

The present financial crisis:
Why has the system derailed?
Some thoughts on securitization

Since August 2007, the world financial system has suffered severe dislocations and many of its compartments have been affected.

Why have things derailed in such a way? The question goes well beyond a chronological description of the causes of the crisis. Before proposing solutions, it is indeed necessary to understand the nature of the problems and to distinguish their specific aspects. I shall briefly focus on three key-considerations.

- the abundance of global liquidity and the weakening of risk assessment;
- the excesses of securitization and their consequences;
- the accounting and regulatory environment.

I shall conclude with a few brief ideas on the necessary actions to be taken.

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I. The abundance of global liquidity and the weakening of risk assessment:

1. The abundance of liquidity:

Whatever the definitions (different monetary aggregates or credit), monetary and credit creation has significantly outpaced, over the last ten years or so, world growth in nominal terms¹. Even if theory has shown that one should be careful in interpreting the evolution of monetary aggregates, there is no doubt that, in the medium and long term, the relationship between liquidity and inflation remains relevant.

Why did Central Banks let liquidity explode?

Two factors have played a key-role:

- o the moderation in the rise in consumer prices (under the influence of technological innovations as well as of low cost imports from emerging countries) has perhaps encouraged monetary policy makers to become more lenient. Since price inflation was tame, why should one take the risk -in tightening monetary policy- of reducing economic growth? This is a way of saying that the strong inflation in asset prices that took place over the last years (real estate, stocks, bonds, gold, commodities...) may not have been sufficiently taken in to account by Central Banks in the determination of their policies;

¹ Global broad money as a percent of nominal GDP has raised from 100 in 1995 to 130 in 2007. As for credit to the private sector, it has increased from 100 to 137 during the same period (more than 1/3 in real terms). BIS

- the other factor stems from the malfunctioning of the international monetary system. It is a fact that United States have, over the years, systematically financed their domestic consumption by external credit. The huge US current account deficits have been financed by the surpluses of Japan and emerging countries. This process -which has led to a spectacular accumulation of reserves in emerging countries (more than 3 trillions dollars in 2007 against less than 1 trillion in 2000)- has been a direct cause of the growth in global liquidity. Indeed, most surplus countries have sought to counter the normal appreciation of their currencies vis a vis the dollar by heavy interventions on the exchange markets. These interventions have led to a major increase in global liquidity and to more accommodating monetary conditions².

2. A weakening of “risk-assessment”:

In this context of “easy money” and low interest rates³, it was tempting to borrow as well as to lend. Hence, the credit explosion which has taken place.

Unfortunately, easy financing has led to deteriorated credit standards. Given the intense competition among financial institutions, favourable conditions were offered to attract borrowers. Spreads, which normally allow banks to protect themselves against risks, have been getting narrower. This insufficient pricing of risk has been one of the deep causes of the present crisis.

A number of financial institutions have, because of thin margins, engaged in riskier and hence more remunerative credits. Through securitization, many financial institutions have offered attractive yields to investors who did not understand to a full extent the risks they were taking. This is the case, as we shall see, of subprime mortgage loans in the US⁴.

To sum up: too much liquidity, too low interest rates and an excessive appetite for mispriced risks. This type of situation is far from being unique in financial history. It always leads, when euphoria stops, to a surge in credit defaults and problems for overextended financial institutions. This is what happened once again in the summer of 2007.

But the present crisis has also more specific aspects which explain its exceptional severity.

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II. The abuse of securitization and its consequences :

1. The rise of securitization :

Over the last twenty five years or so, the financial system has shifted from an “intermediated” model (where banks, that were the main providers of financing, lent directly to their clients

² It has been calculated (see NBER Working Paper n° 12560-2006) that, if during one year, the surplus emerging countries had refrained from buying US Treasury instruments, the interest rates in the US would have increased by 100 basis points.

³ Between 2001 and 2003, the US interest rates have been negative in real terms if one takes into account inflationary expectations.

⁴ Subprime borrowers are characterized by their high probability of default especially in the event of a fall in real estate prices (fall that could have been anticipated given the –unsustainable- exuberance of the US housing market until 2005-2006).

and kept these assets on their books) to a market model (where financial markets provide the bulk of global financing).

In this context, industrial and commercial corporations have increasingly tended to tap financial markets by issuing bonds. But over the recent years, financial institutions have become, themselves, more and more dependent on markets. The classical intermediation model has gradually given way to the “originate and distribute” one. This latter model consists for banks to securitize the credits they originate by transforming them into securities that are offered on the market to investors (pension funds, mutual funds, insurance companies, asset managers....). These “credit risk transfer instruments” have taken many forms. The CDO’s (collateralized debt obligations) have, in particular, considerably increased in volume over the last three years (this phenomenon being closely linked to the expansion of subprime securitized loans).⁵ This type of activity -the very model of investment banks- has thus become predominant.

This evolution has played a major role in the explosion of credit mentioned above. Indeed, banks are limited in terms of their ability to grant credit because of their need to abide by international capital adequacy ratios (Basle). Securitization, which allows banks to get off their books the loans they have originated, has, de facto, increased credit creation because of the acceleration of balance sheet turnover that it implies⁶.

Securitization has, no doubt, contributed to world economic growth over the last years. Conventional wisdom also stated, until the summer of 2007, that this mechanism strengthened the banking system through the dispersion of risks among many investors worldwide.

But securitization, which has led to a great sophistication of financial products, to financial innovation and to the trading of credit risk instruments as a special class of assets, has also been characterized by a number of excesses and deviations which had not been perceived at the time.

- Firstly, as banks are able to sell off their credits to the market, they may be tempted to provide less attention to the intrinsic quality of these loans. It is a fact that credit standards have deteriorated over the last years. The example of the subprime in the US is, in this regard, more than illustrative. Indeed, one can not explain that certain financial institutions have –with no consideration to the incomes of their borrowers- granted mortgages under such risky conditions. It is probable that they would not have acted that way and for such amounts, had they been obliged to keep these loans on their books. The link between securitization and the deterioration of credit quality has been recently confirmed by empirical research⁷. This credit quality deterioration has played a major role in the rise of subprime defaults that have been the trigger of the crisis ;

⁵ Credit Default Swaps (CDSs) have also played a major role in the expansion of financial markets and the spreading and hedging of credit risks (in real terms, the 40 trillion dollars of CDS’s outstanding in the first half of 2007 amounted to 1,2 % of the OECD GDP: i.e. four times more than in the first half of 2004).

⁶ See: “Challenges of monetary policy in a globalized world”, J. de Larosière, *The Banker*, April 2007.

⁷ See Claudio Borio: “The financial turmoil of 2007: preliminary assessment and some policy considerations”; BIS, march 2008. This article makes reference to research by Benjamin, JT. Mukherjee, A. Seru, and V. Vig (2008): “Did securitization lead to lax screening? Evidence from subprime loans 2001-2006”.

- Secondly, securitization has contributed to the development of a vast and uncontrolled “parallel banking system” which has been a determining factor in the crisis. Indeed, banks that are constrained by their capital adequacy requirements, have sought to find financial partners eager to take advantage of higher remunerations on riskier credits. As far as they are concerned, these partners are not limited by regulatory ratios. This is the case of hedge funds, special investment vehicles (SIVs)... which have scarce capital, have no deposit base and are not subject to control. These funds have increased the leverage of the system by borrowing heavily from banks to buy rising volumes of financial products (if a bank cannot lend, for example, more than twelve times its equity, hedge funds or SIV’s... have often invested 20,30,50 or even more than 100 times their capital). It is this huge and opaque leveraging of the system that has been one of its greatest weaknesses. “Non-banks” have, -in order to finance the acquisition of these securitized products, and to ensure their funding needs- borrowed from banks but also from the short term paper commercial market.⁸ The fall in the value (and ratings) of assets in the wake of subprime defaults in 2007 has triggered a selling panic among primary investors like insurance companies, mutual funds, etc.... These investors have sold their shares in funds as well as the securities they had acquired and which were considered -sometimes mistakenly- as dangerous. By doing so, they precipitated the fall. At the same time, these investors were not willing to renew short term facilities on which the “parallel banking system” was so dependent. This is where the liquidity crisis hit. But the issue is not limited to the relation between funds and investors. It also concerns banks. A number of banks had, indeed, set up and sponsored off balance sheets “conduits” or “special vehicles” destined to buy the financial products that they had created (or help to set up) in the first place. These banks were therefore under the obligation to honour the back-up credit lines that they had provided to these conduits. Indeed, the conduits had become unable to tap the short term markets that had dried up because of the unwillingness of investors to continue to refinance them. Sometimes, banks were forced -for reputational reasons- to buy back securities even if they were not contractually compelled to do it. This “re-intermediation” led, in turn, to heavy mark- downs and insufficient equity in those institutions that had gone too far in expanding their off balance sheet operations or had kept on their books large amounts of securitized credits⁹.

Thus, the deterioration in credit standards, favoured by securitization, has weakened the financial system as a whole. Those institutions who believed that they had got rid of risky and costly (capital wise) loans are now in the process of reabsorbing part of these assets. This “involuntary” reintermediation has obvious effects on the new lending capacity of banks and therefore on the real economy. “From being a vehicle for the distribution of risk and comfort in the system, securitization now distributed fear”¹⁰.

But these technical aspects -new to the extent that securitization had never reached present proportions- could not have prospered without a favourable regulatory and accounting framework.

⁸ CDOs, in particular those based in subprime loans, have been used by a number of funds as “equity” to leverage their own operations.

⁹ Citibank, Merrill Lynch, Morgan Stanley, UBS have recently obtained some 50 billion dollars from sovereign funds in emerging countries in order to beef up their equity base.

¹⁰ Claudio Borio : cited above.

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III. The regulatory and accounting environment:

Three issues can be touched upon:

1. Regulation has allowed the development of a vast “parallel banking system”:

Over the last twenty years, commercial banks have been subject to increasingly precise prudential regulation. Basle II rules (2008) are significantly more sophisticated in terms of risk assessment than those of Basle I (1987). This regulatory system has mainly focused on adequate capitalization. But it did not cover the growing universe of the “parallel banking system”¹¹. These “non-banks” are, in essence, more fragile than banks: indeed, they don’t have a deposit base nor, often, sufficient equity. As they are not controlled by bank supervisors, a huge “regulatory arbitrage” has, in fact, taken place from banks to non-banks. But, as we have seen, these parallel banks –which took similar risks as commercial banks while not being subject to the same constraints - were dependent on short term funding. As soon as money markets dried up when the subprime crisis erupted, non-banks were hit by the liquidity crunch. Investment banks also suffered when their trading, arbitrage and hedging positions were suddenly hit by the sudden reversal of markets. To some extent, this was also true for commercial banks¹².

2. The rating of complex financial products has been faulty:

Rating agencies –which are accustomed to rate companies - have also entered the business of rating complex securitized financial products. These instruments are most often sliced in different tranches with specific risk characteristics.

In fact, such ratings have proved questionable. The case of instruments based on US subprime is, in this respect, spectacular. Excellent ratings (triple A) were granted to subprime CDOs which were in fact very risky. Ratings were, indeed, based on the slicing of underlying assets in different “tranches” of risk, whose default probabilities were related to past experience and not sufficiently to potential risks. However, these potential risks were foreseeable given the first signs of a reversal of the housing market and the process of gradual exit from the two year “soft” conditions which had been initially granted to mortgage borrowers.

Given the euphoria of market conditions that had prevailed in the previous years, investors (pension funds, mutual funds, etc....) relied heavily for their choice of assets on ratings provided by agencies.

Furthermore, rating agencies were often in a situation of conflict of interest. They are remunerated for their ratings by the financial institutions who “package” and “distribute” securitized products, but they were also consulted (and remunerated) to provide advice on the structuring of these products. This dual function is obviously most questionable.

¹¹ This expression features not only hedge funds, conduits and financial vehicles but also a large number of investors which are not considered as commercial banks and are not subject to banking control.

¹² Off balance sheet SIVs (of less than one year maturity) were exempted from (Basel I) capital adequacy obligations as long as no back up lines were provided by the sponsoring bank. But a number of banks have been, in fact, compelled to support these structures for reputational reasons.

3. The accounting rules :

Since 1993, the accounting system for US corporations has adopted the “fair value” principles by which assets on the balance sheet are permanently valued according to market values (this being applied not only to trading activities but also to assets held by banks until maturity).

Under pressure by the accounting “experts”, this system has more recently been adopted in great part by Europe in spite of the opposition of the French banks.¹³

The result has been a mechanical worsening of the crisis.

Indeed, during the bullish markets of the last years, the assets held by banks have seen their value go up. This has generated large profits, and thus contributed to the increase of banks own funds. Banks, who usually seek to keep constant their gearing, have thus been incited to grant more credits without weakening their capital ratios. This has contributed to credit creation.

But when markets reversed and when values fell (stocks, real estate, financial products....), the opposite happened. Losses reduce banks equity base, while, at the same time, reintermediation compounds regulatory constraints and forces banks to constrain new credits in order to satisfy their capital adequacy ratios. The resulting “credit crunch” obviously can only increase the effects of the crisis on the real economy.

The “pro-cyclical” drawbacks of systematic and ill-conceived fair value accounting methods as well as their absurd consequences when liquidity vanishes all together, are such that one can see today large US institutions advocating an adaptation of these principles¹⁴

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From the above remarks stem some rather obvious recommendations. Here is a tentative list of possible avenues:

- better recognize that monetary policy has a fundamental and comprehensive role to play in fighting inflation (even if inflation is manifest in asset bubbles more than in CPI);
- tackle the misalignments and deviations related to the functioning of the international monetary system which allows surplus countries to prevent, through massive intervention, their currencies to appreciate;
- better take into account banks liquidity management in conducting banking supervision (a bank like Northern Rock in the UK was dependent in an inordinate way on short term money markets to finance its long term mortgage loans. This maturity mismatch doesn't seem to have been detected in time);
- banks should give priority to risk assessment and management. Be they kept, or not, on the banks balance sheets, credits should be assessed with equal vigilance; in this respect, remuneration incentives should focus less on short term gains and more on risk quality and long term performance;

¹³ This opposition has limited the consequences of the fair value system for certain balance sheet items, (such as credits and client deposits) which can be kept on the books at historical value. The exemption is subject to review.

¹⁴ See Financial Times, March 14, 2008: “AIG urges rethink on « fair value » accounting”.

- seek to restore market confidence in correcting the excesses of securitization. In this regard, financial institutions involved in securitization should clearly explain to potential buyers the risks involved in credit securities. They should also make public their decision either to keep (or not to keep) on their books part of these products, or to provide (or not to provide) liquidity to some of these instruments¹⁵;
- require the “parallel banking system” to abide by minimum reporting obligations (including providing information on their degree of leverage);
- the United States should restructure their mortgage market in a way that would not exacerbate moral hazard. They should also start controlling mortgage loans¹⁶;
- rating agencies should revise their methodology, be encouraged not only to provide ratings but to follow up systematically the rated assets ; they should also not be authorized to rate products that they have been paid to help structure;
- the accounting systems should come back to sounder notions (a clear distinction should be made between the “trading book” which should be marked to market and the “banking book” kept to maturity and which should be accounted at historical value)¹⁷;
- better take into account the systemic nature of financial crisis in a globalized world. All markets are connected. This is why the crisis on the US subprime market – albeit relatively limited in its size- spread out worldwide as soon as investors confidence vanished ; hence the need for global solutions;
- strengthen the positive aspects of securitization which has an important role to play : the sound short term part of this market is already rebounding¹⁸ but the excessive dependency on short term funding of some CDOs based on long term mortgages poses obviously a liquidity issue that has to be dealt with, as suggested above ;
- don’t jump to hasty conclusions. Most of the recommendations touched upon above do not require more regulation but more common sense in the implementation of existing rules. Many of the required improvements should be the result of better standards and principles agreed upon by the industry. What is encouraging in this respect, is that some international banks have avoided the excesses of securitization, have not indulged in subprime lending and have kept a balance between their traditional retail, market and asset management lines of business. This shows that the overwhelming and on going concern for good risk assessment and management should -and can- be the first duty of a banker. Euphoria has not always led to excesses.

¹⁵ One could also think of moving out of the OTC markets by transferring simpler and standardised products to regulated stock exchanges and clearing and settlement institutions.

¹⁶ In France, for example, the legal responsibility of banks to provide advice (“conseil”) to their clients would not have allowed the excesses observed on the US subprime market.

¹⁷ One should also allow the transfer at cost price (in a special category) of assets that are managed in a medium term framework under tightly controlled conditions and on an accrual basis.

¹⁸ The volume of the asset backed commercial paper market in France has doubled over the last year from about 20 to 40 billion euros because of the intrinsic quality of the instruments in question and their eligibility as collateral to the ECB.