, stock markets collapsed and housing markets all over the world saw their real estate prices crumble. The Crisis cost tax payers, investors and governments trillions of dollars. Although warnings had been raised by a number of analysts, they were largely ignored by governments and the market. In actuality the conditions culminating in the crisis had been building over the course of two decades. In the 1980s and 1990s, strong economic growth began to give rise to a widespread sense of complacency. During that period, borrowing limits were raised and asset requirements for securing loans were substantially reduced. The failure to effectively regulate several types of derivative markets (financial contracts based on the value of other assets) led to a massive explosion in what became known as "mortgage-back securities" (Steger and Roy 2010: 124.)

These mortgage-backed securities were in themselves a useful innovation designed to help spread risks. The problem was that both the ratings agencies and investors greatly overestimated the amount by which these securities could reasonably reduce such risks. Operating under the false belief that housing values could only increase, loose lending rules were adopted which allowed banks and mortgage lenders to begin financing a variety of high-risk home loan products without regard to whether or not home borrowers would be able to actually afford their payment commitments over the long run.

Relaxed regulations unleashed a host of creative financing products (also known as unconventional loans) which allowed home borrowers to purchase real estate with no money down (generally regarded as high risk proposition) or only requiring them to the pay interest portion for a fixed amount of time. The initial culprits were the ARMs (adjustable rate mortgages) whose interest rates were assessed according to the fluctuation of short-term interest rate prices in the broader financing market. Often enticing borrowers at relatively low rates in the short term, they had the potential to go up substantially thereafter—and so they did. Low income borrowers who may not have even qualified for a conventional 10 or 30 year fixed-rate loan for example, might get an ARM housing loan at say 3%. Then after only a short period of time, depending on the terms of the loan, this interest rate might even double. When that happened, many borrowers were unable to make their house note.

The loose lending practices described above fueled demand for home borrowing on an unprecedented scale which in turn naturally drove up real estate prices to unrealistic levels. But during this housing boom, many borrowers who had assumed ARMs and found their payments extending beyond their reach could simply refinance their homes and pull their equity out to cover their increased payments. In addition, many borrowers used their home equity like ATMs to pay off other debts and make new purchases. In the short run, this strategy generated massive amounts of wealth, but the party could not last forever.

When concerns began surfacing over the idea that the housing markets (and consequently securities markets) might be overvalued, growth in those markets began to slow down, ultimately spiraling downward. When the housing bubble burst many borrowers began to default on their home loans. With home equities evaporating daily, borrowers began to find that they could no longer qualify for refinancing to bail themselves out as they might have done previously. With defaults mounting daily and no end in sight, mortgage giants Fannie May and Freddie Mac were on the brink of insolvency, ultimately requiring a massive bailout by the federal government. Uncertain about the true value of their investments, speculative fears led to the collapse in their actual value. The nation's leading investment houses such as Bear Stearns and insurance companies such as AIG became heavily exposed. The collapse of Wall Street eventually would carry over into "Main Street" where the fallout would mean less demand for new consumer products such as automobiles and other goods and services. One result was that even the so called "Big Three" automobile manufacturers in the US would turn up in Washington for a multi-billion-dollar government bailout of their own.

In the wake of the crisis some officials and economists blamed the mess on the large capital inflows resulting from what they argue was a global savings glut generated by countries in Asia, (especially China) and the oil exporting countries of the Middle East. While the behavior of international financial markets was partially to blame for the spread of the global crisis, they were not the principal culprit. Losses from holdings of United States mortgage related financial instruments, while tragic for those concerned, were small relative to the size of most national economies. But almost half of the United States mortgage-related securities were held in Europe, largely by banks and hedge funds. As a result there can be no doubt that the losses on these investments did have a major financial impact.

The largest group of innocent victims however, was the developing counties. Over the course of the previous decade many of these developing countries had made major strides in improving the quality of their financial systems. And though they held only a tiny fraction of these bad investments, as the crisis grew in the United States and Europe, capital inflows into Asia, Africa Mexico and Latin American declined dramatically as investors in the advanced economies ran for safety. And as recessions took hold of the advanced economies demand for foreign exports produced in the developing countries slowed considerably, thereby adding to the victims' financial pains.

4 Conclusion

One must distinguish between financial liberalization of the kinds that are aimed at unshackling heavily repressed financial systems (once the norm in developing countries) and the sort of liberalization that has become associated with the imprudent evisceration of regulatory and supervisory institutions required for maintaining sound financial markets. There is clear evidence that banking systems (and a variety of other aspects of financial systems) cannot sufficiently discipline themselves. But while financial globalization has failed to operate in the highly efficient way often assumed by many economics textbooks and neoliberal fundamentalists, neither has it operated in the wildly irrational ways often assumed by market critics. It is clear therefore, that we need to adopt more nuanced and balanced mental models when analyzing and discussing these market failures. This is especially important when these market failures occur at the international and global levels. In order to develop an improved understanding of the behavior of financial markets, economists and financial experts have increasingly turned their attention to cutting edge research that has been emerging in the fields of behavioral finance and complexity economics. The work in these fields has already led to substantial revisions in how the IMF views issues and problems related to international capital flows.

Recent crises have clearly illustrated that poorly conceived and implemented financial policies and regulations in one country can have important negative spillover effects on other countries. The ruinous effects caused by frequent surges and sudden stops to the developing economies have caused the IMF and many other economists to substantially rethink the costs and benefits of unfettered international capital movements. While the case in favor of returning to conventional capital control rigidities remains weak at best, there have been strong arguments raised against unregulated foreign borrowing. While a growing number of economists agree that some cases may warrant the temporary imposition of controls on capital inflows, most believe that stronger regulation and supervision over the international behavior of financial institutions is the best course of action going forward.

Well-functioning financial sectors tend to exist in environments where state-sponsored apparatuses provide prudent and balanced regulatory supervision over economy activity. Moderation is essential. States that wield their regulatory powers arbitrarily and capriciously can cripple economic growth while those that fail to provide a reasonable level of regulatory supervision will be remiss in promoting healthy competitive markets. While the history of recent

crises highlights many weaknesses in the procedures and practices of the private sector, it simultaneously reveals the many deficiencies embedded in the current government-led regulatory system. Most would agree that simply ushering in a bunch of new regulations will not be sufficient to make the financial systems safe. Sadly, despite much activity devoted to financial reform (including the over 800 page Dodd-Frank reform bill in the United States and a continuing stream of reforms that have emerged from the international Basle Committee), many financial experts believe that these noble efforts have resulted in only minor improvements. Strong pressures exerted by financial sector lobbyists resulted in the adoption of many watered-down regulatory proposals. In fact most of these reform proposals offered little in the way of regulating the use of risk models that contributed to the current generation of global financial crises. The practice of manipulating these complicated mathematical models to understate true risks, thereby allowing financial institutions to reduce their capital requirements and increase their leverage, continues even now. Though developing ways to improve the behavior and processes of regulators is not an easy task, it is essential if we are to enjoy the micro-economic efficiency effects of liberalized financial markets without suffering the devastating costs that we will surely have to endure in the absence of genuine comprehensive reform.

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