From one crisis to another: a banker’s perspective

Robert Amzallag (CIRANO)
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For discussion...

Once the 2009 financial meltdown was avoided through central banks’ decisive action and governments’ swift bailouts, the general consensus was that the usual recipes that took us back to prosperity and growth after each of the post war recessions should undoubtedly work again. The main tools selected by the authorities were fiscal stimulus, lowering of interest rates combined with monetary easing, politically motivated legislation and high profile chastising to keep the public satisfied that the authorities were extirpating the roots of the problem.

These remedies were applied and, for a while, seemed to work: stock prices recovered, the US job market stabilized, bail out money started to be repaid and economic growth, although sluggish, appeared to be well into positive territory.

However, two years later, another serious financial crisis unexpectedly struck.

There seemed to be no reason for it. Indeed, this had not been the first time we faced a real estate/financial crisis. For example, in 1990, real estate prices went down even more than they have had since 2008. The amounts dedicated to the stimulus packages and monetary easing were unprecedented and imposing pieces of legislation were quickly passed. So how could this have happened?

The answer to this question requires a careful analysis of the nature of the 2008 crisis, the then prevailing economic conditions and the relevance of the measures taken.
The 2008 crisis was different

1.1 The subprime crisis was financial

All economic crises have a financial dimension. They all result in loss of wealth and often involve the demise of financial institutions. But unless they originate in the financial system itself, they cannot be considered as financial crises.

The oil shocks of the 1970s and the burst of the Internet bubble were serious economic setbacks. The losses they triggered were arguably larger than those caused by the subprime crisis but they did not originate in the financial system. As a consequence, the world financial system bent but did not break down. After a while, it recovered its composure and was in a position to facilitate the subsequent recovery.

The subprime crisis was different. It struck at the heart of the financial system. Although it was the result of a process that had been evolving over more than 30 years and that involved many contributing factors, it manifested itself by disrupting the vital and delicate internal structure of mutual support between the core global financial institutions.

As the crisis intensified in late 2008, the viability of these institutions closely linked through interbank lending and a whole spectrum of market transactions became a matter of concern and suspicion began to erode the mutual confidence without which the international financial system cannot operate.

1. See “The financial crisis: A banker’s perspective”
The crisis also weakened the large banks’ profitability and, as a consequence, increased their levels of risk aversion. Nevertheless, as the recovery progressed, these conditions should have disappeared after a couple of years.

This eventuality, however, would have required that the financial health and, most importantly, the profitability of the main participants in financial markets be restored. This was not the case for reasons we shall analyze later.

1.2 The 2008 crisis hit an increasingly unbalanced world economy

The world economy has never been totally balanced. From the US dominance after WW2 to the oil shocks of the 1970’s and the rise of the Japanese economy 10 years later, financial strength and weaknesses have migrated from one region to another. However, this time around, the globalisation of the economy, the free flow of funds and the interdependence of large financial institutions meant that economic weakness in any part of the world had the potential to become a global threat.

1.2.1 The increasingly fragile financial situation of the US

The US national debt as a percentage of the gross domestic product has been constantly rising since it reached its post war low point of 30% in 1980. By 2008, it had reached 68%. This level was at the top of the range in recent years, even though it did not include 60 trillions in unfunded future liabilities (seemingly ignored for the time being by the market in the hope of some future political solution). At this level of current debt, further borrowing was still possible in case of necessity but there was little room for any misguided use of these funds.

The US external debt went from around 6 trillion in 2003 to 13 trillion in 2008, creating a major international financial imbalance.

The bulk of the US external deficit can be traced to two structural factors:
• The lack of a coherent energy policy since the 80’s has translated into a growing external deficit created by oil imports. They have increased from about 5 million barrels a day in 1985 to 14 million barrels in 2008 as domestic production went from 9 million to around 5 million barrels a day over the same period. The trade deficit in dollar terms was exacerbated by the rise in oil prices from 35$ a barrel in 1985 to 140$ a barrel at the onset of the subprime crisis. At that level, the US is sending around 700 billion dollars a year abroad.

• The rise of China as an inescapable manufacturing center. For more than 4 decades, China has maintained business friendly and low cost policies. Consequently, the country has evolved from cheap goods to high tech manufacturing and is now an innovation centre. By 2008, China manufacturing output had caught up with the US. Accordingly, the US trade deficit in goods with China went from 124 billion dollars in 2003 to 268 billion dollars in 2008.

1.2.2 Taking the European dream one step too far

At the onset of the subprime crisis, the European economy (roughly the same size as the US) had largely escaped these problems. Although still heavily dependent on foreign oil, its imports ran at about 2/3 of the US and thanks to a coherent energy policy promoting the rise of nuclear and alternative energy, imports were not growing. The trade balance with China was about half of the US and EU exports to China were rising at a faster pace than imports.

The weakness was elsewhere.

Since 2000, the political decision to create the euro currency imposed an economic straightjacket on 17 of the 27 countries of the European Union that adopted the Euro. In order to protect the credibility of the new currency, tight rules such as a maximum yearly deficit of 3% of GDP were imposed on the participating countries. Also a European central bank was created with a strict mandate to fight inflation based on the German
Bundesbank model. It all seemed to work well during the economic expansion that preceded the subprime crisis to the point where the Euro was seen as a possible replacement of the US dollar as a reserve currency.

By 2009, however, the 3% deficit rule had been transgressed by most countries. The Eurozone had a deficit of 6.3%; France 7.5%. Even Germany was above the ceiling at 3.3% and they all did so without the imposition of penalties of any sort. More importantly, a keen observer would have noticed that from its inception the Euro had bundled up countries with very different economic profiles, industrial development, size and benefits for the civil service, inflationary expectation and work ethics.

As a result, within 8 years of the creation of the Euro, unit labour cost had gone up 50% in Greece, 20% in Italy and Spain while it went down 19% in Germany. The lack of mobility of the European work force due to disparities in languages, traditions and education systems did not allow the Eurozone to even out the differences but, on the contrary, kept them confined within each respective country.

However, in 2008, no one would have listened to such a keen observer, as everyone then focused on the success of the Euro.

1.2.3 The massive growth of financial markets

The growth of financial markets has been phenomenal since the liberalization that started in the 1980s.

As an example, the foreign exchange market grew from a daily volume of 70 billion in the 80s to 1.5 trillion in the 90s and 3.7 trillions dollars in the next decade.

Perhaps more importantly, the derivative market in terms of outstanding contracts went from practically nothing in the 80s to 20 trillion in the mid-90s, reaching 259 trillions in 2005 and now estimated at 1200 trillion dollars in 2010 or 25 times the world’s yearly output.

A careful examination of the lessons from too big to fail, as exemplified by the bank Herstatt in Germany to the Greek sovereign debt crisis, shows
that it is not the size of the failing entities that counts but their capacity to destabilize any of the global financial markets. These markets are the entities that are too big to fail; and understandably so, as no country or even the whole world is able to hold them back if they come crashing down, thereby creating an insurmountable economic crisis.

These markets are supported by a relatively small number of core market-making financial institutions that are highly interlinked through their reciprocal transactions. So in time of acute crisis, they have to be rescued at all costs giving taxpayers the wrong impression that governments are protecting the rich bankers at their expense while, in fact, the authorities are scrambling to avoid a financial collapse and a global economic meltdown.

By 2008, many governments were facing a crushing and ill appreciated obligation to protect their national banking systems. The ratio of national banks’ debt to annual tax revenues had reached astonishing levels for some countries: 25 times for Ireland and more than 10 times for France, Spain, Italy or Switzerland.

This set of unbalances meant that the steering the banking system out of the subprime crisis required delicate manoeuvring and international cooperation, and left very little room for error. Unfortunately, governments did not grasp these new constraints and decided quasi unilaterally to adopt the same ponderous measures that were used in previous crisis, approaches that ended having the opposite impact.

**These markets are supported by a relatively small number of core market-making financial institutions that are highly interlinked through their reciprocal transactions.**
A careful analysis of the 2008 crisis\(^1\) led us to envisage three possible subsequent scenarios.

The first scenario comprised a quick and painless rebound. Based on the huge amount of liquidity injected in the economy, a rapid recovery in equities shortly followed by other markets (with the exception of the real estate market unable to recover quickly after being so seriously discredited among risk departments of banks) takes place. As confidence returns, governments recoup some of the bailout money and pressure on politicians eases. All participants—banks, hedge funds but also central banks, lawyers, accountants, rating agencies and regulators—are eager to revert to previous conditions before further structural damage undermines the usual way of conducting their affairs. As no significant corrective measures were taken, this scenario leads to new bubbles and subsequent crisis.

The second scenario presented the possibility of a deepening recession and serious market weakness as a result of misguided decisions. As a consequence, governments efforts are unsuccessful and they get further involved in supporting, regulating and even managing the financial system to the point where they put themselves at risk. The resulting dirigiste intervention into the financial system creates inefficiencies, stifles financial and industrial innovation, entrepreneurship. Ultimately, economy continues its downward spiral.
The third scenario advanced a balanced approach whereby a reasonable short term recovery fuelled by injection of liquidity and well devised stimulus plans creates enough breathing space for the main actors to cooperate and implement long term measures that address the real causes of the crisis. In this course of events, a long lasting recovery is possible provided:

- Governments adopt a calm attitude to reassure the public and avoid interfering in areas outside their competence. Equally important is their capacity to resist the temptation to use borrowed funds for political purposes. Rather they apply their limited financial firepower to critical bailouts and support of the economy in ways that stimulate future growth.

- Central banks improve their capacity to identify financial bubbles and act early to restrain them.

- Regulators revise the failed risk models; they also promote reliance on traditional approaches used in banks’ risk departments, extend their reach to establish adequate ethical rules for the key service providers such as rating agencies, auditing firms and legal firms that played a pivotal role in the crisis. They also avoid a heavy-handed approach that would dampen the risk and lending appetite of financial institutions.

- Financial institutions take urgent steps to rectify the risk management shortcomings highlighted by the crisis. But most importantly they remain part of the decision process adopted to tackle the crisis; in this way, their financial health (both the quality of their balance sheet and P&L) is preserved.

Unfortunately, major missteps on both sides of the Atlantic did not allow the third scenario to play out.
2.1 First misstep: the US stimulus plan

Any effective long-term solution to the subprime crisis required a stimulus plan to avoid an economic depression, restore confidence and provide the necessary time to put in place well conceived remedial measures.

Whether it was a supply side or Keynesian in nature did not matter but it had to be large enough to match the scale of the crisis and provide the strongest multiplier effect. Indeed, the high level of US public debt after 700 billion dollars were spent in bailouts and the likelihood of declining tax revenues due to the forthcoming recession meant that such package could not be replicated in the future.

The US 2009 stimulus plan provided little multiplier effect. Indeed, a breakdown of the 789 billion dollars plan showed that:

- 9.2% of the total package was dedicated to items without any impact on economic activity.
- 78.5% was committed to the short-term preservation of jobs, support of spending power of the unemployed, large construction and road maintenance projects. These programs were capable of sustaining the economy while funds were still available but could hardly seed new competitive industries.
- Only 12.3% was dedicated toward industries that improved US competitiveness or to research projects having the potential to promote innovative industries.

The US plan could have worked if, as in past crises, a recovery could quickly take place. But this is not what happened. The bulk of funds went to construction projects with no impact on future exports or competitiveness and, while it did sustain consumption, it did further aggravate the trade imbalance.

By contrast, funds directed to industries with real multiplier effects and capable of creating permanent jobs in areas of US business strength such as health, aerospace, finance etc were narrowly targeted and
comparatively small. Indeed, general measures to help innovation such as better funding of NASA, DARPA or simply to lowering the capital gain tax in order to promote venture capital would have been preferable to selecting the recipient of funds down to the level of specific companies (in some cases with disastrous outcomes) as some government agencies did. As an example of this lack of foresight, NASA, which historically returned 8 dollars of economic benefit to the US economy for every dollar spent, did not benefit from the stimulus plan but instead had its budget reduced in 2011.

The obvious conclusion is that the stimulus plan was misguided and although it could sustain the economy as long as funds lasted, it would not reverse the downturn.

By comparison, the European stimulus plan was smaller and better targeted. It amounted to 200 billion euros and rested on a mix of tax cuts, investment incentives and unemployment support.

2.2 Second misstep: the enactment of overbearing financial regulations in the US and Europe

Adjusting the financial regulatory system had to be part of any long-term solution of the subprime situation. However, the unique nature of the crisis demanded a careful approach based on a consensus of the main players\(^2\). Governments who had to conduct highly unpopular bailouts, decided nonetheless to sidestep meaningful input from financial institutions and enact heavy-handed, wide-ranging legislation aimed mainly at restraining large banks and the investment banks perceived to be the main culprits. They also seized the occasion to regain control of a

\^[2\] See “The Wall Street reform and consumer protection act: A long lasting solution to the financial crisis or an obstacle to the recovery”


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sprawling global financial industry that had become a threat to their authority.

2.2.1 The US response: the Dodd-Frank Wall Street reform and consumer protection act

This imposing piece of legislation rushed through Congress and signed into law in July 2010 is a political response to the crisis. As it name indicates, it is aimed at the perceived culprit: Wall Street. Although it leaves some flexibility in its application, it does create a constraining framework for the US financial industry.

Our detailed analysis of the bill\(^3\) showed that some measures such as better oversight of rating agencies (steering them toward a much more conservative attitude, a move some governments came to regret when they themselves were downgraded), creating a financial stability oversight council, and creating transparency and accountability for derivatives went in the right direction; while others, such as slowing down the process of emergency intervention in times of crisis by involving congress were downright dangerous.

However, it is the consequences of the new constraints imposed on the banking system that are more relevant to the present crisis. New measures such as:

- Transferring most over the counter derivatives into open exchanges
- Credit risk retention for securitized credits
- Consumer protection
- Prohibition of proprietary trading (Volcker rule)
- Putting a lid on the banks size (Volcker rule)

were all clearly detrimental to banks’ profitability.

\(^3\) See “The financial crisis: One year later”
Additionally, within the Dodd-Frank bill, new rules were too vague to even allow a fair assessment of their negative impact on banks’ future results and created further uncertainty. As a consequence banks’ share prices, already depressed by the crisis, did not recover along with the market.

As well, new rules implemented under the Basel III required banks to increase progressively their capital in order to improve their ability to withstand future crisis. It was agreed internationally in 2010 at a time when banks share prices were depressed and, as a result, it has become a very expensive proposition to raise new capital.

There is no doubt that raising the level of banks capital can be valuable in turbulent times. However, it only affords partial protection to the banking system. By necessity, banks are highly geared, since otherwise they could not play their role in creating and circulating money. Even the most recent rules allow a 10 times gearing ratio. Clearly, no bank geared at such level could withstand a run on its deposits whatever its level of capital. Similarly, a 10% write off of its loan portfolio could wipe out its capital.

At the same time, the 2008 crisis has shown that banks’ ability to remain profitable and provide clear guidance of future results, is equally, if not more important to the interbank market and depositors. Also, it is good results rather than an arbitrary level of capital that give banks more confidence to lend.

Faced with a combination of increased credit risks in a weak economy, unfavourable profit outlook and the steep cost of raising new capital, banks did not have any other choice than curtail their credit portfolio and drastically reduce new lending.

Indeed, between 2008 and 2010, commercial bank lending was reduced by 25% in the US and the M1 money multiplier was reduced almost by half.

A main engine of recovery had stalled!
2.2.2 European measures

The EU financial reform legislation pointed in the same direction as the Dodd Frank bill and, to a large extent, prompted European banks to also reduce lending. There were, however, some important differences.

Europeans were more focused on protecting their banks. By increasing supervision, requesting an accelerated implementation of Basel III capital rules and also by moderating the derivatives trading and swaps push-out rules, they better protected bank profitability and outlook.

Eurozone banks operating under stricter lending rules were less affected by the subprime crisis than their UK counterparts. Although their share price plunged in 2008 in step with the market, there was no headline bankruptcy and they rebounded faster than their American counterparts. So, for a while at least, the Eurozone financial institutions seemed somewhat insulated from the crisis. Their recent difficulties are of a different nature.

Blinded by faith in their monetary union and oblivious of its structural problems, Eurozone regulators allowed their banks to place their liquidities in bonds of any participating country without discrimination. Moreover, some banks acquired large networks in southern Europe and, as a consequence, were required to hold bonds of their host countries for liquidity purposes.

As the crisis revealed starkly the risk differential between countries and as markets priced them accordingly, Eurozone banks were tempted to make additional profits through further purchases of risky bonds as allowed by the regulators.

When the level price differential in bonds and the rating downgrades exposed the extent of the problems, the authorities ordered a stress test for their banks but in doing so asked the regulator to specifically exclude the Eurozone sovereign risk from their computation. This unacceptable
interference of the political establishment with the regulatory system greatly alarmed the markets.

2.3 Third misstep: central banks lose sight of their role

Central banks, through their swift and coordinated action in 2008 prevented a total economic meltdown. Having learned from the great depression, they followed up with a series of measures meant to avoid the mistakes made 80 years before; these were intended to be temporary. This textbook response, already implemented in previous slowdowns with good success, was supposed to avoid a deep economic contraction, allow the banking system to bounce back, and ignite a recovery.

As the economic slowdown lingered and unemployment remained high, central banks, in frustration, persisted and amplified their original plan. In the process, they made two fundamental mistakes.

2.3.1 Central banks persist in their very low interest rates policy

Interest rates were lowered considerably after the Internet bubble burst, as a standard measure to soften the consequences of the stock market debacle. As the recovery seemed progressive and inflation under control (in part because of cheap Far East imports but also due to the exclusion of assets and real estate prices from the inflation index formula), the Fed mistakenly maintained them at a low level. This decision led to the real-estate bubble and sub prime situation.

In view of the severity of the 2008 crisis, the Fed and the ECB took the unprecedented decision to drop interest rates to practically 0% in an attempt to revive the economy. However, as time went by, the expected improvement in economic activity did not transpire. In theory, a low interest rate policy supports economic recovery by:

- Lowering the cost of loans to private and corporate borrowers;
- Allowing banks to borrow cheaply and absorb past losses through improved spreads between borrowing and lending.
In this new environment, bank lending had collapsed and, consequently, the beneficial effect of the 0% interest rate policy had been negated. The adverse effects of this policy persisted: it penalized savers and retirees with the effect of further depressing consumption. It also created on both sides of the Atlantic unsustainable liability gaps for private and public pension funds whose projections were based on much higher returns. Finally it reduced the cost of raising sovereign debt, encouraging further government spending through borrowing. In fact, for many countries, debt has now reached such levels that it is becoming politically difficult to envisage any meaningful rise of interest rates and debt servicing costs.

Nevertheless, central banks have decided to maintain interest rates at these historically low levels even going as far to announcing as in the US that they will be held there for the next two years.

2.3.2 Central banks depart from their mandate

The Federal Reserve launched its first round of monetary easing (QE1) to the tune of 1.5 trillion in 2008. Adding liquidity aggressively has been used in earlier crises, but this time around the Fed also decided to book extraordinary risks on its balance sheet. Indeed, 1.25 trillion was allocated to the purchase of mortgage-backed securities in the hope of unleashing a huge wave of mortgage refinancing followed by renewed consumer spending.

By 2010, it was clear that this approach had failed due in large part to the paralysis of the banking system. The real estate market had not recovered and consumers were more interested in paying back debt than borrowing. Nonetheless, the Fed opted for a second round (QE2) of 900 billions dollars dedicated to the purchase of treasury bills.

The new round did not work any better but did increase the Fed’s balance sheet to 2.8 trillion dollars or more than 3 times its size in 2008. It also helped the US treasury issue the necessary amounts of bonds to finance its dangerously high deficit and contributed to the solvency of the government.
In this sense, the Fed became another political tool. In fact, when the US long term debt got downgraded, it did not take long for the Fed to declare that they would be buying long term T bonds and selling short term T bills. Whether this move was intended to help out the government or boost the economy as officially announced is unclear; it definitely increased the Fed’s balance sheet risk profile.

In Europe, the ECB, true to its primary mandate of maintaining price stability, kept its finances under better control at the beginning of the sub prime crisis. However, as the Eurozone crisis – an existential risk for the ECB – gained momentum, it started providing liquidity much more aggressively doubling its balance sheet to 2.2 trillion euros (3.1 trillion USD) in 2011.

In the process, the ECB risk profile deteriorated quickly. Only 4 days after confirming on May 6 2010 its commitment not to buy sovereign debt, it announced an unlimited program of sovereign and corporate debt purchase. Since then, the ECB has been dangerously climbing the risk curve.

As it stood at the end of 2010, its assets included 360 billion euros (500 billion USD) of “non marketable securities” and 260 billion euros (360 billions USD) of loans to Ireland, Portugal and Spain.

Despite the obvious weakness of its balance sheet - now posting a 23 times gearing ratio – it extended in October 2011 an unlimited amount of credits to the now troubled Eurozone banks.

This policy, it must be said, is highly unusual for a responsible central bank.
The 2011 financial crisis and its possible outcomes

3.1 From one financial crisis to another

It is now easier to see how the 2011 financial crisis was brought on.

At first, the classic response seemed to work according to plan. In March 2009, after Goldman Sachs announced relatively good results, stock markets started to rally worldwide. As an advanced indicator, this was perceived as a sign that the economy would follow suit 6 to 9 months later. Indeed, propped by the stimulus plan and QE1, the US economy was emerging out of recession and even if the pace was slow, it was surely a matter of time before it reached full recovery mode. The Dodd-Frank bill was then signed and the Europeans were advancing their legislation at their own pace.

Everything seemed under control.

The conclusion of our analysis of the sub prime crisis one year later was completely different.

As soon as the Dodd Frank bill became law and details of its European equivalent were known, it became clear that scenario 3 of our earlier analysis of the 2008 crisis—the only one allowing a stable long-term solution—was no longer possible. As a consequence, what appeared as a progressive and orderly return to economic normality was in fact the result of a tug of war between, on the one hand, economic expansion fuelled by
the 0% interest rate policy and the huge amount of liquidity forced into markets by central banks as well as various stimulus plans and, on the other side, recessionary forces relating to concerns over soaring government indebtedness, central bank risky-loan policy and, most importantly, a serious contraction of bank lending.

The record levels of markets volatility during that period is a manifestation of this unstable balance. It became clear that as soon as one side weakened, the reaction in the opposite direction would be violent and disorderly.

And this is what happened in June 2011.

As the stimulus plan in the US ended and the Fed decided prudently to avoid a QE3, expansionary forces ran out of fuel, fear took over and markets skidded. And as the prospects of an American lead recovery faded, markets turned their attention towards the sovereign debt problems of the Eurozone.

The downgrades of the weak Eurozone countries by rating agencies followed a steep rise in bond yields. Blinded by the Euro dogma, Eurozone leaders, in a state of disbelief and convinced that the measures put in place would soon work, hesitated, and then tried to hide the true extent of the problem. In the end, facts prevailed and the European authorities requested creditors to accept a voluntary 50% haircut on their Greek bonds. This precedent demonstrated that the Eurozone was prepared to drop its support to its weaker members. Even more troubling, the measure was devised in a way to avoid a default event that would have triggered CDS payments. Private lenders were left facing losses on presumed covered positions and the Eurozone sovereign debt CDS market was effectively crippled. In these circumstances, any private sector reasonably priced funding in the Eurozone became problematic. The stronger Eurozone countries, the ECB and the IMF had to step in at their own risk, while the banks of the region were considerably weakened.

And so a new crisis has now developed, and we are again at risk of another recession on both sides of the Atlantic. But in the current context:

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Blinded by the Euro dogma, Eurozone leaders, in a state of disbelief and convinced that the measures put in place would soon work, hesitated, and then tried to hide the true extent of the problem.

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• The US and the EU have squandered their reserves. As their debt reach unacceptable levels and they remain under watch by rating agencies and markets, their capacity to conduct a credible expansionary policy is seriously restrained;

• Faced with economic uncertainty, large corporations and banks are holding on to their cash.

• Central banks, the last and most respected containment to speculation, (not the least because of their unlimited power to print money) have increased their balance sheets and risk profiles to the point where they themselves are at risk of losing credibility and on the verge of inducing inflation.

Under these circumstances, what does the future hold?

3.2. The two possible outcomes

In the past 3 years, the US and the EU have tried traditional economic recipes to extricate themselves from the crisis. They have failed so far. The hope that China could pull them out of trouble is also misplaced. The Chinese economy is only a fifth of the US and EU combined. The Italian debt would consume half of its reserves. It simply does not have, at this stage, the economic power to do so and could run the great risk of being dragged into the crisis.

Markets vigilance has imposed a new discipline and triggered a wave of often-disorderly budgetary contractions. By themselves, these contractions can only intensify the recession and increase budgetary deficits through lower tax intakes. Massive social costs (and, in the case of the EU, political costs) will have to be faced. Financial solutions have run their course. Growth strategies rooted in the real economy are needed, and this is why authorities are now at a cross road that points in only two main directions.

3.2.1 The recovery scenario

Such a scenario requires governments in the US and Europe to address their fundamental unbalances that impede a sustained recovery.
But they have to travel a narrow road that starts in the US. Indeed, the EU does not seem to have political institutions able to react with sufficient speed and determination to extricate itself from the current economic and social turmoil. The US has to lead the way and, fortunately, has a trump card it could put into play quickly: its huge energy reserves. The recovery scenario could then play out as follows:

In the US, a comprehensive energy policy including a vast oil and gas drilling program and some rise in fuel taxes is announced. Markets react quickly and the price of oil drops, giving some relief to stretched consumer finances. When the program gets underway, tax revenues increase and the budget deficit outlook improves. As markets take notice and rise, corporations feel more confident to put their cash at work and resume hiring.

With more means at its disposal and less political pressure, the government decides to tone down its criticism of banks and to repeal large parts of the Dodd Frank bill in order to restore the profitability prospects of US banks.

As their share values rise, banks decide to strengthen their balance sheets by issuing shares at a now more acceptable price. Confidence in the financial system returns, unleashing a wave of new lending.

The situation keeps improving and lawmakers can focus again on long-term competitiveness. A comprehensive program aimed at restoring technological advance in areas such as healthcare, aerospace or finance and enhance exports is put in place. Innovation linked capital gains tax is reduced and meaningful funds are directed toward government agencies that create value in new technologies such as NASA or DARPA.

Meanwhile, in Europe, the EU realizes that imposing drastic consolidation demands on the weakest countries with total disregard to the human cost – indeed a surprising approach for a continent that prides itself for its social concerns - deepens the continent’s recession and creates serious social unrest. Markets react to the precedent created by the imposed haircuts on Greek bonds. They understand that, if it is in its interest, the EU
not only can and will let down creditors of their member states, but will
deny them CDS protection as well by avoiding default events through
clever legal schemes. Accordingly, investors do not participate in bond
issues from weak countries. As Italy and Spain come under attack, the ESFS
loses all credibility for lack of means and the situation becomes untenable.

The EU ultimately takes the logical decision to disentangle the strong and
weak economies from the Euro straightjacket. This is planned carefully and
done in an orderly manner. The ECB gets a mandate to support the new
currencies until they progressively float.

The process is painful and involves some degree of sovereign default. But
as the countries leaving the Euro regain competitiveness and reduce their
unemployment on the basis of their weaker currency, confidence returns
to the old continent and growth resumes. Central banks revert to their
natural mandate. They can now mop up liquidity and bring their balance
sheets under control. As the recovery gets under way, they can raise
interest rates and control inflation.

Clearly this scenario is not easy to achieve and holds some serious risks but
it remains vastly better than the alternative.

3.2.2 The downward spiral

Governments, by lack of political strength, decide to hold on to their
current policies in the hope that, somehow, prosperity will return, as it did
after recessions.

As new financial sector regulations are enforced, banks’ profitability and
share prices continue to decline. The cost of regulatory capital becomes so
high that their managements decide to further reduce lending rather than
raise capital. Even when credits are extended, the interest rates charged
become prohibitively expensive after taking into account the cost of
additional capital and the potential provisions for bad debts in a
recessionary climate. As a consequence lending dries up, prolonging the
recession and frustrating politicians.
Markets and rating agencies keep a close watch on sovereign debt levels further reducing governments’ borrowing capacity. New stimulus programs are now out of the question and instead very conservative, and therefore recessionary fiscal policies, are widely adopted. Investors stop lending to weaker countries and several Eurozone members default.

Politicians realize that their last solution to induce growth is to coerce their central banks into more vigorous intervention. Central banks are asked to buy more sovereign bonds or even bypass the banking system by lending directly to companies - as the UK is now considering - thus raising considerably their risk profile. More dangerously, they are prodded into adding unreasonable amounts of liquidity in the market, creating inflation, market bubbles and undermining their currency. Eventually, the confidence in central banks is lost.

Faced with a lingering recession, a devalued currency, an expensive borrowing cost and rising inflation, the temptation is high for governments to resort to a dirigiste approach. Through nationalizations or regulations, they compel banks to lend creating more distrust in the interbank market. Rating agencies lose their independence; regulators are ordered to ignore some risks (as already has been the case in the EU). As governments take control of their domestic markets, global finance gets fragmented followed by diminished international trade and protectionism rises.

The tug of war between inflationary and recessionary measures continues to generate markets volatility. The economic mood will shift from depressive to hopeful and confident but the general trend points toward recession. As more money is printed, prices of assets and commodities rise followed by consumer goods. Headline inflation climbs.

In the end, this scenario points to an inflationary global recession and the destruction of the economic progress achieved in the last 30 years, not because the original model was flawed but for lack of understanding of the real causes of the financial crisis by governments.
Financial markets have now reached such size that keeping them in balance has become an absolute priority as by falling, they could crush the world global economy.

Overlooking this important fact and confident that they understood well the workings of these markets, governments, central banks, market makers and operators tried to manipulate the financial system to their own advantage. This resulted in bubbles and crisis of growing magnitude in various economic areas and culminated in the 2008 crisis, which hit at the heart of finance.

Governments did not appreciate properly the magnitude and complexity of the situation and the forces at play. Instead of bringing together all the players to try and find an unbiased long-term solution to the crisis, they decided to resolve the crisis practically on their own by applying recipes that worked in the past but were not adapted to the new situation. Their attempt has been, so far, unsuccessful.

As one would expect, none of the two extreme scenarios described above will play out as such. It is possible that the world economy tacks in one direction and then the other creating market highs and lows of increasing magnitude. Some economic region could adopt the right policies while another keeps on applying failed recipes thus generating geographical tensions and large currency movements. \textit{Black swan} occurrences could seriously disturb how the scenarios play out.

However, as events unfold and decisions are taken, it might be possible to identify which of the outcomes described above becomes more likely and map the general direction of the future economic path.
At this stage, it is too early to assess what scenario will prevail but the almost inexistent debate over energy policy in the US, talks of direct support of corporate loans by the Bank of England and, in the Eurozone, attempts to manipulate the CDS market or political intervention in member countries who resist the official rescue plan, do not suggest that a real understanding of the situation by the authorities is imminent nor that there is yet a will to change their approach.
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