

What have the crises in emerging markets and the Euro Zone in common and what differentiates them? 1

Roberto Frenkel²

Introduction

A number of economists have pointed out the key role of international capital flows and current account deficits in the formation of the crises in the periphery of the Euro Zone and have also mentioned their similarities with the crises in emerging market economies (for instance Krugman 2011, Mansori 2011 and Wolf 2011). They characterize those events as "balance of payments crises", as alternative to "public debt crises". Other economists have adopted the same perspective and have produced papers with detailed data and persuasive arguments on the role and effects of capital inflows after the launching of the Euro (for instance Cesaratto and Stirati 2011, and Bibow 2012). More recently, Cesaratto (2012) and Bagnai (2012) have developed analyses of the Euro Zone crises making use of our description of the macroeconomic dynamics that precedes the crises in emerging markets (as presented in Frenkel and Rapetti 2009). On the other hand, I became very interested in the comparison between the macroeconomic performances of the Euro Zone and the emerging market countries in early 2010, when the Greek sovereign risk premium started to rise. In a short paper (Frenkel 2010) I discussed the similarities and differences of country risk premiums between both sets of countries.

In this paper I attempt a broader comparison, taking my own analysis of crises in emerging markets as point of departure. This perspective could be useful to shed some additional light to the understanding of this important issue.

The paper is presented in two sections. In section 1 I compare the macroeconomic behavior of some of the Euro Zone economies (Greece, Ireland, Portugal, Spain and Italy: GIPSI countries) with that of a set of emerging market economies that experienced financial crises in the second period of financial globalization (from the early 70s of the XX century up to present days). I focus on the stylized facts of the critical processes looking for commonalities and differences.

My first point is that all the mentioned experiences have in common a cyclical macroeconomic dynamic, which resembles that originally described and explained by Hyman Minsky. This observation allows me to separately analyze and compare the booming phases (i.e. the formation of the crises), on the one hand, and the

The paper is based on presentations at the 21st Annual Hyman P. Minsky Conference on the State of the US and World Economies "Debts, Deficits and Financial Instability", organized by the Levy Economics Institute of Bard College in New York, April 11-12, 2012 and at the workshop "The Euro: manage it or leave it! The economics, social and political costs of crisis exit strategies", Faculty of Economics, Gabriele d'Annunzio University, Pescara, Italy, June 22-23, 2012. A previous version of this paper was presented at the International Economic Association "Roundtable on Debt Crises and their Resolution", Buenos Aires, August 13-14, 2012. The author thanks the comments and suggestions received in the mentioned seminars and the support of Ford Foundation to the research. The author also thanks the comments by Martín Rapetti and Mario Damill.

Principal Research Associate at CEDES, Professor at the Torcuato Di Tella University and Honorary Professor of the Buenos Aires University.



second contractive phases (i.e. the processes that lead to the systemic financial crisis) on the other. I show that analogous events put in motion the first phase and that similar dynamics are observed in this phase in both sets of countries. I conclude that the same factors (i.e. capital inflows and swift private credit expansion) have planted the seeds (i.e. the appreciation of the real exchange rate and the generation of important current account deficits) of the turning point and the second phase of the cycle in both emerging market and the mentioned Euro Zone economies.

With regard the second phase, the comparison focuses on the exchange risk and the risk of default of the debts issued in the first phase. The inexistence of a lender of last resort in international currency for the emerging market economies makes their behavior differ from that of the Euro Zone countries. In the former, the exchange risk and the risk of default of the debts in international currency (both private and public) issued in the first phase play a key role in the dynamic leading to the financial and currency crises. In contrast, in the Euro Zone cases, the main source of negative feedback effects in the second phase of the cycle is the risk of default of public debts. These effects result from the reluctance of the European Central Bank to play the role of lender of last resort of Euro Zone governments. But I also observe that the GIPSI economies would be trapped in contexts of debt deflation and low competitiveness, even if the European Central Bank would have acted as lender of last resort of the governments.

Next, the comparison focuses on the pro-cyclical fiscal policies implemented in common by emerging market and Euro Zone countries in the second phase of the cycle. I explore the political economy of these policies, which privilege the issuing of signals to the financial markets above measures to foster the recuperation of growth and employment. The Keynesian beauty contest provides an appropriate framework for this analysis.

Section 2 focuses on the lessons that can be drawn from the comparative analysis of crises. One conclusion of the comparison is that the macroeconomic policies implemented by emerging market countries in the 2000s suggest that they have learned from their past experience with crises, while the monetary and financial design of the Euro Zone and the policies currently implemented have made the same mistakes that emerging market countries have committed in the first thirty years of the modern financial globalization, up to the late 1990s.

A brief description of crisis resolution experiences in emerging market economies follows. Successful resolutions included devaluation in all cases (with the exception of the Argentine Tequila crisis in 1995). In most cases the resolution included massive international rescue packages or the substantial alleviation of the debt burden together with the refinancing of private debts in favorable terms subsidized with significant fiscal resources. The present orientation of Euro Zone policies does not seem to draw any lesson from these historical antecedents.

1. Comparing financial crises in the globalization period

Taxonomy is the activity of grouping individuals into species, arranging species into larger groups, and giving those groups names, thus producing a classification. I apply this methodology to a set of financial crises that took place in second period of financial globalization which lasted from the late 60s of the XX



century up to present days. The set comprises the most important crises experienced by emerging market economies as from the early 80s and the crises that Euro Zone economies are suffering nowadays. Instead of the form or shape of the individuals recorded by the naturalists, the classification looks at the stylized facts of the critical processes.

The set of crises. Emerging market economies are developing countries that inserted into the expanding international financial system after implementing policies of deregulation and liberalization of their financial systems and capital accounts. Almost all of these countries were net receptors of capital flows from developed countries from the beginning of the financial globalization process up to the late 1990s (Frenkel and Rapetti 2010). In the last three decades of last century (expanded to include the first two years of the 2000s) those countries experienced two waves of crises. The first wave swept the Latin American region in the early 1980s. This experience is related to the fact that Latin American economies inserted into the globalization process much earlier than other developing countries: Brazil started to tap the Eurodollar market in the late sixties and other Latin American economies started to receive international credits in the second half of the seventies. Most of these economies experienced foreign debt crises in the early eighties, but some of them did not experienced systemic financial crises (Brazil, for instance). I take advantage of the work by Laeven and Valencia (2008) in order to identify the financial crises cases. In the early eighties deep financial (and currency) crises were experienced by Argentina, Chile, Uruguay and Mexico.

The second wave of financial crises in Latin America began with the 1995 Mexican and Argentine crises, which were followed by the Brazilian currency crisis in 1998 and the financial and currency crises in Argentina and Uruguay in 2001-2002. On the other hand, five economies in East Asia and Russia experienced financial crises in 1997-98. The Asian and Russian crises had important financial spillovers and negative real impacts on developing countries. Finally, Turkey in 2001 experienced a financial and currency crisis that, together with the Argentine and Uruquayan mentioned crises, constitute so far the last financial crises in emerging markets. It seems important to stress that each wave of crisis was preceded by booms of capital inflows to developing countries.

The crises in the Euro Zone were triggered by the US sub-prime crisis. The initial impacts of the contagion were proportional to the degree of exposure of the national financial systems to toxic assets in the US, irrespective of their balance of payments situations. For instance, GDP contraction in 2009 was greater in Germany, which showed a current account surplus, than in other Euro Zone economies showing current account deficits but less exposure to US assets (Servén and Nguyen 2010). I am interested in the further development of the critical processes in Greece, Ireland, Portugal, Spain and Italy (GIPSI). In these countries a second surge of critical developments led by Greece started in early 2010.

It is important to differentiate financial crises that have taken place together with foreign debt crises from foreign debt crises not accompanied by financial crises, because the macroeconomic dynamics that lead to the crises differ in both cases. For instance, Brazil in the early eighties confronted a public foreign debt crisis without a domestic financial crisis. The public foreign debt, intended to deepen the ISI process and preserve relatively high rates of growth in a context of high energy prices, became unsustainable because two simultaneous negative shocks in 1979: the abrupt rise of the international interest rate and an additional jump in the oil price. In contrast with Argentina, Chile, Mexico and Uruguay; Brazil in the 1970s maintained the foreign exchange controls and did not open the capital account nor deregulate the financial system (Frenkel (2003). From 2002 on there were no financial crises in emerging market economies, despite the strong negative real and financial shocks caused by the United States sub-prime crisis.



The Minskyan cycle

The first stylized fact I observe is shared by all the episodes in the mentioned set of crises. They were preceded in all cases by a cyclical macroeconomic dynamics, with an initial phase of expansion, followed by growing financial fragility and ending up in financial crises (in all the mentioned cases except Brazil in 1998) and in currency crises in all the emerging market cases (with the exception of the Argentine in 1995). This cyclical dynamics is clearly related to the work of Hyman Minsky (1975, 1977). Minsky stressed that unregulated market economies are systems cyclical in nature, in which crises are not unusual events. A key element of this cyclical pattern is the endogenous behavior of agents' risk perception and expectations. In the development of the boom phase, optimism spreads and confidence increases. Optimism and confidence tend to reduce the perception of risk and agents - investors and intermediaries - take riskier positions. Asset price bubbles that support the financial expansion inflate in the process. In the booming phase, the balance sheets become increasingly fragile. At some point a negative episode draws people's attention to the high degree of risk exposure and a period of distress begins. Concern about the exposure to risk leads many players to prefer liquidity and undo positions. Bubbles deflate and many agents are forced to assume wealth losses. Pessimism replaces the previous optimism while the contraction process feedbacks. The development of the downturn leads to the systemic crisis. It was impressive to realize how accurately the Minskyan cycle described the pattern followed by the American economy in the period preceding Lehman Brothers bankruptcy. Minsky's insights were then broadly recognized and this helped to bring them back from the intellectual exile where they had been relegated.

Actually, the Minskyan cycle is observed in many other financial crises⁵. The processes that led to financial crises in the emerging market economies and the Euro Zone economies exhibit Minskyan features similar to those verified in the US economy. Crises were always preceded by booming periods in which credit expanded and risk taking increased. Analysis of the range suggests that the crises emerged as the culmination of the same processes that caused a growing optimism and encouraged greater risks taking in the boom phase.

Stylized facts shared by the crises in emerging market and Euro Zone economies Besides the above-mentioned cyclical dynamics, the comparative analysis of the crises in emerging market and Euro Zone economies crises reveals other common stylized facts:

Similar triggers of the booming phase. In Frenkel and Rapetti (2009) we pointed out an important difference between the triggers of the booming phase in the US sub-prime crisis and the emerging market crises. In the United States, the real state bubble and the financial innovations that started with the securitization of mortgages (and other debts) are the key ingredients of the booming phase of the cycle. Both are processes that developed and nurtured one to another during a relatively long period. These facts are consistent with the Minskyan view about the endogenous character of the trigger of the booming phase in developed economies.

Besides the pioneer work by Minsky and Kindleberger (1978), the role of credit expansion in the configuration of financial crises has gained increasing recognition (see for instance Kaminsky and Reinhart (1999) and Reinhart and Rogoff (2009). Kaminsky and Reinhart have studied the role of credit expansion fed by international capital inflows in the configuration of "twin" financial and balance of payments crises. Schularick and Taylor (2012) study of financial crises in the period 1870-2008 provides strong support to the role of financial exuberance in the configuration of financial crises and to the general validity of Minsky's model.



In contrast, a distinguishing characteristic of the emerging market crises is that the booming phase began, not with innovations in the financial markets, but with the implementation of macroeconomic policies that give rise to a profitable environment for financial arbitrage between domestic and foreign assets. So, the trigger of the Minskyan cycle in emerging market countries crises has an important exogenous component, associated to the implementation of new macroeconomic policies. This stylized fact is shared by the peripheral Euro Zone crises.

The booming phase in emerging market economies was generated by relatively drastic changes in macroeconomic policies and regulations, which typically included the liberalization of the capital account of the balance of payments and local financial market jointly with the implementation of some sort of exchange rate fixation (pegs active crawling-pegs) 6. The implementation of new regulations and macroeconomic arrangements operated as an exogenous shock on the financial system, which quickly established incentives for arbitraging between domestic and foreign assets and led to booming phases.

The initial booming phase in the Euro Zone economies also resulted from a drastic change in macroeconomic policies. The introduction of the common currency operated as a shock on the national financial systems, which established stronger incentives for arbitraging between core and peripheral countries assets and led to the booming phase in the periphery of the Euro Zone.

Lax financial regulation. The regulation of local financial markets was weak in both the emerging market economies and the Euro Zone economies. In the emerging market cases it may be because local financial markets had been recently liberalized or because the expansion of financial intermediation during the boom exceeds the existing regulatory capacity. In the Euro Zone cases, the introduction of the common currency, by increasing the incentives to international capital flows, generated renewed risks without a contemporaneous reinforcement in financial regulation.

Crucial role of capital movements. International capital movements played a crucial role in the boom and the contracting phase in both the emerging market economies and the Euro Zone economies.

The triggers put in motion similar macroeconomic dynamics. In what follows I present a narrative of a stylized cyclical dynamics based on my analysis of crises in emerging market economies 7. The ability of the narrative to depict the macroeconomic dynamics of the GIPSI cases is discussed in Cesaratto (2012) and Bagnai (2012). Complementary evidence can be found in Bibow (2012), European Commission (2009) and European Commission (2010).

The combination of credibly fixed (or predetermined) exchange rate and capital account liberalization generates important arbitrage opportunities by exploiting significant spreads between the yields of foreign and domestic assets. Capital inflows expanded liquidity and credit in the economy and fed bubbles in financial and real assets. As a result, output and employment growth accelerate. The expansion of aggregate demand leads to non-tradable price increases, which under fixed (or

The Asian countries that experienced crises in 1997-98 already had fixed exchange rate regimes when they liberalized the capital account to facilitate the reception of international credits in the 1990s. The narrative draws on Frenkel (2003) and Frenkel and Rapetti (2009). A formal model, originally intended to interpret the Chilean and Argentine crises of the early eighties, is presented in Frenkel (1983). The model is sketched in Williamson (1983) and restated in Taylor (1991). Taylor (1998) argues that this framework is also applicable to the emerging market crises of the 1990s.



predetermined) exchange rate regimes provokes an appreciation of the real exchange rate. The real appreciation trend reinforces capital inflows seeking to obtain capital gains by holding domestic assets. This in turn feeds back into the real economy, accelerating the expansion of credit and output growth. In this context, domestic agents' financial positions became increasingly fragile (in Minsky's sense). Simultaneously, the combined effect of the real exchange rate appreciation and economic growth stimulates the demand for imports, while exports tend to weaken. The worsening of the trade balance together with the increase in the interest and dividend payments turns the current account into deficit. A steady increase in current account deficit is typically observed. Since, initially, capital inflows are higher than the absolute value of current account deficits, foreign exchange reserves accumulate during the booming phase in the emerging market economies. At some point, however, current account deficit becomes larger than capital inflows, turning negative the balance of payments result and inducing a contraction of liquidity and credit in an already fragile financial system. This is the beginning of the contracting phase. Asset prices bubbles gradually began to deflate and episodes of illiquidity and insolvency emerged, first as isolated cases and then as a systemic financial crisis. In the emerging market economies, financial tensions or crises preceded currency crises in most cases.

The above narrative describes a process in which the credit expansion is fed by international capital inflows while current account deficits widen. The process reaches the turning point when the balance of payments result turns negative. The following contracting phase is described as a gradual process leading to the financial crisis (in all cases) and the currency crisis (in the emerging market cases). This description is intended to emphasize that what leads to the turn of the cycle is the increasing financial and external fragility attained by the economy along the expansionary phase (i.e. the permanency of the expansionary phase would require a permanent growing trend in capital inflows). But in fact, instead of a gradual process, the contracting phase can be an abrupt fall triggered, for instance, by a sudden-stop of capital flows induced by contagion effects, as it happened in a number emerging markets and in the GIPSI cases. In any case, being the sudden-stop triggered by a fundamental or non-fundamental contagion, its damaging effects are proportional to the financial and external fragility previously attained by the economy . The narrative (and the model on which it is based) tells the story of one country, but the actual boom-and-bust processes have taken place simultaneously in groups of countries, not only in the Euro Zone, but also in the emerging market cases. So, contagion effects have been present in different degrees in many cases.

Stylized facts exclusive to the emerging market economies' crises

I have presented so far the similar roles that capital flows and current account deficits played in emerging markets and Euro Zone crises. Beyond this common stylized fact, the critical processes took different paths in the emerging market economies and the Euro Zone economies. A key differential factor relates to the existence or not of a lender of last resort able to dissipate the default risk on the

For instance, emerging market economies after the Lehman Brothers bankruptcy experienced negative real and financial shocks of similar magnitude than the shocks that these economies confronted after the East Asian crises. While in the late 1990s a number of emerging markets experienced deep crises, no crisis took place in these economies in the 2000s, because their external and financial configurations were more robust than in the late 1990s (Ocampo 2010, Frenkel 2012). Also the emerging markets crises have simultaneously taken place in groups of countries: the Latin American economies in the early eighties, Mexico and Argentina in 1994-95, and the Asian countries, Russia, Turkey and a number of Latin American countries in the late 1990s-early 2000s.



debts in international currency issued during the booming phase. In the emerging market economies case, given the absence of a lender of last resort in foreign currency, exchange risk and country risk are key determinants of the critical processes, as I explain below. Before that, I briefly discuss the consequences of the inexistence of an international currency lender of last resort in the emerging market economies cases.

Country risk and its price – the country risk premium – are central to the analysis of foreign debt sustainability in emerging market economies. These debts have a specific default risk associated with the currency in which the debt is nominated (Frenkel 2008). The default risk of the debts issued in foreign currency affects both public and private debts. A private debtor may be liquid in domestic currency and able to service its debt without difficulty at the current exchange rate. However, if liquidity in foreign currency becomes insufficient to serve all international debts, the government could appeal to convertibility suspension in order to avoid the depletion of reserves, forcing the private agents to default on their debts. On the other hand, if sufficient liquidity in foreign currency is available, it is highly unlikely that the public sector fails to fulfill its commitments in that currency due to the lack of liquidity in domestic currency. Therefore, only insufficient liquidity in foreign currency can force a default on public debt issued in that currency. Consequently, public debt is the lower risk between the debts in foreign currency issued by domestic agents. This is why country risk premium is typically indicated by the sovereign risk premium, and measured as the difference between the yield on a sovereign bond in US dollar and the equivalent yield on the US bond, which is taken as the risk-free asset.

It is not difficult to understand why the state and expected evolution of the balance of payments are crucial in the assessment of sovereign (country) risk in emerging market economies. The debtor country has financing needs in foreign currency, consisting of the sum of the current account deficit plus the foreign debt capital payments. A crucial point is that the possibilities of adjusting the balance of payments are not unlimited, even after devaluing the domestic currency. Consequently, in emerging market economies default risk is closely associated to the possibility that the country does not get all the foreign currency liquidity needed to meet its obligations (Frenkel (2008)¹⁰. I would like to emphasize that this risk would disappear if emerging market economies had a lender of last resort able to provide the country with the needed foreign currency liquidity.

Under conditions of high foreign debt in an emerging market economy, a large proportion of the financing needs must necessarily be covered with funds from capital markets, even after adjustments have been made in the external sector. The assessment of the future path of the debt and its sustainability depends on the interest rate faced by the debtor and thereby on the risk premium determined in capital markets ¹¹. Multiple-equilibria scenarios are not uncommon. In their assessments of debt sustainability, each investor has to guess the behavior of the rest of the market participants. The predominance of optimistic assessments may result in a relatively low risk premium and sustainable debt projections. On the contrary, predominantly pessimistic perceptions may result in high risk-premium and unsustainable debt projections. Via the determination of risk premiums, market participants determine whether debt is sustainable or not in a standard self-fulfilling behavior. I discuss this issue more in depth below.

¹⁰ Similar view on the role of international currency liquidity in financial crises in emerging markets is exposed in Chang and Velasco (1999).

¹¹ A formal model is presented in Frenkel (2005).



Given the absence of a lender of last resort in foreign currency, exchange risk and country risk are key determinants of the critical processes in the emerging market economies. The evolution of external accounts and foreign exchange reserves reflect one aspect of the Minskyan cycle in these economies. As already mentioned, there is a steady increase in the current account deficit in the first phase of the cycle. Initially, capital inflows are higher than the absolute value of current account deficits and reserves accumulate. At some point the current account deficit becomes larger than the capital inflows. The stock of international reserves reaches a maximum and then contracts, inducing the contraction of money and credit.

The portfolio decisions of domestic and foreign agents - regarding the portion of the portfolio exposed to country and currency risks - are affected by the evolution of the balance of payments (Frenkel 1983). The evolution of domestic interest rates reflects the financial aspects of the cycle in the emerging market economies. The local interest rate tends to decline in the first phase and to increase in the second. As exchange rate policy initially enjoys credibility, arbitrage between domestic and foreign assets leads to a reduction of domestic interest rates. Low interest rates contribute to the real and financial expansion. In the second phase the interest rates rise. The increase in nominal and real interest rates in the second phase is also explained by the arbitrage between domestic and foreign assets. The sum of the exchange risk premium plus the country risk premium - the added price of devaluation and default risks - sets a floor for local real interest rates and is the main variable that drives their increase. The persistent increase in the current account deficit - and from a certain point the contraction trend in international reserves - reduces the credibility of the exchange rate rule, on the one hand, while increasing, on the other hand, the probability of default of the debt issued in international currency.

The maintenance of the exchange rate rule and the regular service of external obligations require increasing capital inflows. Therefore risk premiums tend to increase. Higher risk premiums and consequently higher interest rates are required to balance the portfolios and attract foreign capital. The economic activity contracts and episodes of illiquidity and insolvency further contribute to reducing the credibility of the exchange rate policy. At the end of the process there is no interest rate high enough to sustain the demand for local financial assets. There are runs on central bank foreign exchange reserves, which ultimately lead to the collapse of exchange rate regime.

Stylized facts exclusive to the Euro Zone economies' crises

In contrast to emerging market economies, neither private debts nor public debts in the Euro Zone economies have an additional risk of default associated to the potential lack of foreign currency liquidity at the national aggregate level. This is so because the Euro Zone payments system warrants the availability of liquidity to fulfill all international payments. On the other hand, European Central Bank (ECB) has performed the role of lender of last resort of commercial banks (and indirectly to firms) located in the Euro Zone economies.

In association with the different settings, the critical processes have evolved differently in the emerging market economies and the Euro Zone economies. In the emerging market economies' crises, as was already mentioned, the evolution of external accounts and international reserves feed back negatively in the second



phase of the Minskyan cycle throughout their effects on the exchange rate risk and the specific default risk of international currency debts, public and private. This stylized fact is absent in Euro Zone economies' crises. In the Euro Zone economies, the exchange rate risk has played no role in the portfolio decisions leading to capital outflows (at least until well advanced the GIPSI critical processes, when the possibility of Greece abandoning the euro and issuing a new currency became visible). Neither have capital flows been directly influenced by the evolution of the external accounts. Euro Zone countries do not carry stocks of international reserves whose evolution could indicate risks of devaluation and default, as in the emerging market economies. The Euro Zone economies balance of payments results (the sum of current and capital account results) are approximately recorded in the Target2 balances of the ECB and do not seem to have significant influence in the countries' risk assessments.12

On the other hand, public debts in the Euro Zone economies do have a specific liquidity risk of default similar to that of public debts in emerging market economies issued in foreign currency. This is so because governments in the Euro Zone do not have a (highly credible) lender of last resort able to dissipate this risk.¹³

The debtor government in the Euro Zone economies has some financing needs, made up by its fiscal deficit (the primary deficit plus interests) plus the principal maturities. The possibilities of adjusting public finances are not unlimited. Consequently, there is a risk that the debtor does not count with sufficient liquidity to cover its financing needs and be forced to default on their obligations. The role of the default risk premium in the sustainability of public debts in the Euro Zone is similar to the role it plays in the sustainability of foreign currency debts (public and private) in emerging market economies. As in the emerging markets cases, a large proportion of the financing needs of the GIPSI governments must necessarily be covered with funds from the market, even after adjustments have been made in the public accounts. The process that follows is also similar to the experience of emerging market economies with their foreign currency debts. The markets' assessments of risks tend to place the countries in financial traps with increasing public debt ratios and risk premiums. 14

In the Euro Zone economies' crises, absent the influence of the exchange risk and the international liquidity risk in the portfolio decisions, the main source of negative feedback effects in the second phase of the cycle is the evolution of public debt ratios and sovereign risk premiums, throughout their effects on the portfolio decisions of the private sector. These effects would not occur if the Euro Zone governments had a credible lender of last resort.

Another stylized fact shared by the Euro Zone and the emerging market economies: pro-cyclical fiscal policies in the contraction phase of the cycle

¹² On the Target2 balances of the European Central Bank see Sinn and Wolmerhaueser (2011) and Cesaratto (2012).

¹³ The ECB have played this role to some extent, but the rhetoric and weakness of its interventions did not eradicate the fears and uncertainties associated to the possibility of default on public debts. The announcement by the ECB of the Outright Monetary Transactions (OMT) generated more optimistic expectations about the sustainability of the GIPSI public debts, but the conditionality to which these operations would be subjected leaves open doubts about their efficacy. No OMT operation was implemented at the time I am writing this paper.

¹⁴ Research by the IMF has recently shown that the market assessments of default risks are associated with the short term growth performances, i.e. perceived risk increases when output falls (Cotarelli 2011). The author comments on the crucial mechanism of the vicious circle: "projected growth is important (higher growth leading to lower spreads), but, again, short-term growth is what matters, rather than potential growth. One unpleasant implication of this focus on short-term output growth is that, if the fiscal multiplier is sufficiently large (higher than 1.2-1.3 based on the estimated coefficients), a fiscal tightening can lead to a rise in spreads: the improvement in the deficit tends to lower spreads, but the short-term decline in GDP, acting also through the short-term rise in the debt ratio, tends to push spreads up."



So far we have pointed out stylized facts of the macroeconomic dynamics determined by the interaction between agents' behavior and the institutional settings. In addition, we could also consider as another stylized fact of the crises dynamics the pro-cyclical fiscal policies implemented by the governments in the second phase of the cycle in order to gain credibility from the markets and revert the capital outflows and the recession trends. Actually, this stylized fact was observed in almost all emerging market economies' crises and on the other hand, pro-cyclical fiscal measures are presently a crucial ingredient in the development of the Euro Zone economies' crises. An obvious motivation of these policies is the conditionality imposed in exchange of financial support by the multilateral institutions. The IMF has imposed fiscal austerity in all cases in which its support programs were involved in the emerging market economies' crises. On the other hand, fiscal austerity is the main objective of the policy orientation of the European Union and the main conditionality presently claimed by the European financial institutions to the support given to the Euro Zone economies. In what follows, we want to discuss other motivations and objectives pursued by governments that implement pro-cyclical fiscal policies both in the emerging market economies and the Euro Zone economies, besides the conditionality imposed by international institutions.

The second phase of the cycle is currently in full development in the Euro Zone economies' crises. The turning point of the cycle could be dated in September 2008, when the contagion of Lehman Brothers bankruptcy spread to the entire world. So, the second phase of the cycle in the Euro Zone economies' crises has lasted so far about four years.

In order to make a valid comparison with regard pro-cyclical fiscal policies between the crises in the Euro Zone economies and the emerging market economies, we should look at the emerging market economies' crises dynamics in the period between the turning point of the cycle and the abandoning of the fixed exchange rate. As was already mentioned, all the emerging market economies' crises ended up in devaluations (the only exception is Argentina in 1995, when the currency board exchange regime survived the financial crisis). The period between the turning point of the cycle and the devaluation has usually been relatively short in the emerging market economies. For instance, between one and two years in the Latin American crises in the early 1980s, about one year in the 1995 Mexican crisis and less than one year in the East Asian crises. The Argentine crisis in 2001 is an exception in this regard because the turning point of the cycle occurred in mid-1998 while the devaluation took place at the end of 2001. The contraction phase was a prolonged depression that lasted three and a half years in which pro-cyclical fiscal policies were intensively implemented. This makes the Argentine case particularly relevant in the comparison with the Euro Zone crises because, both in Argentina and in the Euro Zone crises, the second phase of the cycle has lasted much more than in other cases, giving room for clear observations of the implementation and effects of the pro-cyclical fiscal policies.

In order to discuss the motivations and effects of pro-cyclical fiscal policies I take as a fact that they have direct contraction effects on aggregate demand (Jayadev and Konczal 2010, DeLong and Summers 2012, Guajardo, Leigh and Pescatori 2011) . The idea that a fiscal deficit reduction may have a net expansionary effect on output rests on the existence of indirect positive effects on private expenditures, throughout the impact of the policy on expectations and credibility. In an emerging

This assessment has recently gained support from the IMF. See, for instance IMF World Economic Outlook, Chapter 1 (2012).



throughout the impact of the policy on expectations and credibility. In an emerging market economy case, the potential effect of the policy on the domestic real interest rate, throughout the reduction of the country risk premium, points to a visible link between the policy and its hypothetical positive indirect effects. In the case of a Euro Zone economy, the potential expansionary effect also rests on a reduction of the sovereign risk premium, but there is no visible link between the reduction of the risk premium and the hypothetical consequent increase in private expenditures. In this case, the indirect expansionary effects of a deficit reduction seem to rest on more ambiguous mechanisms than in an emerging market economy. However, beyond their hypothetical foundations, a bet on the indirect expansionary effects does not seem to be the main motivation of a government that pursues pro-cyclical fiscal policies in the contraction phase. Governments may or may not believe in indirect expansionary effects, but it seems clear that in all cases debt sustainability is the main objective of those policies: the sustainability of both the aggregate external debt of the country and the public debt issued in international currency, in the case of an emerging market economy; and the sustainability of the public debt in the case of an Euro Zone economy.

Sustainability means the ability of the debtors to fulfill its financial commitments as they are written in the involved contracts. Obviously, sustainability is not a guarantee that the contracts will actually be fulfilled. Sustainability is an assessment about future uncertain events, based on present information and probable conjectures.

An investor has to evaluate both the prospects of the capital flows and the ability of the country to make necessary adjustments in the external accounts (in an emerging market economy case) and in the public accounts (in both emerging market economy and Euro Zone cases). Domestic information can not provide a complete assessment of the risk. Even the quantitative components of the sustainability assessment depend on the behavior of the financial market. Present and expected risk premiums are necessary information to forecast the evolution of the debt burden and the future financing needs. Because the prospects of the country risk premium are essential components of the sustainability assessment, each of the investors has to conjecture the behavior of the rest of the market. Consequently, there is room for multiple equilibrium and self-fulfilling prophecies.

The composition of the present and forecasted financing needs provides information about the proportion that should inescapably be backed by new lending in the market, even after adjustment policy measures have been taken. When the debt burden makes up for the bulk of the present and projected financing needs, the effects of current domestic policy measures on the financing needs are relatively small. Consequently, the assessment of sustainability depends in this case mostly on conjectures about the behavior of the rest of the financial market (and also on conjectures about the behavior of the international institutions).

Sustainability is then a self-fulfilling prophecy of the average opinion of the market. The average opinion can suddenly change from sustainable to unsustainable. The changes can be triggered by relatively small variations in the fundamentals or other news affecting the fundamentals. Or the change can be caused by domestic or international news less connected with the fundamentals. The sufficient condition for that to happen is a conventional opinion shared by most of the market participants. Consequently, sustainability is highly vulnerable to contagion effects or other sources of volatility, international or domestic.

¹⁶ The discussion that follows draws on Frenkel (2008).



The valuation of the assets issued by a country in the above situation is a neat example of the Keynesian beauty contest. What can the country do to make their financial assets look more beautiful? For the mentioned reasons, the government domestic policies have relatively little room for improving in the short run the fundamentals in which the sustainability assessments are based. But this does not mean that domestic policies are irrelevant. They are relevant, not because of their effect on the fundamentals, but as signals to the financial market. The signals should make the country look more beautiful at the eyes of the average beauty criteria of the market. Signals are intended to convince individual investors that the average opinion will be favorably influenced. So, they have to harmonize with the more generalized conventions of the market participants. Fiscal austerity measures are valuable signals if, as it is actually the case, generalized conventions see them always positively, even if an independent analysis could show that they worsen the sustainability fundamentals. The effects of the announcements of pro-cyclical fiscal policies should be seen well before the adjustment measures objectively show their results on economic variables.

A country in this context looses most of its policy degrees of freedom. The financing of the debt burden becomes the main focus of domestic policies because it is the most important and urgent government target. The default of the debt would impose a high political cost and consequently, the government perceives the loss of funding as the most important threat it faces. Policy signals to the market may be, and usually are, socially or politically problematic and may actually have negative impacts on the economic performance. Experience shows that governments choose to confront the domestic social and political conflicts and risk a worsening of the economic performance in order to give priority to the issuing of signals to the market. Governments always prefer to play for time. The threat of default is tangible, while the effects of the signals are more uncertain, take more time to appear or simply are comparatively less costly for the government.

In no case in the emerging market economies crises the pro-cyclical fiscal policies have helped to stabilize the financial market, reduce the risk premiums and avoid the abandoning of the fixed exchange rates. The signals were not capable of turning the vicious circle of higher risk premiums and worsening debt ratios into virtuous circles of lower risk premiums and improving debt ratios, even in the case of Argentina, where the fiscal austerity announcements were effectively implemented along a period long enough to make fully observable their effects on output and the fiscal accounts (Damill, Frenkel and Rapetti 2010).

In the Euro Zone economies crises pro-cyclical fiscal policies and signals are in full operation. So far, they have been incapable of turning the mentioned vicious circle into a virtuous one.

2. Lessons from the comparative analysis of crises

The main lessons provided by the above comparative analysis refer to how to prevent the occurrence of crises.

In the first place, the crises in both developed and developing countries have highlighted the shortcomings of poorly regulated domestic financial systems. The general lesson is that reinforcing and extending financial regulation is essential to avoid instability and crisis.

A specific conclusion with regard emerging market economies is that the prevention of crisis involves elements that go beyond the regulation of the domestic financial systems. In emerging market economies, the conjunction of macroeconomic policies



with the pattern of insertion into the international financial system plays a crucial role in the financial performance. The study of crises in emerging market economies suggests that in addition to strengthen and expand financial regulation, these countries should: 1) adopt exchange rate regimes that prevent speculation and provide flexibility to policymakers, 2) implement measures pointing to the regulation of capital flows and 3) implement policies that ensure the robustness of the external accounts, including the accumulation of foreign exchange reserves and the preservation of competitive (or non-appreciated) real exchange rates.

The emerging market economies seem to have taken advantage from those lessons. Significant changes took place in many countries in the 2000s with respect to the dominant features in the 90s and before. There were important changes in the patterns of insertion into the international financial system, in macroeconomic policy regimes and in the regulation of national financial systems. Many countries adopted managed floating exchange rate regimes, generated current account surpluses and accumulated considerable foreign exchange reserves (Frenkel and Rapetti 2010). These changes are consistent with the preventive measures suggested by the study of emerging market economies' crises briefly presented above. So, it can be concluded that the robustness exhibited recently by developing economies can be seen as confirmation a-posteriori of those recommendations.

Before the emergence of the Euro Zone economies crises, suggestions of crisis prevention policies were usually accompanied by initiatives that should be implemented at the international level. The building of an institution able to perform the role of lender of last resort in international currency for emerging market economies was one of the most often mentioned recommendations. In fact, some of the recommended domestic policies – for instance, the accumulation of large volumes of foreign exchange reserves – were mainly intended to play a substitute role for such an institution. The recent experience in the Euro Zone shows how far we are from the possibility of constructing a more rational and stable international financial architecture with an international lender of last resort as one of its central elements. The reason is simple: if governments' coordination to set up an efficient international arrangement to prevent and manage crises is so difficult in the Euro Zone, what would be the possibility of such an arrangement at the global level?

With regard the Euro Zone, the comparative analysis shows that the establishment of the Euro resulted in a type of crisis with strong similarities with the crises in emerging market economies. In both emerging market and Euro Zone economies the crises originated in the conjunction of fixed exchange rates, full capital mobility and weak financial regulation, i.e. in the conjunction of failures in macroeconomic policies and failures in financial regulations.

A preventive lesson for Europe should be: do no adopt the common currency, but the lesson is irrelevant now. A more concrete and practical lesson refers to the negative feedback effects in the contraction phase of the Minskyan cycle. The main sources of these effects in the Euro Zone economies are the vicious circle dynamics of public debt ratios and risk premiums. These mechanisms could have been stopped by the operation of the ECB as a credible lender of last resort of the Euro Zone governments, in the same way as did the central banks in US, UK and Japan after the financial crises burst in these countries. May be there is still time in Europe to do it.



Even if the ECB had performed from the beginning of the crises as a credible lender of last resort for governments and the negative feedback mechanisms had been consequently neutralized, the GIPSI countries would be anyway trapped in contexts of debt deflation and low international competitiveness. Has the experience of the emerging market economies something to teach us in this regard?

As was already mentioned, all emerging market economies crises ended up in devaluations, and so, a more depreciated real exchange rate was the general condition for the following recovery processes. But devaluation was not a sufficient condition. For instance, the Latin American crises of the early 1980s were followed by big devaluations and a number of rounds of foreign debts restructurings. But none of the debt restructurings in the 1980s included substantial alleviation of the debt burdens. As a consequence, the biggest countries in the region experienced about eight years of stagnation, high inflation and hyperinflation. The stabilization and the recovery of growth were inconsistent with the fulfillment of the debt obligations. In other more successful crisis resolutions (for instance, Mexico after 1995 and the East Asian countries after 1998) the debts restructurings did not include significant haircuts, but were facilitated by massive international rescue packages led by the IMF. Almost in all cases the resolution of the crises in the emerging market economies comprised the bail out and deep restructuring of the domestic financial systems, which included the refinancing of private debts in favorable terms (subsidized with fiscal resources) and involved significant fiscal costs.

The Argentine crisis in 2001 is a singular case. Argentina defaulted on its external debt, as did the Latin America countries suffering crisis in the early eighties, but then suspended debt payments to private creditors for about four years. In 2005, Argentina reached an agreement with creditors to restructure most of the debt with a haircut that at that time was an historical record. As in other cases, the crisis resolution involved a huge devaluation and the bail out and restructuring of the domestic financial system, with favorable refinancing terms for domestic private debts. The economy started to grow soon after the devaluation and sustained a very high rate of growth in the following years. This experience makes the Argentine case particularly interesting for people looking for lessons from crisis resolutions.

References

Bagnai, A. (2012) "Unhappy Families are All Alike: Minskyan Cycles, Kaldorian Growth and the Euro Zone Peripheral Crises" in Iniciativa para la Transparencia Financiera (ITF), Technical Papers. http://www.itf.org.ar/ingles/pdf/documentos/87_2012.pdf

Bibow J. (2012) "The Euro Debt Crisis and Germany's Euro Trilemma" in Working Paper No. 721, Levy Economics Institute of Bard College, New York.

Cesaratto S. (2012) "Controversial and novel features of the Eurozone crisis as a balance of payment crisis" in Quaderni del Dipartimento di Economia Politica e Statistica No. 640, Università degli Studi di Siena. Italy.



Cesaratto, S. and A. Stiratti (2011) "Germany and the European and Global Crises" in Quaderni del Dipartimento di Economia Politica No. 607. Università degli Studi di Siena. Italy.

Cotarelli, C. (2011) "Challenges of Budgetary and Financial Crises in Europe", presentation at the London School of Economics and Political Science on November 18. Fiscal Affairs Department, International Monetary Fund.

Chang, R. and A. Velasco (1999) "Liquidity Crises in Emerging Markets: Theory and Policy" Working Paper 7272, National Bureau of Economic Research, USA. July

Damill, M., R. Frenkel and M, Rapetti (2010) "The Argentinean Debt: History, Default and Restructuring" in Herman, B., J. A. Ocampo and S. Spiegel (eds.) Overcoming Developing Country Debt Crises. Oxford University Press. Initiative for Policy Dialogue Series.

DeLong, J. B. and L. H. Summers (2012) "Fiscal Policy in a Depressed Economy" Washington DC, Brookings.

European Commission (2009) "Special Report: Competitiveness developments within the euro area" in Quaterly Report on the Euro Area Volume 8, No.1.

European Commission (2010) "Special issue: The impact of the global crisis on competitiveness and current account divergences in the euro area" in Quaterly Report on the Euro Area Volume 10, No.1.

Frenkel, R. (1983) "Mercado Financiero, expectativas cambiarias y movimientos de capital", El Trimestre Económico, No. 200, México.

Frenkel, R. (2003) "Globalization and Financial Crises in Latin America", CEPAL Review, No 80.

Frenkel, R. (2005) "External Debt, Growth and Sustainability" in J. A. Ocampo (ed.) Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability. Stanford University Presss, Palo Alto, and ECLAC.

Frenkel, R. (2008) "From the Boom in Capital Inflows to Financial Traps" in J. A. Ocampo and J. Stiglitz (eds.) Capital Markets Liberalization and Development IPD Book Series, Oxford University Press.

Frenkel, R. (2010) "El riesgo país en la zona del Euro y en las economías de mercado emergente" in Iniciativa para la Transparencia Financiera (ITF), Readings 53. http://www.itf.org.ar/ingles/pdf/lecturas/lectura53.pdf

Frenkel, R. (2012) "Lecciones de política macroeconómica para el desarrollo, a la luz de la experiencia de la última década" in El Trimestre Económico No 313. Mexico. January.



Frenkel, R. and M. Rapetti (2009) "A Developing Country View of the Current Global Crisis: What Should not be Forgotten and What Should be Done" in Cambridge Journal of Economics Volume 33 Number 4. Special Issue: The Global Financial Crisis. July.

Frenkel, R. and M. Rapetti (2010) "Economic Development and the International Financial System" in Griffith-Jones S., J. A. Ocampo and J. Stiglitz (eds) Time for a Visible Hand. Lessons from the 2008 World Financial Crisis. Oxford University Press.

Guajardo, J., D. Leigh and A. Pescatori (2011) "Expansionary Austerity: New International Evidence" in IMF Working Paper WP/11/158. International Monetary Fund.

IMF World Economic Outlook. Chapter 1 (2012) International Monetary Fund.

Jayadev, A. and M. Konczal (2010) "The Boom, Not the Slump: The Right Time For Austerity" in Working Paper, August 23, The Roosevelt Institute. http://www.rooseveltinstitute.org/sites/all/files/not_the_time_for_austerity.pdf

Kaminsky, G. L. and C. M. Reinhart (1999) "The Twin Crises: The Causes of Banking and Balance-of-Payments Problems" in American Economic Review, June.

Kindleberger, C. (1978) Manias, Panics, and Crashes: A History of Financial Crisis, John Wiley and Sons, New York.

Krugman, P. (2011) "Euro Zone Death Trip" The New York Times, September 25.

Laeven, L. and F. Valencia (2008) "Systemic Banking Crises: A New Database" in IMF Working Paper WP/08/224. International Monetary Fund.

Mansori, K. (2011) "What Really Caused the Eurozone Crisis?" The Street Light Blog, September 23.

Minsky, H. (1975) John Maynard Keynes. Columbia University Press, New York.

Minsky, H. (1977) "A Theory of Systemic Fragility", in E. Altman and A. W. Sametz (eds.) Financial Crises: Institutions and Markets in a Fragile Environment. John Wiley and Sons, New York.

Ocampo, J. A. (2010) "How Well has Latin America Fared During the Global Financial Crisis?" in Iniciativa para la Transparencia Financiera (ITF). Readings. http://www.itf.org.ar/ingles/pdf/lecturas/lectura56.pdf

Reinhart, C. M. and K. S. Rogoff (2009) This Time is Different. Princeton University Press.

Servén, L. and H. Nguyen (2010) "Global Imbalances Before and After the Global



Crisis" in Policy Research Working Paper 5354, The World Bank Development Research Group, Macroeconomics and Growth Team. The World Bank.

Schularick, M. and A. M. Taylor (2012) "Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870–2008" in American Economic Review, 102(2): 1029–1061.

Sinn, H. and T. Wollmershaeuser (2011) "Target Loans, Current Account Balances and Capital Flows: The ECB's Rescue Facility" in Working Paper 17626, National Bureau of Economic Research. November. http://www.nber.org/papers/w17626

Taylor, L. (1991) Income Distribution, Inflation and Growth, MIT Press, Cambridge, Massachusetts.

Taylor, L. (1998) "Capital Market Crises: Liberalisation, Fixed Exchange Rates and Market-driven Destabilization" Cambridge Journal of Economics, vol. 22, 663-676.

Williamson, J. (1983) The Open Economy and the World Economy, Basic Books, New York.

Wolf, M. (2011) "Creditors can huff, but they need debtors" Financial Times, November 1.