

## Review

# Financial Stability: Why? Who? How?

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### Abstract

**The objective of this paper is to contribute to the debate on the issues of financial stability. We ask three basic questions, namely, why financial stability: the question of the importance of a stable financial system for different economies. Who must ensure financial stability: it is the question about the place and role of different actors involved in the preservation of financial stability. Finally, how to ensure financial stability: the question of ways and means to preserve the stability of the financial system nationally and internationally. Our analysis shows that a stable financial system is essential to a functioning economy and the successful implementation of monetary policy. Central banks are at the heart of the various strategies for the preservation of financial stability. However, to ensure financial system stability, stakeholder coordination is needed with an important role to play by the government.**

**Keywords:** Financial stability, central bank, banks, financial markets, insurance markets, microfinance, authority.

## INTRODUCTION

The search for financial stability is problematic because any financial activity is subject to acceptance of risk, for the simple reason that it involves a bet on the future of an uncertain nature. Thus, financial crises can be justified by the often abrupt adjustments punters. Indeed, once confidence in a market is crumbling, there is capital flight because of investors' behavior. But financial crises that occur, particularly following a persistent financial instability, have several implications (Artus, 2000). In particular, they result in costly credit due to rising interest rates. Therefore, financial crises weaken banks and increase the debt service (Obstfeld, 1994). They also generate a fall in investment and growth in response to credit constraints they generate (Cartapanis, 2004). Similarly, they involve high costs of bank restructuring and a loss of investors' confidence. Therefore, it is important to maintain a stable financial system at both national and international levels. Indeed, a stable financial system promotes a better allocation of capital as well as investment and economic growth. Today, financial stability is considered as a global public property. Thus remains to identify the actors able to carry out this mission of financial stability, on the one hand, and to find ways and means to strengthen on the other.

As for actors, central banks are at the heart of the process for the simple reason that it is them who are responsible for ensuring monetary stability a prerequisite for financial stability. However, the concept of finance includes currency; in other words, the monetary system is

one element of the financial system. That is to say, seeking financial stability requires consideration of other subsectors of the financial system, especially financial markets, insurance markets and that of microfinance. These are not necessarily under the control of central banks. Indeed, in some countries, each compartment of the financial system has its own authority. Also, financial globalization complicates the tasks of central banks in searching for a stable financial system. Indeed, financial globalization has resulted in a change of bank balance sheets because much of the assets and liabilities of banks depend on the performance of financial markets, which are often not under the control of the central bank. With regard to ways and means to strengthen financial stability at both national and international levels, responses are not the same according to specialists in the world of finance. The reasons for these discrepancies are elements of an explanation of the specificity of the different economies. Indeed, despite the context of globalization, economic structures are not quite the same around the world, particularly between developed and emerging or developing countries. So we cannot have the same remedy for a different problem. Thus, depending on the level of financial development, the issuing institutions may or may not ensure financial stability; meaning, if most of the funding of the economic activity are through bank lending, central banks will be able to play this role. On the other hand, in economies of capital markets, central banks must coordinate more with other authorities

to participate in the preservation of financial stability. Several issues deserve to attract the attention of financial actors today. These include the following questions:

- Should financial stability be an explicit mandate for central banks?
- Should asset prices be included in the reaction function of central banks?
- Does the International Monetary Fund have to be the international lender of last resort?
- What solutions to the recurrence of international financial crises?
- What are the modalities of implementing the requirements of the Basel Committee?
- Is a coordination or a supervising institution necessary for the preservation of financial stability?

This paper will offer some answers to many of these questions.

Financial stability depends on the evolution of macroeconomic variables, including the level of inflation or the level of budget deficit, the financial structure (weight of foreign banks, banking concentration), the trade and financial shocks with outside and the strength of the various components of the financial system and institutions. Issues of financial stability are also due to the quality of institutional arrangements and payment systems in place that guide risk-taking for credit institutions and investment decisions or investment by non-financial agents (Patat, 2000).

For Eboue (2004), financial instability has both microeconomic and macroeconomic sources. For the first, it is the behavior of economic agents facing the risk of volatility in financial markets, partly due to asymmetric information and contagion effects related to foreign markets. Sources are related to macroeconomic budget deficit, the real exchange rate, the weight of debt and inflation. In general, financial stability depends on monetary, financial and economic factors (Bank of France, 2000). These include the level of financial development, macroeconomic environment, trade shocks related to the growth rate of exports, the balance of current account, trade openness, financial shocks, more particularly the weight of the short-term debt as a percentage of foreign reserves, soundness of financial institutions in place, political stability, and rule of law. Financial development leads to development of banking intermediation which results in an increase of distributed credit. It is supposed to promote economic growth but, in return and because of more or less risky funded projects and of asymmetric information, financial development is generally accompanied by financial instability.

The rest of the paper is organized as follows. The second section focuses on the importance of a stable financial system nationally and internationally. The third section discusses the place and role of different actors and sets out the ways and means of enhancing financial stability. The fourth and final section concludes and

identifies general recommendations.

## FINANCIAL STABILITY, WHY?

This question leads us to think about the importance of a stable financial system for individual economies. Therefore, it is necessary, before all, to define financial stability. Note that there is no single definition of financial stability, probably because of the diversity of financial systems, issues in different countries and contexts.

But we can retain these definitions. For some specialists, with financial stability, you can understand a sound and efficient financial system, which allows: an efficient allocation of economic resources; normal and sustainable functioning of the financial sector, effective responses to potential shocks from inside or outside. Icard (2007) defines financial stability as "the environment in which the financial system ensures the good allocation of savings to investment through time, space and sectors, a healthy control of risks induced by these activities, the regular functioning of financial infrastructures and capacity to withstand shocks without these functions are in jeopardy ". Mishkin (1999) proposes to define financial stability in the absence of its opposite (that is to say the absence of financial instability), "financial instability occurs when shocks to the financial system prevent the flow of information so that the financial system can no longer fulfill its role in directing funds to those with productive investment opportunities". Definition highlights the impact of asymmetric information in order to preserve financial stability. Indeed, price volatility in financial markets is related to the imperfect information available to stakeholders in these markets. For Patat (2000): "the concept of financial stability covers a multidimensional concept that could be expressed as a situation in which the functioning of various components of the financial system, and especially their mutual relations, is done healthily and without brutal disturbances".

This is why financial stability holds a prominent place for the smooth running of an economy. Indeed, financial stability is an essential condition of economic growth since most transactions of economy are settled through the financial system. For our part, we will consider a financial system is in an unstable situation when it can no longer provide its primary function which is the optimal allocation of resources to agents lending to agents in need of funding (Thiam, 2008). Now, it appears clearly with these different definitions that financial instability paralyzes the economic activity and can result in a financial crisis. Without going into details, it seems appropriate in this part, to talk about the pros and cons of financial globalization in relation to financial stability, causes and consequences of financial crises, and discuss the relationship between the financial

development and the economic growth.

### **Financial globalization, opportunities and limitations**

With regard to financial globalization, it provides new opportunities for investment and investment but it exposes economies to greater risks that can lead to situations of instability of the financial system nationally and internationally. Therefore Cartapanis (2004) argues that “the globalization of financial markets deserves neither excessive honor nor excess of unworthiness. It is a process, probably imperfect and yet irreplaceable resource allocation globally”. Can be retained with other authors, that financial globalization has led to an integration of financial markets internationally, it offers various economic opportunities for financing and investing larger but s' accompanied by new risks.

Indeed, one consequence of financial globalization is capital account liberalization. This liberalization has led to massive capital inflows in countries where the banking and financial structures were not strong enough. There has been a whole process of transformation of financial systems that some authors have termed the rule of three "D", namely, deregulation, disintermediation and opening-up (Bourguinat, 1995). The opening up and deregulation are the abolition of boundaries between financial markets previously separated and segmented. In the U.S., for example, the deregulation has resulted in the abolition of restrictive laws of the twenties and thirties, as the Mac Fadden Act of 1927 which forbade U.S. banks to establish subsidiaries outside their home state, and the Glass Steagall Act of 1933 which required a strict separation between banking (commercial banks on one side and banks on the other). In Europe, there was in 1990 with the creation of a unified capital market with the abolition of exchange controls by member countries. There was also at the end of the conventional separation between money market (short-term financing) and financial market (long-term financing).

Disintermediation in turn has resulted in a decline of traditional banking (deposits and loans) that need to reposition themselves in new activities, such as bank-insurance (Bailly and al, 2000). Deregulation occurs at the level of domestic financial system, by abolishing controls interest rates, an abandonment of the credit crunch, a development of the credit market, securities and equities. The objectives of these measures are lower costs through competition, better access to credit and greater efficiency in the allocation of funds. The undesirable consequences are greater risk-taking by banks; a set of financial accelerator is a source of financial fragility, excessive responsiveness to market expectations. In sum, the increased competition induces greater risk-taking (Boyer and al, 2004).

Similarly, at international level, deregulation is

manifested by a lifting of exchange controls, a mobility of financial institutions. The motivations are a desire to maintain the competitiveness of domestic firms and create a deep market for private and public securities. However, there are undesirable consequences because the exchange rates are governed by the financial expectations. Also, you can attend a systemic risk because of the interdependence between currency crises and banking crises (Boyer and al, 2004). Under these conditions, the strengthening of the micro-prudential supervision is necessary to address individual risk taking. Similarly, measures are needed at the global level.

Some propose to fight against the adverse effects associated with the massive influx of capital to organize or implement:

- A control device at the entrance as a reserve requirement ratio;
- Periodic review of the adequacy of the exchange regime to domestic macroeconomic conditions and international trends;
- Increased mobilization of domestic savings particularly in developing countries to reduce external financial vulnerability

But the most famous of the proposals is that of the American economist James Tobin in 1972 imagines a tax on international financial transactions in the short term in exchange. The objective of Tobin is to discourage speculative movements by taxing the amount traded in each operation, to reduce fluctuations too violent. But the implementation of the Tobin tax remains problematic. These critics point to the risk of migration from one market to another: to be effective, the Tobin tax should apply uniformly to all financial markets in the world, otherwise there is a risk of movement of capital to financial markets without taxation (Bailly and al, 2004). This has been a renewed interest following the 2008 financial crisis, especially within the European Union, but with views that are slow to converge. Financial globalization, despite its various advantages; thus resulting excessive risk taking by financial institutions. That is why it is often the cause of recurrent financial crises.

### **Financial crises, causes and consequences**

Precisely, these crises and their aftermath have given a renewed interest in finding solutions for the promotion of strong and sustainable economic growth. Indeed, financial instability results in instability of investment and consequently economic growth. It is therefore likely to weaken the various economies. Also, in general, the difficulties of the financial system tend to reduce the effectiveness of monetary policy, since the effects of monetary policy is transmitted to the economy through the financial system.

The most significant financial crises in recent decades are the crisis of bank debt from 1982 and the currency crises of the 90s, the crisis in Japan in 1990 and Sweden in 1990, the Mexican crisis in 1994, the Asian crisis in 1997-98, the Russian crisis in 1998, the Brazilian real in 1998, that of Argentina and Turkey in 2001, the recent crisis of "subprime" in 2007, the debt crisis in Europe and especially in Greece since 2010. In general, these crises have to source the fragility of the economies associated with an inadequate economic policy, a disorderly financial liberalization, to a nonexistent banking supervision and risk-taking in a context of excessive volatility of capital. There are basically banking crises, currency crises and balance of payments crises. They all result in capital flight, with serious consequences on the real economy.

We can retain three main generations of financial crises even though, because of the complexity of financial markets, it becomes increasingly difficult to find a specificity to a financial crisis. Indeed, the fact is that this is a set of macroeconomic, financial, institutional and even geopolitical factors that cause crises. The first generation was theorized by several authors including Krugman in 1979. According to the author, these attacks occur when there is inconsistency between macroeconomic policy and the maintaining of the exchange-rate target. Thus, according to the author, a country pursuing a policy of change and engaging in excessive fiscal spending is constrained to pursue a policy of monetary expansion to finance its deficit, which has the effect of a new inflation, a real appreciation of the currency and an increase of the deficit of trade balance. It follows a decrease of foreign reserves used to support the price of the currency from speculative attacks, and a collapse of an abandonment of fixation.

The second generation is developed under the leadership of Obstfeld in 1994. It highlights the self-fulfilling speculative attacks, still current. Therefore, these crises can be explained by the behavior of speculators using available information and do not necessarily reflect the macroeconomic situation of the concerned economies, as in the previous case. According to Obstfeld, currency crises (including those of 1992-1993 that affected EMS) might be caused by the rationality of operators that cause changes in the orientation of economic policies when they become unsustainable. The idea is that the state must make trade-offs between the costs of defending a parity (depletion of foreign exchange reserves, high interest rates, therefore, reduced activity and rising unemployment in the short term) and earnings (medium-term credibility).

The market is led to evaluate, test, and the authorities' determination to maintain its exchange rate policy. Henceforth, currency crises "self-validates" are even more likely if the economic and social difficulties put pressure on the government and push it to change its economic policy. According to Obstfeld, "any event which in the eyes of the market increases the sensitivity of

government to pain, or diminish the benefits expected from the defense of the currency, can trigger a speculative attack". Moreover, the herd behavior of investors is explained by the fact that many of them money managers whose performance is assessed in relation to their competitors. In such situations, the herd behavior is perfectly rational for each agent, by copying the behavior of the entire profession, ensures that it will not significantly do worse than the competition (Krugman, 1979).

The third generation is explained by microeconomic mechanisms that cause the crisis, namely the imperfect information in financial markets and banking systems (Cartapanis, 2004). According to him, crises meet a series of cases causing a panic, but the disturbance comes mainly from the banking sector (including the risk of liquidity) and extends to the foreign exchange market. Thus, for Stiglitz (1998), 'Asian crisis initially responded to the degradation ratio of "short-term external debts of foreign exchange reserves," shortly before the loss of confidence that will carry the Asian currencies, and resembles an international banking illiquidity crisis: the short-term liabilities in foreign banks, mostly in dollars, suddenly became higher than the liquidation value in dollars of their collateral (assets held against commitment)". Even today, experts are questioning the factors behind the recent financial crises (Icard, 2007, Pastré, 2008, Paulo, 2011). The focus is often on the loss of investor confidence, reckless choices in allocating capital and exogenous shocks. The tables below further illustrate the determinants of recent financial crises. The table below shows that there is a positive link between imbalances in macroeconomic fundamentals and financial crises. Similarly, the excessive increase of credit is one of the main factors explaining the financial crises. Therefore it is imperative to preserve financial stability and thus prevent the occurrence of financial crises of fiscal consolidation and to ensure some control over the growth of credit granted in the economy (Table 1).

Also, external funding and an excessive external debt unstructured part of the main causes of financial crises in emerging markets (Table 2). The fixed exchange rate also acts positively on both crises in emerging markets than in developed countries. What led several economists after the Asian financial crisis of 1997 to have a certain preference for flexible exchange rates, but it is clear that each of the two regimes has both advantages and disadvantages.

→ : To the outside ← : From the outside ↔ : Intra-regional

The weakness of the financial system with more recent liberalization is also the origin of financial crises. Indeed, the success of financial liberalization is subject to a number of conditions including the strength of local financial institutions. Therefore, it must be done gradually to avoid financial crises (Table 3).

Financial crises have serious consequences for countries particularly because of the high cost of bank

**Table 1.** Main features of recent financial crises: macroeconomic

Country / Dates	Budget deficit	Current account deficit	Inflation	Credit Growth
<b>Emerging Countries</b>				
Latin America 1982	++	++	++	++
Mexico 1995	0	++	0	++
South East Asia 1997	0	+	0	++
Russia 1998	++	0	++	0
Brazil 1998	++	+	+	0
Argentina 2001	++	++	0	0
Turkey 2001	++	++	++	0
<b>Developed Countries</b>				
Sweden 1990	++	+	++	++
Japan 1990	++	0	0	++

Sources: Icard, 2007 and author, 0: not significant; +: significant; ++: very strong

**Table 2.** Main features of recent crises: external situation

Country / Dates	External Overfinancing	External debt unstructured	fixity of exchange	Contagion
<b>Emerging Countries</b>				
Latin America 1982	++	++	++	↔
Mexico 1995	++	++	++	→
South East Asia 1997	++	++	++	↔
Russia 1998	++	++	++	→
Brazil 1998	+	+	+	←
Argentina 2001	++	++	++	0
Turkey 2001	++	++	+	0
<b>Developed Countries</b>				
Sweden 1990	0	0	++	0
Japan 1990	0	0	++	0

Source, Icard, 2007 and author

**Table 3.** Main features of recent financial crises: the financial system

Country / Dates	Weakness of the financial system and its control	Recent liberalization	Governance
<b>Emerging Countries</b>			
Latin America 1982	0	0	+
Mexico 1995	++	++	++
South East Asia 1997	++	++	++
Russia 1998	++	++	++
Brazil 1998	0	+	0
Argentina 2001	0	+	++
Turkey 2001	++	++	++
<b>Developed Countries</b>			
Saving and Loans 1980-1982	++	++	++
Sweden 1990	++	++	+
Japan 1990	++	++	++

Sources: Icard (2007) and author, 0: not significant; +: significant; ++: very strong

**Table 4.** Cost of financial crises for the public sector (as% of GDP)

Country	Period	Initial Cost	Net Cost
<b>Emerging countries</b>			
Indonesia	1997-2003	56.8	52.3
Thailand	1997-2000	43.8	34.8
Chile	1981-1983	52.7	33.5
Korea	1997-2000	31.2	23.1
Ecuador	1998-2001	21.7	21.7
Mexico	1994-1995	n.d.	19.3
<b>Developed countries</b>			
United States	Savings and Loans 1984-1991	3.7	2.1
France	Crédit Lyonnais 1993-1995	1.2	1.0
Japan	1990-2005	20	15 to 20
Norway	1987-1989	2.5	0
Suede	1991-1993	4.4	0

Source: IMF, except Japan and France: France: Court of Auditors; Japan: BCBS WP No. 13.

restructuring, the risk of recession and its scale. In terms of bank restructuring, the key success factors concern the macroeconomic framework, the rehabilitation of the judiciary and the formalization of banking law, and strengthening banking supervision and the withdrawal of state capital and management of commercial banks. In general, recessions are more pronounced when accompanied by banking crises. The difference between original cost and net cost represents the collection operations. Note that this difference varies considerably from one country to another. The lower net cost is, the better the crisis was handled by the authorities. Note also that crises generate losses in terms of economic activity (Icard, 2007). According to the author, to measure this loss, it is necessary to compare the level of production observed between the beginning and end of the crisis to its previous trend or potential one. But it adds that this approach can lead to an exaggeration of the economic cost induced by the crisis if factors beyond the crisis slowed the level of economic activity. Bordo, Eichengreen, and Martinez-Peria Kliengebiel (2001) show that if a banking crisis was accompanied by a currency crisis, the economic loss would average about 15% of GDP, this figure falls to 5% for a banking crisis without foreign exchange crisis (Table 4).

### **Financial development: a source of economic growth and financial instability factor**

Many studies show that there is a positive relationship between financial development and economic growth, although some authors have tried to reverse the direction of causality. For the latter, indeed, it is the economic development that requires the development of finance. In addition, many studies have shown that financial

development (even if one accepts these positive effects on growth) is the source of many financial crises. The pioneers of the relationship between economic growth and financial development are Bagehot (1873) and Schumpeter (1972). Walter Bagehot (1873), said that "the distinguishing features of English financial market was the relative ease in mobilizing savings to finance investment projects in the long run." He noted also that financial intermediation has been crucial to the rapid industrialization of England. In 1912, it was the turn of Schumpeter, in "The theory of economic development," to give us his views on the issue. In its quest for the innovative entrepreneur, he explains the importance of credit for production. The entrepreneur needs credit to finance its projects and thanks to financial intermediation as it gets the funds it needs. Hence the importance of financial development that promotes the production and, consequently, economic growth by identifying and redirecting funds to innovative projects.

Financial systems, because of their primary mission, namely the optimal allocation of capital, allow the financing of the economy (investment projects) and thus participate in the promotion of economic growth. The financial system provides five types of services to the economy: it helps mobilize the resources, it facilitates transactions and exchange, it allows you to group and diversify the risks faced by all suppliers and users of funds, it plays a central role in gathering and evaluating information about borrowers and investment projects, then it organizes the monitoring of the behavior of business executives evaluating their performance and encouraging them to act in the interest of the company. Thus, Levine (1996) summarizes five theoretical arguments in the positive relationship between financial development and economic growth:

- The financial system helps protect against the

risk and sharing it;

- It allows an optimal allocation of resources;
- It allows better control and management of the company by shareholders;
- It facilitates the mobilization of domestic savings;
- It facilitates the exchange of goods and services.

A strong and efficient financial system facilitates portfolio diversification of the investor (Gurley and Shaw 1960, Goldsmith 1969) and the incentive to finance riskier projects (long-term projects) but also more profitable (St. Paul 1992, Pagano 1993). Goldsmith (1969), in "Financial structure and development" shows us that there is a strong correlation between financial development and the level of economic activity.

The empirical testing of the relationship primarily revolves around the choice of indicator of financial development. Goldsmith (1969) was chosen as an indicator of financial development asset values reported financial intermediation to GDP. His study of thirty five (35) countries, (data before 1964), leads to the fundamental findings namely the existence of a positive relationship between financial development and economic development. According to the author, as the economy grows, the financial structure changes and the number of credit institutions operating increases.

The author claims that "the role of financial structure in the economy accelerates economic growth and improves economic performance by the act of facilitating the migration of funds to the best user, ie towards the destination where the funds offer the highest social returns". For many authors, Goldsmith's work has several weaknesses, namely:

- The sample size is small (35 countries)
- There are other variables that explain economic growth not taken into account in his study;
- The choice of measurement indicator of financial development is questionable;
- The sense of causality between financial development and economic growth isn't clearly showed (Kpodar and Guillaumont, 2004).

These weaknesses have been the subject of many researches. For example, studies by King and Levine (1993) on 80 countries over the period 1960-1989, systematically take into account other factors affecting the long-term growth, examine the channels of capital accumulation and of productivity growth, build additional measures for financial development, and analyze whether the level of financial development precedes economic growth, capital accumulation and productivity growth in the long run. The authors introduce cross-sectional studies.

King and Levine (1993) introduce some variables that can serve as measures for the intermediation activity, measurement indicators developed by the World Bank and IMF. They use four indicators to measure the level of financial development, namely: the size of financial intermediation, the degree of credit allocation by the

central banks in comparison to those of commercial banks, the ratio of credit allocation private companies reported total domestic credit and credit to private enterprises divided by GDP. The results obtained by King and Levine suggest that the initial level of financial development provides a good forecast for future rates of economic growth and accumulation of physical capital, and to improve economic efficiency over the next thirty years even after taking into account as a control variable, income, education, political stability and monetary policy measures, trade and taxation. Additional studies show that there are other characteristics of financial development that are associated with high rates of growth. This is, for example, the stock market liquidity (Rousseau and Wachtel (2000)) and the improvement of accounting rules, bankruptcy procedures and governance (Levine, Loayza and Beck (2000)).

Joan Robinson (1952) and Robert Lucas (1988) argued that the financial sector is not particularly important for economic growth. According to these authors, it is growth that drives the development and financial development is only one element of economic development. According to Robinson, it is economic growth that stimulates need for certain financial services and the financial system simply responds, and automatically, with the request. Lucas, meanwhile, said that "economists were overloading the role of financial factors in the process of economic growth". In summary, for these authors, therefore, the development of financial markets can be seen as the result of a request by the productive sector. For example, the first industrial revolution has favored self-financing, the second, based on capital-intensive industries, has required the implementation of new funding arrangements, which required financial development.

McKinnon and Shaw (1973) criticize the pressure exerted by the state on financial intermediaries that had resulted in interest rates on loans and on deposits capped the excessively high reserve ratios of banks, the phenomena of administrative allocations of credit, barriers when entering the banking system, bank nationalization or creation of public banks. Figure 1 This situation blocks the functioning of the market and, therefore, reduces the level of savings and investment. The annuity represents the capture of repression by the state of implicit income would have had to hold the households and businesses in their operations to bank loans, given the lending rate ceiling. The authors refer to situations of financial repression. They advocated the need for financial liberalization to find the paths of growth and economic development. The effects of financial repression can be summarized as follows: if the state arbitrarily fixed real interest rates (via the setting of nominal interest rates served and / or requested by banks) below their values market equilibrium, it reduces economic growth as far as:

- It reduces the amount of funds available for investment through lower bank deposits;

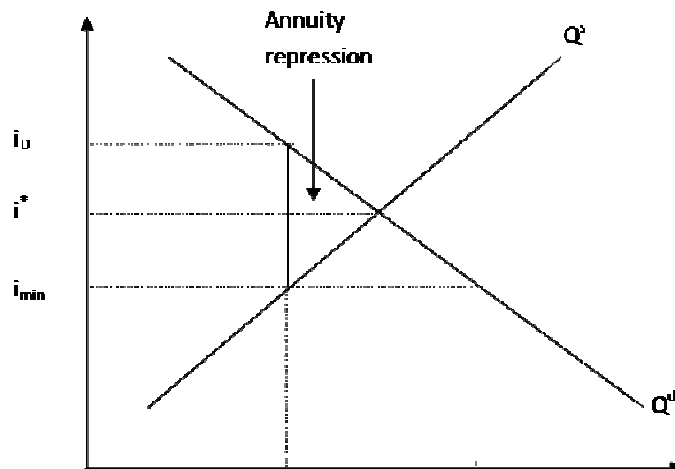


Figure 1. Annuity repression. Source :Author

- This affects the quality of investment through changing behavior of financial intermediaries, as show points out, the actual caps to lower real deposit rates are intensifying risk aversion and liquidity preference intermediaries.

But for many observers, there is no automatic link between financial liberalization and economic growth. Moreover, even if we accept the positive effects of financial development on growth, it is often the cause of financial instability and therefore financial crises. Indeed, financial development leads most often by excessive growth of credit granted, which is a potential source of financial instability and, consequently, of financial crisis. It thus appears that financial globalization has both advantages and disadvantages. Today, all economies are highly integrated financially and the question is not to turn back but to find the best strategy to take full advantage of globalization while avoiding (or at least limiting) side effects outlines above. The importance of a stable financial system can be analyzed, first by the positive effects of financial development on economic growth, although these effects are far from unanimous in the financial world. Indeed, the financial system is where the savings are converted into investment; it promotes a better allocation of capital. But it is clear that financial deepening, which results in financial liberalization, is likely to pose new risks, exposing the country to ebb and flow of capital with massive consequences that we know about financial stability.

Kaminsky and Reinhart (1998) teach us that eighteen of the twenty six banking crises in their sample were preceded by financial liberalization. Which argues for a gradual financial liberalization and therefore invites a certain discipline in capital allocation, countries must establish the conditions for successful liberalization. The importance of a stable financial system can also analyze the consequences of financial instability (leading to

financial crises) on the real economy. Emerging (or developing, broadly defined) are those most affected by financial crises are the main sources of fundamental macroeconomic imbalances, banking and financial structures and ill-suited and above all an excessive growth of credit distributed. Therefore the competent authorities of all countries should ensure that credit grows at the rate of economic conditions. Indeed, in the field of finance any excess is harmful, because the agents are constantly searching for yield and often abrupt adjustments occur with negative consequences on financial stability nationally and internationally. The international financial architecture has shown signs of weakness today, as evidenced by the international financial crisis, so it is necessary to redefine the rules of international finance. This will undoubtedly see greater involvement of different authorities, in the functioning of financial markets. We will in the following discuss an important issue as the previous one, who should ensure financial stability?

### Financial Stability, Who? How?

In this section, it is to discuss the place and role of key actors in financial stability as well as ways and means to perpetuate. A privileged place is given to the central bank since it is responsible in all countries to ensure price stability. Therefore, its function is a prerequisite for the preservation of financial stability. However, it must be emphasized that the effectiveness of its policy is strongly dependent on the behavior of other actors, insurance companies, issuers and underwriters in financial markets and different supervisory authorities of the latter. In particular, for credit institutions on the one hand more and more of their assets and their liabilities are held in the form of securities which are often denominated in



foreign currencies. Therefore, proper management of these securities is essential to avoid situations of financial instability (Eboue, 2004). There are also other players in the financial system whose behaviors directly affect financial stability; this is the case of investment companies with variable capital, pension funds, insurance companies, products and effect leverage as the "hedge funds".

The new international financial architecture is to change the functioning of financial markets, especially in emerging countries. These include four objectives in this direction: improving transparency and access to information; modernize prudential regulation of financial institutions strengthen their methods of intervention to better meet the challenges of market volatility; correct the incentive system that governs the decisions of the private sector and make him pay an appropriate share of the burden in times of crisis. The ambition is to promote new practices and improve the governance of international capital markets.

In this section we will discuss successively the place of central banks, the International Monetary Fund, the Financial Stability Committee and other international supervision. It will also discuss opportunities between single and multiples guardianship to preserve financial stability.

### **The role of central banks**

Most central banks have primary mission to ensure price stability. But we find increasingly that low inflation is not sufficient to ensure financial stability. Indeed, in recent years, we see periods of financial turmoil even though inflation has remained low. Thus, price stability is seen as a necessary but not sufficient to preserve financial stability. That's why the news of discussions relating to the tasks of central banks revolves around the question of extending their mission to the financial system as a whole. Central banks are generally responsible for the implementation of monetary policy, the legal currency in circulation, the system of payments viability and stability of general price level. They are also central clearing system between debit and credit positions and therefore play a leading role in the management of means of payment. This is why central banks have an important place in financial stability. This place is also analyzed by the signals they give to financial markets by deciding for example to change their key policy rates or injecting liquidity into the economy.

This is the case of the Federal Reserve and European Central Bank during the 2008 financial crisis. Thus, they can influence decisions about consumption and investment of various economic agents, promote aggregate demand and, therefore, contribute to the promotion of economic growth. Also, to fight against bank panic situations, central banks have to play the role of

Lender of Last Resort. But this function raises the problem of moral hazard because it may encourage irrational behavior of investors including large institutions. The dilemma is not as wide as the intervention also leads to situations of systemic risk.

This is why financial stability appears to be a natural role for central banks especially since monetary stability has a direct link to financial stability. Indeed, it is the Central Bank is the issuing institution of the legal currency in circulation, so it is she who provides the means necessary payments to individual transactions within an economy. But the financial needs of fiat money but also the stability of its value to function properly. So, financial stability has a direct link to monetary stability and hence with the Central Bank. Admittedly, monetary stability does not necessarily financial stability, but it is a necessary condition. However, because of financial globalization, all central banks are faced with problems of defining their functions reactions. Indeed, financial globalization has led to complexity of the action of central banks. It resulted in the emergence of new assets (investment vehicles), new liabilities (debt instruments) and new actors (emerging markets, pension funds, institutional investors). A major problem of contemporary monetary policy of central banks is linked to changes in financial asset prices; there is much debate on the need to consider these prices in the implementation of monetary policy (Bernanke, 2004). To many observers, a central bank must integrate over the financial assets (primarily real estate and stock market) in its final objective, namely price stability. But this proposal raises a problem of consistency and implementation. Indeed, asset prices are inherently volatile, yet the goal of a Central Bank is the stability of core inflation, that is to say, after inflation of prices the least volatile. Clearly there is more volatility, the more liquidity risk.

Some also argue that the Index of Consumer Prices (CPI) is not a good indicator of price stability, because the CPI is a demand price, yet offer prices may also evolve and undergo shocks that affect all of the general price level. And the right indicator would be the ISP (Stability of Price Index) which incorporates both prices consumer goods that offer price depending on the sensitivity of each of the price situation. Inflation does not only relate to the demand but also supply. But how a central bank could step in to prevent adverse events related to financial asset prices? It cannot directly, because in this case it must buy or sell shares. So, two solutions remain indirect. The first is that used by the former Fed chairman, Greenspan, namely making speeches warning. The second is the handling of interest rates; in fact, financial crises can be solved by lower interest rates. The 2008 financial crisis has crossed the world economy calls into discussion the problem of "too big to fail", that is to say the consequences of the rescue of a major financial institution for the financial system as a whole.

**Table 5.** Mandate of central banks in financial stability

Country	Payment System	Crisis Management	banking supervision	Macro financial balance
Germany	++	0	+	0
Austria	++	++	0	+
Belgium	++	+	0	+
ECB	++	+	0	+
BCEAO	++	++	++	++
Canada	++	++	0	+
United States	++	++	++	0
Spain	++	++	++	++
France	++	++	++	++
Hong Kong	++	+	++	+
Italy	++	++	++	0
Japan	++	+	+	+
Mexico	++	++	0	0
Netherlands	++	++	++	++
UK	++	++	0	++
Singapore	++	++	++	++
Suede	++	+	0	++
Switzerland	++	+	0	++

Source: Icard (2007) and author

Indeed, there is more to certain irresponsibility in the management of some large financial institutions whose leaders take excessive risks in the financial markets. This is the case in the U.S. financial system including the Bank Lehman Brothers, the insurance AIG (American International Group) or the two main refinancing mortgage institutions Freddie Mac and Fannie Mae. Several measures have been taken by U.S. authorities to rescue the financial system and restore confidence in financial markets, these measures are both essential but somehow give the green light to market for taking new risks. Due to the internationalization of banking and finance, the U.S. financial crisis spreads to Europe and the Rest of the World. The banking and financial system is thus entering a new phase which calls for more transparency and regulation in the banking and financial activities including the public authorities. The issue of financial stability can also be analyzed in terms of governance of global savings. Can a single agency as the Central Bank sufficient to ensure that role or does it hold a shared surveillance? For some the role of maintaining or guaranteeing financial stability should be a task for central banks because they can avoid a major crisis negatively affects the growth and involves major expenditures. They also claim that the central banker is able to detect a bubble better than all the other actors, combining action on expectations and action on rates. For others, financial stability is not a mission entrusted to central banks, but it must rest with the Superintendence of Banks and the stock market. Indeed, for the latter, private agents are

more informed than the central banker; further action on interest rates can have no effect on inflation, or at best a compromise (between inflation and output gap). Thus, the mission of central banks in financial stability varies from one country to another as can be seen in the following table: Table 5.

### **The role of the International Monetary Fund (IMF)**

The IMF promotes international monetary cooperation and provides member states with policy advice, temporary loans and technical assistance to help them achieve financial stability and external viability, and strengthen their economies sustainably. The loans are used to support the implementation of economic programs designed to address the problems of balance of payments. This institution, however powerful it is, has been the subject of much criticism following the debt crisis of the 80s, exacerbated by the financial crises of the 90s. These have highlighted the systemic risk that may paralyze the financial system as a whole. Thus a country, regardless of the strength of its financial system and economic fundamentals, at any time may be a victim of these attacks mainly because of contagion effects. That is why the IMF has implemented a new financial instrument for crisis prevention, the credit line, immediately accessible to member countries with sound macroeconomic conditions but exposed to a process of financial contagion.

The IMF intervention methods for solving these crises and especially the lack of effective forecasts of this institution (it refers primarily to the Asian financial crisis of 1997), have left many countries in transition into a recession that is far from over despite promising repeatedly here and elsewhere shy. A lively debate is still underway among economists, politicians, private contractors ... on the merits of this institution. For some, simply delete the IMF since its existence only encourages imprudent investments: they are therefore highlighted the problem of moral hazard, while others insisted on its necessity but recommend adjustments, including concerning the role of Lender of Last Resort. The problem came into effect with financial globalization facilitated by the Washington consensus that has led many countries to liberalize their capital accounts, thus liberalization of capital movements as we have outlined above. It should be noted that capital flows are broken down into three components: foreign direct investment, portfolio investment and bank lending last. The respective share of these three components varies from one region to another, particularly given the level of development, investor confidence and the monetary and fiscal discipline in the country in question. This finding should require the Fund to adopt different methods of intervention and to prohibit copying of the development models that have proved successful elsewhere.

For the resolution of financial crises the IMF can play the role of restoring confidence in the currency market while central banks are better able to ensure the restoration of confidence in the domestic banking system. According to the report of the Independent Evaluation Office of IMF (IEO) of 2007 a number of measures must be adopted by the IMF to improve its guidance including:

- Clarify the rules on monitoring foreign exchange rates, both for the IMF to its member countries;
- Provide guidance practices for large analytical information, for example on the use and limitations of interventions on foreign exchange markets, from the results of the examination of the stability of the international monetary system by the Board of the IMF;
- Ensure effective dialogue with member countries by adopting a more strategic approach and adjusting institutional incentives for the staff;
- Eliminate inconsistencies and ambiguities in how the IMF classifies the exchange rate regimes;
- Expand the IMF's advice on the choice of exchange rate regime with analyzes more explicit;
- Ensure that the IMF is always at the forefront of new approaches and methods for assessing the level of exchange rates;
- Take steps to identify the causes of apparently serious problems of data communication;
- Formulate guidelines for improving the impact review in analyzing the country;
- Target the critical issues in the analysis of exchange rates clarifying responsibilities and consider

changes the structure of staff teams responsible for the country;

- Specify the rules of confidentiality and accountability for the examination of sensitive actions on exchange rates;
- Focus on opportunities for concerted multilateral action.

These proposals revolve around the exchange rate policy and seem useful in order to make the IMF a International Lender Of Last Resort although today the mission is not in the official statutes of the institution.

Therefore, despite the many criticisms of the IMF, we must recognize the strategic role of this institution in search of financial stability. Thus, during the recent financial crisis, authorities around the world including through the G20, have decided to strengthen its powers. In April 2009, the G20 decided to triple the IMF's lending capacity, which previously ranged from \$ 265 billion (Paulo, 2011). The IMF regularly publishes economic and financial relationships relevant to financial stability. To participate increasingly in search of financial stability, IMF governance has also been reformed, notably under the leadership of the G20. And emerging countries like China, India, Brazil, Mexico and South Korea, have seen their increase in quotas since 2008. The executive committee is also becoming more balanced, reflecting the important role of emerging countries in decision making at the international level.

### **The role of other oversight organizations**

Internationally, there are also other organizations that participate actively in search of financial stability. This is particularly the G20, the Financial Stability Committee, and the Basel Committee on Banking Supervision. The G 20, i.e. the group of twenty, was born in 1999 and aims to involve emerging countries in search of financial stability. Indeed, these countries have become important in the international as they contribute significantly to global economic growth. The G20 represents 85% of the global economy and 66% of the world population. The G20 appears to be an international solidarity organization deal with the crisis. The group decided to better support and strengthening the IMF's lending capacity, modernizes its governance with a better account of the realities of the 21st century. The group also meets to discuss policy changes in different countries and issues of governance of international finance. The G20 is well known to play a leading role in the necessary reform of the international financial architecture.

The Financial Stability Committee replaces the Financial Stability Forum since the 2008 financial crisis, specifically in November 2008 during the G20 summit in Washington. The idea is thus to strengthen its weight and its mission to better participate in the regulation of global finance. The CSF should help harmonize standards and

**Table 6.** Supervision in the U.S.A

<b>Categories of establishment</b>	<b>Regulator</b>
Complex financial holding companies holding a / the bank (s) (or complex holding companies ...)	Federal Reserve Board
Complex financial holding companies holding a / the trader (s) - broker (s)	The Securities and Exchange Commission
Federally chartered banks	
Federally chartered banks	The Office of the Comptroller of the Currency (OCC)
State chartered bank	State Banking Departement in one of 54 federal states
Savings banks and finance companies Savings and Loan	Federal Deposit Insurance Corporation (FDIC)
Savings institutions (thrift)	Office of the Thrift Supervision
Credit unions	National Credit Union Administration
Insurance companies	Supervision of the State, with coordination at the federal level, the National Association of Insurance Commissioners
Investment firms	The Securities and Exchange Commission

Source : Icard (2007) and author

accounting and financial practices around the world. Unlike the FSF, it takes more into account the reality of emerging countries. The FSB will therefore ensure the smooth functioning of the system must also identify the various sources of financial vulnerability.

The secretariat of the CSF is located at the Bank of International Settlements in Basel. The Basel Committee on Banking Supervision (CBSB) is the source of the Basel Accords that helped define standards of prudential supervision for the various financial institutions. The different ratios in place aimed at promoting banking supervision in order to fight against banking and financial crises. Basel I to Basel III, the different ratios attempt to reflect the reality of the financial system. The various financial innovations necessary, because the periodic review of prudential standards. Indeed, with financial innovations, new risks are emerging that warrant new standards. The CBSB was created in 1974 by the governors of the G10 central banks and aims to strengthen international cooperation on regulation and supervision. It focuses on the capital requirements of banks thus participates in the banking and financial stability.

### Single or multiple supervisory

A very topical issue is the supervisory authority in charge of financial stability, should it be single or multiple. The answer is not the same across countries and the tendency is to guardianship multiple, posing, in fact, a coordination problem.

In Britain, there was a single authority to regulate the financial system, namely the Financial Services Authority which is responsible for supervising credit institutions, investment firms and insurance companies. It allows players with access to the market, regulates the functioning of markets and protect the end investor.

In France, multiple yard supervision in January 2010 but was set Prudential Control Authority (ACP) which is formed by the merger of the Banking and Insurance Supervisory Authority (ACAM). It has three main tasks include: contributing to the stability of the financial system, protect customers and strengthen the influence of France in the international and European. But for the supervision of financial markets, there is always the Financial Markets Authority (AMF). However the two organizations work closely together.

In the U.S.A, we have a multiple supervisory. But the Federal Reserve (Fed) is responsible for several tasks including regulation and control of key sectors of financial markets, nationally and internationally (G Schinasi, 2004). The Fed oversees the Federal Reserve Banks, 12 in number, who hold the bank reserve requirements. The direction of the Fed (the Board of Governors) is appointed by the President and confirmed by the Senate. The Fed implements monetary policy, supervises the banking system, maintains the stability of the financial system and provides a number of services including the management of the funds transfer Fedwine. The SEC (Securities and Exchange Commission) ensures the transparency of financial markets monitors the activity of market participants and punishes breaches of regulations. But in general, the distribution of powers between the different authorities can be summarized as Table 6.

In the European Union, the European Central Bank's mission is to ensure price stability and its contribution to the pursuit of financial stability is limited to ensure the proper functioning of the payments system TARGET (the settlement system for the area euro) and not the financial system as such. Responsibility for banking supervision is delegated mostly to National Central Banks. In the West African Economic and Monetary Union (WAEMU), for monitoring the financial system was a trusteeship multiple. The Banking Commission

**Table 7.** Single or multiple supervisory by country

Country	Fully integrated supervision (banks, insurance, securities)	Banks	Insurance	Securities
<b>G10 and Countries of West African Economic and Monetary Union</b>				
Germany	Federal Financial services (BaFIN)			
Belgium	Banking, Finance and Insurance Commission			
Canada		Office of the Superintendent of Financial Institutions (OSFI)	Office of the Superintendent of Financial Institutions (OSFI)	Various provincial authorities
France		Prudential supervisory authority	Prudential supervisory authority	Financial Markets Authority (AMF)
Italy		Bank of Italy	Institute for the Supervision of Private Insurance	National Commission for Companies and Stock Exchange (CONSOB)
Japan	Financial Services Agency			
Netherlands		De Nederlandsche Bank	De Nederlandsche Bank	Financial Markets Authority
Suede	Financial			
Switzerland	Consolidation since 2008 within a single authority: FINMA			
UK	Financial Services Authority			
United States		Federal Reserve Board (plus others)	Various state authorities	Securities Exchange Commission (SEC)
WAEMU		Banking Commission	Inter-African Conference of Insurance Markets (CIMA)	Regional Council of Public Savings and Financial Markets (CREPMF)

Source: Icard (2007) and author

supervises the banking system, the financial market is under the authority of the Regional Council for Public Savings and Financial Markets (CREPMF); microfinance is under the control of the Ministries of Finance and the insurance sector under the control of the Inter-African Conference of Insurance Markets (CIMA). Ultimately, the financial supervision varies from country to country, but central banks remain at the heart of this mechanism, as they are responsible, among other sustainability payment systems. The following table summarizes the situation of some countries in supervision (Table 7).

Ultimately, the search for financial stability necessary to set the ground rules between the different actors in the financial sector at national and international ((Borio (2003), Borio et al (2001), Barth et al (2000), BCEAO, 2006)). Central banks have a natural role to play because they are concerned with monetary stability. One can also note that central banks ensure the proper functioning of interbank payments and the quality of currency in

circulation and in doing they ensure the viability of payment systems. Central banks must also take into account changes in financial asset prices in the implementation of monetary policy. But now, opinions are widely shared in terms of power of central banks to control the overall savings. However, they can significantly contribute to reducing financial risks including placing a monetary discipline and providing a payment system viable and effective.

## CONCLUSION AND RECOMMENDATIONS

The search for the stability of financial systems remains a priority in all countries today, mainly because of high costs incurred by financial crises and induced effects of the financial stability of economic growth. But ways to achieve this vary from country to country. Thus, there are unique supervisory authorities (Great Britain, Sweden,

Japan, Germany, Switzerland) and multiple supervisory authorities (France, USA, Italy, Canada, WAEMU) for the surveillance of financial systems at national level.

Central banks should ensure the quality of currency in circulation and make the payment system works smoothly; one of their main missions is price stability. This stability is supposed to firstly promote financial stability and, secondly, inform economic agents in their investment choices and investment promote aggregate demand and hence economic growth. But the recurrence of financial crises means that the mission of price stability, even if it is filled, is insufficient to guarantee the stability of the financial system as a whole. These financial crises are very diverse, because they have sources both microeconomic and macroeconomic, and because of their consequences, they paralyze all the economies concerned. There is unanimity on the need to develop a device to avoid them or to predict or less, but on the other hand there is much debate about the actor able to carry out this mission. Central banks are naturally interested in the subject, because of their role as issuers of banknotes, money market regulators and responsible for monetary policy but also their role throughout history in the rescue of troubled financial institutions. However, the mandates of central banks, as regards the issue of financial stability, vary from one country to another, some being more advanced than others. In developing countries, in general, financial markets are still in an embryonic state, and therefore the banking system remains the main sector of the financial system. Thus the central bank plays a key role in preserving financial stability and promoting economic growth in these countries. Despite multiple efforts to ensure a stable financial system, our study leads to the following recommendations. Thus, we suggest further regulate financial activities at national and international levels, including focused accountability of different actors in the financial sphere. It is also essential to ensure the stability of the parity between the major currencies of reference, particularly between the euro and U.S. dollar. Doing so also facilitates international trade due to the reduction of currency risk, which is a major handicap for the development of trade between countries. It also seems important to stabilize oil prices at a reasonable price and make every effort to discourage speculators. To maintain financial stability, it is also fundamental to seek macroeconomic balance (balance of public finances and low inflation) but also keeping a moderate credit.

The financial crisis of 2007/2008 calls for greater transparency in the functioning of financial markets and thus to more regulation of different sectors of the financial system, which means it also takes more coordination between different regulators to preserve stability of the financial system nationally and internationally. The G20, the Financial Stability Committee, the Basel Committee for Banking Supervision, the International Monetary Fund, are all actors, who can with good coordination,

ensure international financial stability. The various financial innovations also require a regular review of standards and practices of supervision and financial regulation nationally and internationally. The role of rating agencies for financial system stability is also a question of what size to face the international financial community.

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