

# A Brief History of Recent Times

(and some thoughts)

January 2009

# A Brief History of Recent Times

Recent market developments, and the answers public authorities and regulators have given to the challenges they pose, are certainly cause for concern and reflection on the sources of the crisis, the pertinence of public authorities, and the financial system as a whole. It should also drive changes in the way institutions are regulated, but more importantly, on how risks are measured and captured.

The reasons for the markets instability witnessed over the past 18 months have been endlessly discussed and debated. It would therefore be reasonable to assume that they are well known and relatively well understood. However, the market – and more worryingly its regulators- seem to be taken off guard every time a new crisis appears, generating some suspicion as to how much awareness and understanding there is globally. Let us attempt therefore to draw a clear framework that will put some structure around the chaos that is currently unfolding.

#### How did it all start?

The first signal happened to be the subprime crisis (which does not mean the crisis exists because of the subprime). A segment of the mortgage market became out of favour, on the premises that delinquency rates were on the way up due to the combination of increased mortgage payments - as resets were triggered - and a fall in US housing prices. To add insult to injury, the situation was considered unlikely to improve in the perspective of the coming economic slowdown. This became suddenly quite evident to the finance industry, although the theme had been heralded and recognized by a number of market participants for a number of months; some had even built significant positions ahead of the events, generating at the time reactions at best incredulous. Overnight, every institution faced the difficult task of evaluating the exposure they had to these assets, and the likely resulting loss. They started to look into their balance sheet to find out. What they found out took them by surprise and this was that they could not really say. The structured bonds they held would not allow them to understand exactly what kind of risk they were exposed to, or at least not in sufficient detail. The loss of granularity was such that they could neither determine the scale of their exposure, nor the pain they should expect to face. They could not really estimate the value or the risk inherent in a significant part of their balance sheet. They then turned to the market to find the answer. Many of them. At the same time. The resulting unbalance triggered the events and the rest of the story is history. Before exploring the contamination mechanism, let us spend a moment on what followed and, more importantly, why.

## Structuring looked like a good idea...

Previously, products were simple and the resulting risk exposure was equally relatively straightforward to capture. Credit decisions were based on the evaluation of the credit worthiness of the counterparty. Then came the art of repackaging, also called credit structuring. Repackaging allows banks to bundle debts together, take them off balance sheet and refinance them through various securities issuance guaranteed by these pools, with different levels of risks associated with each of them. Rating agencies provide a rating to those securities, based on the description of the pool in term of type of assets and statistical analysis of the resulting risk of loss. Banks then turn to the market and sell these securities to investors attracted by the spreads they offer. As a result, banks' balance sheets get lighter and capacity to generate new business is recreated. Credit structuring brings liquidity to a market known to be fundamentally illiquid; a form of remedy to the credit market limitation. A perfect world appears: Banks, credit specialists, originate credit exposure and then repackage them in securities offered to investors who understand investing in securities and can incorporate those new vehicles into their asset allocation policies thanks to their ratings. The gap is bridged and the possibilities appear infinite. For years this market developed, happily providing the world economy with a powerful growth engine, and the investment community with assets. It is important at this stage to recognize this fundamental truth: this new market benefitted the economy as a whole. It made credit more readily available, allowed banks to originate more business, hence fuelling the global economy to everyone's benefit. So where did it go wrong?

# When recycling becomes waste management

As the old adage goes, "garbage in, garbage out". The real quality of these structured securities relies on the quality of the pool, of the underlying assets, mortgages and loans. In the first years, quality assets were aplenty. So were the resulting securities. After a while, the rules of the game changed: restructuring became the end and not the means. The purpose was not to recycle debt to free up credit capacity anymore; the purpose became to generate assets to fuel the structuring business and satisfy the never-ending appetite of investors. In the end, any asset would do. Subprime assets, and then the dreaded silent seconds and liars loans. Banks incentivised their staff to generate new business and discipline relaxed; loans were made over 100% of the collateral value; second loans were made and included in pools as per usual. Banks wrote to homeowners, inviting them to "free up equity". Credit cards and loan offers were made on the net, in every possible corner shop. The miracles of credit engineering created structures based on structures, adding an extra layer of risk structuring and opacity. The system started clogging up with toxic paper a few months before reality struck and caused a massive coronary to the world financial system.

## Ratings, leverage and regulations

At this stage, let us come back to a stage of the process covered only briefly: the placement of these securities. As briefly mentioned, the structured securities benefitted from being rated by rating agencies, contingent on the quality of the asset pool, and the level of risk associated with each of them. The tranche carrying the greatest risks, the initial percentage of loss in the pool are known as the "equity tranches". The tranches taking the lowest level of risk, and the first in the order of repayment, would get a higher rating, often AAA. This made them eligible as suitable assets to a wide array of theoretically extremely conservative institutional investors: some money market funds, insurance companies, pension funds, central banks. These investors have enormous amounts to invest and the appearance of a new source of eligible assets was certainly welcomed by many, even more so given that, at times when interest rates were low, these assets bore very attractive level of remuneration for what was perceived as an equivalent risk. Loose monetary policy following mild recessions from earlier in the decade made sure there was enough cheap cash to fuel the machine. More importantly, or catastrophically with the benefit of hindsight, the combination allowed, from a regulatory standpoint, for the highest level of leverage for banks.

The equity tranches, those carrying the highest level of risk, were the most remunerative of all, obviously commensurate with the risk associated with them. At a time where business was booming, real estate prices were climbing as if there was no limit, keeping those on a balance sheet did not seem such a bad idea. Those were also more difficult to sell as there were considered eligible assets by a very limited group of investors. Consequently, the most toxic of these securities accumulated in a limited number of hands. On the other side of the risk spectrum institutions chose to leverage their capital by carrying large inventories of "AAA" rated papers, with "riskless" positive carry, to levels unheard of... they were going to meet as the circle closed.

#### How to build a time bomb

So we face a situation where:

- A new type of securities have been created and distributed in the system for years; volume of this paper is enormous;
- These securities have been purchased by institutional investors of the highest quality, key participants to financial markets: central banks, insurance companies, banks, trusts and funds of all nature;
- In the later part of the process, the system has produced and disseminated toxic securities.
- Ratings are granted mechanically, by unregulated entities; Valuations in balance sheets are verified by auditors, equally unregulated. In effect, we are facing a situation where two of the main pillars on which the regulated system is based are unregulated.

All the ingredients are in place to create the earthquake that is going to threaten the very survival of the modern financial system.

We left the evolution of this debacle at the point where financial institutions were left with the difficult task of assessing the true value of these vast portfolios and the risks associated with them. A particularly daunting task when you think of the magnitude of it all, as it would mean exploring each pool of loans/mortgages backing the securities in question and analysing them, then calculating the relevant risk ratios. The only way remaining was questioning the market. This is not something out of the ordinary and institutions use this method all the time, it is called marking to market. It had been going on for years, for hundreds of billions of dollars, under the watchful supervision of auditors and accounting firms.

### Truth, trust and common sense

This time however, there was a twist: the process was tainted with mistrust, a capital vice in the financial world. Therefore, as we mentioned earlier, a vast number of investors started to interrogate the market to get an appropriate remarking of their book and a reassessment of their risks. By that time, bank books were about full, and the rumour was spreading that default rates were going to increase due to a faltering real estate market and a slowing economy, endangering subprime-based structures and subsequently the credit card based ones. Subprime paper that effectively had been disseminated through various mechanisms, and almost impossible to track. Banks started evaluating losses and numbers started circulating. Very quickly, they became staggering. It became clear that the level of disclosure differed widely, to put it mildly, depending on the institution, and the banks started to drip feed information about their losses in the market. This could be reasonably presented as a reasonable way to proceed in order to avoid panic. Except that (i) it is misleading to all creditors, present ones and those in the future, and (ii) it created strong and persistent rumours: liars were sitting around the poker table! Some of the banks in the system were "delaying disclosure of losses" (!). One could argue that this was not unprecedented, but this time it was different, as the market as a whole had an evaluation of the extent of the total loss; the number was much bigger than the announced losses, therefore fuelling the rumour. Moreover, the market had made "generous" use of leverage, the mechanism used to increase risk exposure with a given amount of capital; this technique had, up to that point, only generated profits but was on the verge of demonstrating again a simple truism: the more leveraged a position, the greater the loss when risk materialises.

At that stage, the worm was in the fruit. Banks are by nature organisations that recycle money by borrowing short-term money to lend long-term money. This is one of their primary functions financial intermediation to keep the wheels of capital markets greased and turning smoothly. Heavily regulated, the system is based on trust; trust that the banks are conservatively run, trust that regulators have put in place safety checks and controls to make sure this is the case, and trust that accounting does reflect the true nature of their assets, liabilities and commitments.

Therefore, when trust disappears, the system clogs up and grinds to a halt. Fearing that they could be exposed to the liars, banks stop participating to the interbank market. This in turn paralyses the process of money recycling and strangles the participants more exposed to refinancing risk, those with no access to central bank refinancing and/or to the retail markets and not wise enough to manage their refinancing conservatively, which is to borrow long against long-term commitments.

## Refinancing and liquidity

The point on the access to central bank refinancing was a key one in the propagation of the crisis. Certain banks have access to refinancing, giving various assets as collateral. Early in the crisis some central banks, like the European Central Banks, relaxed their criteria of what they would accept as assets "eligible" for refinancing, making it easier for these banks to access liquidity. These institutions are in turn responsible for spreading this liquidity in the market by refinancing smaller financial institutions and their clients. In accepting these assets, which value it is more difficult to establish than those usually accepted, the central banks were (i) entrusting the banks with a wise and conservative selection process and (ii) trying to provide much demanded cash to the system. Sadly, stricken by their (educated?) belief that there were still liars around the table and panicked by their own potential cash needs, they did not fulfil this role as much as could have been expected. The average amount of cash deposited by Banks to the ECB is was historically about Euro 500 million overnight; it is now closer to Euro 180 Billion. Cash is the lifeblood of any economy. When it does not circulate easily, the whole body suffers.

The institutions had set a trap for themselves by taking risks out of reasonable proportion, by playing the rules and forgetting the basic law of risk: there is no such thing as a free lunch. These risks were not properly controlled and leverage had created an explosive situation. The loss of trust was to be the spring, and money markets the media to spread the disease. As news gradually trickled out, the names of the liars were slowly revealed. Bear Stearns was the first victim. The issues of trust and availability of cash were such that the US Treasury had to funnel refinancing through JP Morgan and guarantee the buyer against losses to make the deal happen. It was hoped a catastrophe had been averted.

# The disease spreads

However, the next step was inevitable. Banks were carrying these securities but they were not the only ones. As mentioned earlier banks, heavily regulated, have to communicate their financial health and that forced them to acknowledge the issue and deal with it— or suffer from it. However, let's not be mistaken here. Ignoring it or trying to conceal it further would not have been a positive alternative. It would only have made the problem bigger. Issues like this just don't evaporate.

A fact remains— other institutions are potentially in trouble too. Who are they? Well — central banks, insurance companies, reinsurers, pension funds. They have to be the final holders of those vast amounts of securities that somehow have not yet been accounted for. We have seen the first sign of it with AIG. But probably not the last. And, as for pension funds, they cannot be allowed to fail. Lehman Brothers is a tragedy as is any company's bankruptcy and a nightmare for the industry but in itself a manageable event. Insurers and reinsurers cannot be allowed to fail. They represent the long end of the risk spectrum. Those risks that no one else can carry: very long-term financing, long end of the swap markets, infrastructure risk, life insurance and they spread to public life in many ways. Interlinked, the failure of one in times of stress would create a massive systemic chain reaction, one that no one really wants to contemplate.

Strangely enough only one of them has come to light so far. Who are the next liars to be exposed? And nothing from the pension funds... as yet.

So where does that leave us?

# Trying to fix the symptoms

Liquidity crises have happened in the past. In the equity markets, so much that it is the first risk young traders are taught to expect it when joining a trading floor. It happened in the fixed income markets; let us just remember the last ERM crisis: swap spread widened to incredible levels and eventually closed and fixed income futures volatility increased to previously unbelievable levels. Credit crises have happened and flight to quality witnessed, countries have defaulted. Talking about real estate crisis is a cyclical pattern. Banks have collapsed and governments and taxpayers have footed the bill (shall we remember the Credit Lyonnais in France).

What is different today? Trust, cash and the availability of it. Those are, at the end of the day, the fundamental elements of a financial system. The scope is also of an unprecedented magnitude. The numbers are just mind blowing.

It is of primary important to make sure the later is widely available, but also to restore the former. Availability of cash is what the central banks tried to address since last year with different measures. This proved to be insufficient mainly because of the trust element: institutions having access to financing kept the precious resources mainly to themselves, unwilling to lend to potentially defaulting counterparties. The size of the announced estimated losses and the names involved contributed to creating this behaviour. And it is difficult to blame the banks completely for a number of reasons. If anything those that are cash rich, or supposedly so, take this liquidity from retail and commercial depositors and are accountable for it. They have a fiduciary duty to be conservative and protective in their approach to counterparty risk and, tragically late for some of them, they became suddenly aware of it. The availability of liquidity and counterparty risk are intimately entwined. The next step for the authorities as institutions started to collapse was to guarantee assets, or potential losses, in order to protect potential buyers against the quality of the assets they were taking control over. In a situation like this, the real issue is the assets not the liabilities; quite an ironic state of affairs. guaranteeing the assets equates to putting a floor on the risk represented by a counterparty, so it looks like the right thing to do, in such circumstances. Or rather could have been the right thing to do if it had been done earlier, when the process was still under control. Sadly, it was again too late as a reaction to events. Back to our previous point.

The next step is also known: governments intervene, saving institutions from collapse, taking massive stakes in the institutions they rescue, and rightly so. And let's face it; it might not be such a bad deal after all. Governments and taxpayers, might end up very happy in the future. If things turn around, and we certainly all hope they will, within a few years loans will be repaid and governments will end up with very valuable assets that they will sell at a significant profit. They will be remunerated for the services of lender/shareholder of last resort and rightly so. If this does not work— well we will all have other cats to skin. Is it right for governments to do so? Are they "bailing out" banks?

Let us digress a second to cover that nonsense. The financial system is the corner stone of any economy. It is the means to bring resources where they are needed and the way to offer some liquidity to the social structure. If the financial system fails, the whole society suffers. As a comparison, let us contemplate for a second a similar breakdown in the agriculture sector... or in the energy sector... how much money, how many wars...

The system has to be rescued. The consequences otherwise are just beyond imagination.

It is not an issue about who personally benefits from it. It is not about protecting shareholders or anyone but the public interest. It is about providing a vital economical function of recycling resources, the capacity to take it where the need to usefulness ratio is the highest. As said before, if the blood does not flow in the body, the body suffers and ultimately dies. Does blood flow benefit more the brain, the liver or the muscles? Who cares! If it does not flow the body dies.

#### Some common sense comments

However, above everything else, we need to restore trust. TRUST and confidence. Trust in the accounts you analyse when deciding a counterparty's credit worthiness, trust in the analysis of the value of its assets, trust in the real extent of its liabilities; confidence in the fact that market and public authorities are watching over the whole process and make sure it is reliable and under control. Also eventually standing at the ready to intervene and block/correct excesses as and when they happen, as needed. Therefore, we need to identify failures accurately and fix them. Let us try to avoid "scapegoating" and focus on learning from what happened. From what we described above, we can identify a number of issues: excessive risk in the system, gross underestimation of risks, supervisory/control failures, irresponsible behaviours. We can go on forever trying to establish the value of this or that risk calculation method, supervisory mechanism, control but there are some basic truths that have been forgotten:

- It is not reasonable to have the pillars of the supervisory/regulatory system unregulated and answering/controlled by no one. How many more disasters need to happen before audit firms and rating agencies are properly controlled and regulated?
- Any model is imperfect; a model is merely an attempt to represent reality. Reality is always
  more complex than any model can capture. A consequence is that a model should never be
  used in isolation. Decision makers should never hide behind any model. Using models implies
  an understanding of them and especially their flaws and limitations. They complement
  common sense and judgment; they do not replace them.
- Ultimately, business and risk taking are matters of judgment. It must be a guided process, but it is fundamentally a human decision; and so is the nature and amount of risks taken by a financial institution. Should it be quantified, measured, monitored? Of course.
- As a CEO in a financial institution likes to remind his managers, the first responsibility of a CEO
  is to make sure the company survives any crisis and lives to fight another day; and not to bet
  the shop on oversized "riskless" investments.

The bottom line is that if market participants want to play the system, they will. Nothing can durably prevent that from happening. We need to bring some ethics and good old common sense at senior management/board level.