



The monetary origins of the financial and economic crisis

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Introduction

The global economic situation suddenly worsened in the fall of 2008 and output expansion was negative almost everywhere for 2009: 3.8% on average for the GDP decrease of developed countries. Although there has been a moderate recovery since the summer of 2009, for many countries, this economic and financial crisis has been the worst and longest since the 1930s.

Economists have been all the more perplexed in that nothing foretold of such events, as the intensity of fluctuations had been decreasing since 1985. Moreover, this was considered to be due to better management of economic policies, notably monetary policies.

Along the same lines, fluctuation analysis has shown that most of the financial crises and recessions of the past were triggered and worsened by inadequate monetary policies. Thus, after having examined the sudden speculative rises and crises since the 18th century, Charles Kindleberger (2005) noted that monetary expansion played a key role in each of the bubbles studied: "Money and credit growth have allowed the bubbles to accelerate and in many cases have been the original cause of such events."

Also, the analysis of American economic fluctuations since the Second World War has highlighted the role that monetary policies play in triggering recessions, the worst of which was during the anti-inflationist policies put in place in the early 1980s by Paul Volker.

The precedent of the 1930s

Even if an irrelevant parallel is rejected, as the intensity of the current recession is around one-fourth that of the depression in the 30s in countries that were the most effected, from a monetary point of view, it could be useful to go back over the main lessons learned during the Great Depression.

Among its remote causes, Friedrich Hayek and the Austrian authors point out that the monetary policy and credit conditions had distorted market signs leading to poor or excessive investments. Their inevitable correction was the cause of the Great Depression. It should be noted that then, and now, the inflation index of consumer prices could not indicate the progressive increase of economic and financial risks linked to the meltdown to the players or monetary managers.

Christina Romer (2009), the current Chair of the Council of Economic Advisers in the Obama administration, underlined the major role played by the monetary policy in the Great Depression of 1929 in the United States. A misguided practice, initiated by a bewildered Federal Reserve, led to a decrease of the monetary mass and deflation between 1929 and 1933. In France, a persistent attachment to the gold standard blocked growth of monetary mass and credits, thus provoking a sustainable slowdown in the accumulation of capital. Conversely, Great Britain extricated itself by renouncing convertibility as early as 1931, therefore having to undergo only a slight and very brief decline in its production.

On the other side of the Great Depression, a similar efficiency can also be noted. After 1933, and for three years, the Federal Reserve of the United States committed to intensive growth of the monetary mass (+17% per year) which helped push aside the deflationary tendencies of the previous years (prices had lowered 25% between 1929 and 1933) and triggered immense demand and production expansion. The first effects were noticeable for operations in capital goods, in the automobile industry for example, which benefited from the drop of anticipated real rates. On the other hand, the monetary policy, which had become tighter after 1936 when faced with fears of unjustified inflation, provoked the relapse of 1937 and 1938.

As for the British, their policy of "cheap" money stimulated the housing industry as early as 1931. Lastly, there was no recovery in France until after 1936 when government deficits were monetized and prices started going back up.

The monetary policy was thus implicated, first of all through its responsibility in the emergence and the seriousness of the Great Depression, secondly through its acknowledged capacity to soften the effects, and finally, through the breaking out of it completely. The lessons which the monetary policy makers learned, including those which should be made when the nominal interest rates are close to zero, helped them to improve their results during the current crisis on a long-term basis. Stephen Cecchetti (1997) already indicated that the central banks had learned two main lessons from the Great Depression: first, deflation

absolutely must be avoided and secondly, they have to play their role of lenders with no qualms as a last resort. He emphasized to what point these lessons bore their fruit, on the one hand by eradicating the idea of having a zero inflation objective, too close to an area where prices drop and on the other hand, by pointing out through a few significant episodes, notably the Stock Market crash of 1987 and the "Savings and Loans" crisis, an unwavering determination to procure liquid assets to the failing financial actors. In the contemporary context, these well-learned lessons are indeed the basis of efficient reactions noted since the autumn of 2008, however they can also explain why the central banks, who have a strong capacity to manage a crisis once underway, show a certain amount of negligence prior to the crisis, notably in 2002 and 2005. Moreover, it is through what we call the "Greenspan Doctrine" that this type of excessive confidence played a part in the outbreak of the crisis.

In conclusion, the renewal of a crisis situation in 2007-2008 undoubtedly showed flagging of central bank vigilance, which was rather similar to what had taken place in the years prior to the Great Depression, yet he does not question all of the progress that has been made since the 1930s, from which the current global economy has benefited.

To come back to our times, after the outbreak of the financial crisis and after the recession that followed, it is now time to renew the previous sequence of thought through two successive parts.

The monetary policy played a significant role in the development of the events through its responsibility in the outbreak of the financial crisis. A monetary policy which was too accommodating most probably helped create a speculative bubble in the housing sector; this is the topic of the first part.

In the second part, the consequences of the restrictive business policies since 2005 will be assessed. They have undoubtedly contributed to the outbreak and the sinking of the recession into a context of a global crisis.

(1) One of the causes of the financial crisis

The monetary policy, especially that of the United States, can be criticized for having lowered interest rates excessively over a long period of time, thus favoring the creation of a housing bubble and weakening its own financial system, as well as those of the other countries in the world. A similar criticism can be made on the concomitant creation of a "climate" favorable to the emergence of the speculative bubble and to the development of risky behavior from the financial players. One of the recognized results of the monetary policy is its impact on players'

anticipation and behavior. The "Greenspan Doctrine" [Alan Greenspan (2002) first, but also Ben Bernanke (2002)] states that the creation of a speculative bubble should not be opposed, but that the focus should be on mitigating the fallout when they burst, which probably encouraged excessive risk taking and the feeling of impunity, according to the well-known mechanism of "moral hazard".

The rise of risks: an excessively accommodative policy between 2002 and 2005

William Niskanen (2008) indicates that the financial crises (stock market crash of 1987, Asian and Russian crises in 1997 and 1999 respectively, and finally the events of 2001) have led the Federal Reserve to decide to lower rates so as to supply global demand; he observes that these successive reactions systematically exceed their goal, thus leading to the effect of excessive expansion; this overreaction then obliges the central bank to put restrictive policies in place, thus leading to the next recession. This scenario can also be applied to the years after 2001!

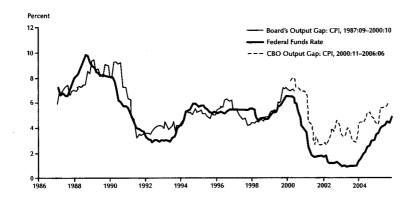
To measure the extent of the accommodation of the monetary policy in place, a comparison will be used between the effective intervention rates and those from the calculation of the standard Taylor rule. This comparison is justified by the idea that the latter represent the type of efficient and wise policy that would lead to the "Great Moderation" from 1985 to 2000. Graph I, due to William Poole (2007), shows the gap between the rates; the Federal Reserve intervention rate was very low after 2001, which can be justified by the threat of the crisis; it is then maintained at this level for too long and with no legitimate reason. In fact, the criticism against the easy policy of the Federal Reserve is mostly for the years 2002, 2003, and 2004. More generally, one may call into question its refusal to take the evolution of active prices into account to set forth a policy, which was a constant refusal confirmed by Ben Bernanke until recent years.

John Taylor (2009) continues this analysis by trying to determine what the situation of the American housing market would have been if the interest rate of the Central Bank had followed his rule. He asserts that the high speculative increase that took place in this market would probably not have happened with a tighter monetary policy after 2002.

Moreover, the consequence of the decrease in interest rates prompted financial institutions to look for more lucrative investments by taking more risks, provoking a flight forward towards doubtful and unclear credits. Their accumulation triggered the financial crisis. Indeed, Roger Altman (2009) indicates that the amount of mortgage credits increased

six fold in 2005 and 2006. These doubtful credits were also granted somewhat everywhere.

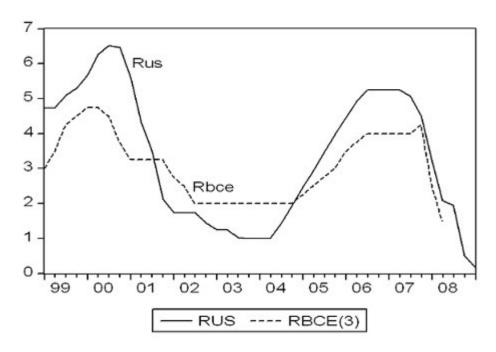
Graph I The Greenspan Years: Federal rate and Taylor rate



Caption Bold line: Federal rate; Dotted line: Taylor rate calculated by the simple rule

The American monetary policy also has a leading role in world rates as some countries have a currency for which the dollar amount is set; they, therefore, set their monetary policy according to the U.S. monetary policy. For other reasons, the European Central Bank and other central banks in the world also implicitly follow the American policy.

Graph II European and American intervention rates (1999-2008)

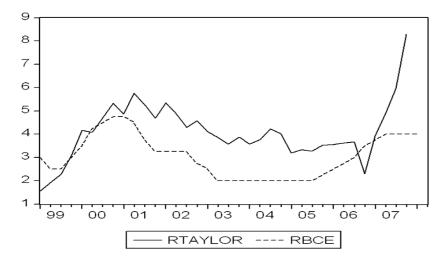


Caption R_{us} : American rate (The Federal Reserve); R_{bce} : European rate (European Central Bank)

Graph II illustrates this dependency by showing the respective situations of the European and U.S. intervention rates from 1999-2008. The conformity of the lines seems significant and the cross-correlation calculation shows that the ECB rates "follow" the American rates with an interval of one to three quarters.

Was the European monetary policy too accommodative during the time period in question? The question does not hold the same importance as it does for the United States as the financial crisis did not start in Europe and no one considers that the European Central Bank is significantly responsible for the financial cataclysm of 2007-2008. However, a comparison with the Taylor rates could be made. In Graph III, the intervention rate of the European Central Bank is lower than the one given by the Taylor rule, for the prevailing conditions over the entire Euro Zone. The difference is greatly negative over a long period of time, from 2001 to 2006.

Graph III ECB rates 1999-2008 and Taylor rates (ECB numbers and the author's calculations)



Such a situation certainly derives from that of the United States at the same time period; to verify this point, an attempt is made here to explain these European quarterly differences between the rates (R_{BCE}) and the Taylor values by using the Federal Reserve rate (R_{us}) as an explicative variable.

"Taylor Differences"
$$_{BCE} = -2.18 + 0.30 R_{us}$$
 $R^2 = 0.434$ $n = 40$

Consequently, the American monetary policy did have an effect in the sense given by the theory and could, therefore, explain the weak rates between 2001 and 2005. Exchange considerations could also be used to justify these differences. To be more moderate, it is not certain that the Taylor rule is as good a monetary policy guide outside the United States, which leaves a doubt to the excessively accommodative character of EBC policy for the Euro Zone. Furthermore, the housing speculation was never as significant in the Euro Zone as in the United States.

However, one of the reasons that the European monetary policy can be considered as responsible for the housing and financial crisis is the laxity it has shown, from necessity, for some countries. Indeed, the Euro Zone is a rather a sundry whole and the different situations are quite contrasted, from inflation risks to production or employment perspectives. The national deviations with regard to the Taylor rule are irregular as the inflation and "production gap" are different for each country.

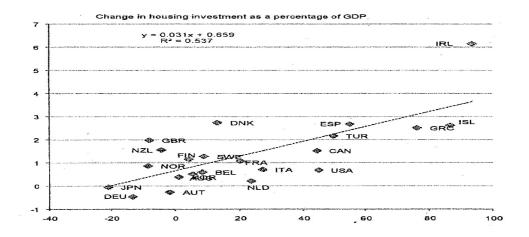
Ireland, Spain, Greece, and the Netherlands have undergone an aggravated housing bubble because the monetary policy that best suited them, calculated by the national Taylor rule, should have been more rigorous than the single policy put in place by the European Central Bank. These are some of the countries which have been affected the most by the economic and financial crisis.

Rudiger Ahrend (2008) tried to generalize this reasoning for all of the OECD member countries. He shows that the accumulated quarterly differences of the effective rates with regards to the national rates simulated by Taylor are correlated to mortgage rates, to building investments and to housing prices, thus increasing the intensity of housing speculation and financial unsteadiness.

Graph IV gives the different cases of each of the OECD member countries to which this reasoning can be applied for the 2002-2006 period. It shows the impact of the easy monetary policies (high accumulated quarterly differences) on the value of housing investment.

The countries on the right of the graph are those for which the monetary policy has proven the most accommodative over long periods of times and due to this, they are also the ones that have undergone the worst housing crisis with the worst threats on their banking system and later on public finances.

Graph IV Housing investments and "Taylor differences" 2001-2006 (Source Ahrend)



Caption: Abscissa: Accumulated quarterly "Taylor differences" between 2001 and end of 2006; Ordinate: housing investment progression for the same period

Furthermore, the influence of the monetary policy combines with that of financial innovations and deregulation to accentuate the associated phenomena and risks. Thus, in the British case, the financial innovations seem to have been more decisive than the monetary policy in the progressive creation of the housing bubble. This does not a priori put the action of the Bank of England in the clear as it could also be feared that its policy of targeting inflation incites negligence of elements such as the increase of financial or housing dangers. Nonetheless, Daria Finocchiaro and Virginia Queijo Von Heideken (2007) have shown that the Bank of England took housing prices into account quickly enough in its reaction. Moreover, its rates are high enough during the crucial period (between 4 and 5%, between 2002 and 2006).

Discussion

The argument presented here, therefore, gives the responsibility of the financial crisis largely to the monetary policy, all the while conceding that there were other factors. Its adversaries, among the first of which are quite naturally the heads of the central banks in question, assert that the monetary policy is but weakly implicated. Thus, Ben Bernanke (2010) endeavors to minimize its impact through a series of four theoretical and empirical propositions.

He insists first of all on the fact that the "Taylor rule" used as a reference for a healthy monetary policy should be of a prospective nature, taking into account the normal transmission delays. Inflation and the "production gap" should be apprehended as forecasts (for a year for

example) so as to calculate the appropriate intervention rate of the reference. In this case, the Taylor differences found between 2002 and 2006, all the while negative, are the weakest, indicating a more accommodative policy than what it seems according to the standard calculations of Taylor which are reproduced in Graph I.

He also claims that the increase in the housing speculation dates happened before the first "negative Taylor differences" seen after 2002, which could clear the monetary policy of suspicion.

Ben Bernanke also underlines the diversity of national experience and refers to recent works by other IMF teams (Fatas et al. 2009) who oppose the conclusions that Rudiger Ahrend has drawn. According to these works, there was only a weak econometric link between the Taylor differences and the amount of the housing values over a sample of 20 industrial countries.

Finally, the President of the Federal Reserve brings the debate back to the real origin of low interest rates which incited speculation. Several observers insist on the abundance of saving on a global level, the saving glut which Ben Bernanke himself made reference to as early as 2005. The Asian, Russian, and South American financial crises of the 90s caused many emerging countries to renounce international loans and to becoming moneylenders on a global scale, which also brings to mind China and other oil-producing countries who wanted to invest their large reserves. It is possible, even probable, that the United States and other countries having an exterior deficit therefore obtained easy financial terms at low rates during the related years of 2002-2005.

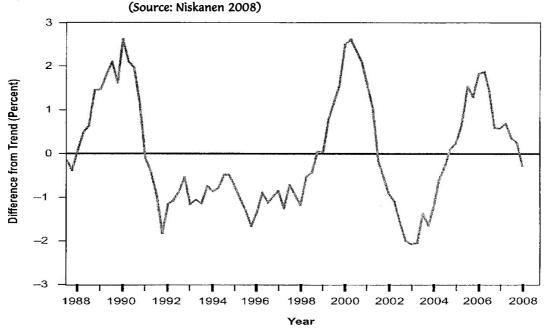
However, some of Ben Bernanke's arguments do not seem absolutely convincing.

The Standard Taylor rule, which used contemporary inflation data and the production gap, is undoubtedly not the perfect formula to carry out a prospective monetary policy, but it was effectively applied to the policies carried out by the Federal Reserve since 1985 which brought about the "Great Moderation". Thus, it is not abusive to see it as a sort of empirical ideal and to accept it as a reference.

There are also other proofs of monetary laxity during the crucial years of 2002-2005, such as the negative value of the real Federal fund rates or the high increase in internal nominal demand that could be seen in the United States. Lawrence White (2009) indicates that, from a rate of 3.1% which could be seen in 2001-2002, the nominal sales to national buyers progress at a rhythm of 6.7%, and then 7.1% during the following years, and did not slow down until after the beginning of 2006. It is this same indictor that incited William Niskanen (2008) to use the thesis of monetary responsibility. In Graph V, nominal sales give very pronounced

fluctuation. After 2002, a great deal of progression of nominal sales can be seen, reflecting an easy monetary policy. An action of the same type was undertaken in reaction to the bursting of the stock market bubble of 1987 and yet another after the troubles caused by the Asian crisis, the Russian bankruptcy of 1998 and the collapse of the technology bubble of 1999. Each time, the behavior of the Federal Reserve obeyed the logic of the Greenspan doctrine and each time the excessive and drawn out reaction was the cause of the following financial bubble. Thus, the monetary analysis carried out on a theoretical basis and the different indicators of the Taylor rule confirming the indications of the latter thus make Ben Bernanke's defense less compelling.

Graph V Final nominal sales to U.S. national buyers



Furthermore, a bubble is obviously not dangerous when it is created. It should be admitted that the monetary policy was not responsible from the start, but having fed speculation at a later stage was not innocent and even less excusable as the bubble was already visible. Credit gap indicators, recently perfected by Claudio Borio and Philip Lowe (2002), showed an excess of credit beyond the warning limit of +5% from 2001 for the U.S.A. The housing prices certainly began rising before the year 2000, but it was only in 2003 that they went over the warning threshold inciting a bubble creation - bubble bursting chain [see Bharat Trehan (2009)]. At the time that happened, reinforcing an excessively easy monetary policy with the disastrous effects of the Greenspan doctrine on the implicit guarantee of safety in the case of a crisis could but encourage financial actors and borrowers to take exaggerated risks, establishing the illusion that the rise in housing prices could last forever.

Finally, as for the saving glut and by using IMF works, John Taylor (2009) points out that beyond the increased imbalance between groups of countries during this period, global savings did not see a significant enough progression to be the sole explanation for the low American and global interest rates. Instead, it went down at the end of 2002, before picking back up after 2002, however its level never increasing significantly. The responsibility of the monetary policy can, therefore, not be removed, for the United States or for all of the global economies. This conclusion can be confirmed by a study carried out by the economists of the Deutsche Bank [Sebastian Becker (2009)] who have pointed out the great increase of the global monetary mass, particularly during the years 2001-2003.

(II) The monetary policy: one of the causes of the recession

When the time came, the monetary policy was also implicated in the collapse of the housing bubble and banking crisis. As is the case for many past recessions, it can, therefore, be blamed for triggering the global recession. In his aforementioned article, William Niskanen (2008) wrote: "A third lesson is that the necessary measures to deflate the demand bubbles caused by overreacting to financial crises should be expected to lead to a recession." When this was written, he was still wondering what would happen to the American economy after the monetary stance was tightened in 2005...

Tightening of the monetary stance

If you look back over Graph V by Niskenen, you can see the first appearance of the Federal Reserve's tightening monetary stance, which was put into place after 2004. The last part of the final demand curve starts to decline at the beginning of 2006 and falls below the long-term trend line at the beginning of 2008.

From 2004, Alan Greenspan and in 2006, Ben Bernanke, his successor, stated their concern about the housing bubble and started to bring intervention rates back up to slow it down. Convincing results do not seem to have been obtained, at least not in 2005 and 2006 (as was pointed out by Roger Altman). The distribution of rate increases towards the longest possible terms seemed painstaking: Alan Greenspan colorfully called the phenomenon "conundrum", thus showing an "abnormal" trend toward the lowering of long-term rates. Ben Bernanke polished up his own explanation with a global "saving glut" which fueled American mortgage loans thus, countering national monetary restrictions. Nonetheless, despite

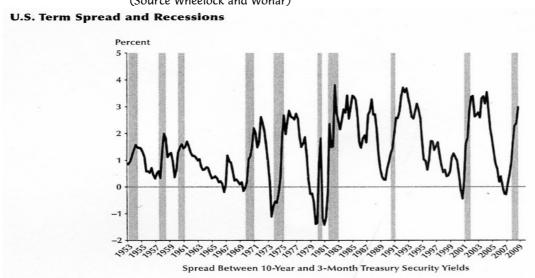
appearances, tightening the monetary stance started off well. However, it had a negative influence on the American economy and as a result on the global economy, which should be explained beyond "conundrum": how can a recessionary impact of a monetary policy which has proven to be incapable of raising long-term loan rates be justified. This is what the rate gap theory and explicative analyses recently proposed by New York economists claim to do.

Forecasting recessions with rate gaps

Tobias Adrian, Arturo Estrella, and Hyun Song Shin (2010), economists at the New York Federal Reserve Bank, evoke that the rate gap forecasts real future activity very well and dominates all other advanced economic indicators in this role.

For their part, David Wheelock and Mark Wohar (2009), who wrote a synthesis article on this relationship, point out the more specific utility of the rate gap for foreseeing recessions, as early as a year before. A recession is all the likelier when the gap between long-term rates (over 10 years for example) and short-term rates (3 months) tends to decrease or invert. Graph VI gives an illustration of this relationship for the United States. Other countries have also been studied with similar results in a whole series of related studies by Wheelock and Wohart. For example, the rate gap is particularly useful in forecasting recessions for Germany (for France, the number of recessions since the Second World War do not let one clearly draw out a link).

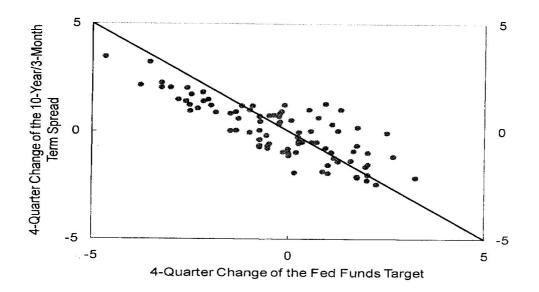
Graph VI "Rate gap" and American recessions
(Source Wheelock and Wohar)



Since 1955, 12 recessions have taken place in the United States, each of these recessions were preceded by an inversion of the yield curve slope. Symmetrically, only one inversion was not followed by a recession, but did nonetheless end in a rise in unemployment. To be more precise, Adrian et al. (2010) note that one rate gap under the threshold of 93 basis points and all the more so in the negative zone, has always heralded a recession or a rise in unemployment, in the indicated period.

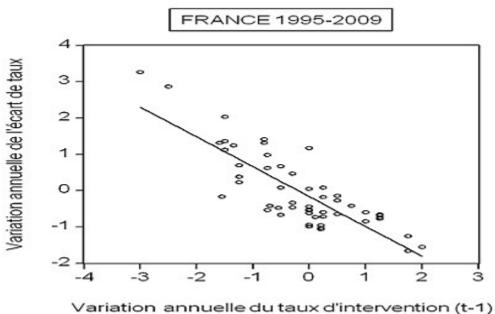
What role does the monetary policy play in the inversion and more generally in the movement of rate curves? Monetary tightening, which can be spotted by the variations of intervention rates, has a very significant impact on the rate gap as can be seen in Graph VII, proposed by Adrian et al. (2010). A personal analogous work confirms this for France, an indicator country for the Eurozone (Graph VIII). In both examples, the elevation policy of Central Bank conditions brought about a decrease in the rate gap of around one for one in the United States, and a little less (slope: -0.82) for France. The simple regression for France, which reached an R_2 of 0.67, indicates the role played by the monetary policy in the evolution of the rate gap between 10-year loans and 3-month loans is around two-thirds.

Graph VII Federal rate changes and the U.S. rate gap
(Source: Adrian et al.)



Graph VIII Central Bank intervention rate movements and the rate gap (1995-2009)

(ECB and Federal Reserve Bank of St. Louis numbers: calculations by the author)



Caption: The "Central Bank" is the Banque de France before 1999 and the EBC after.

A theory linking the rate gap and the probability of recession

Tobias Adrian, Arturo Estrella, and Hyun Song Shin (2010) offer an explanation of why the lowering of the rate gap and its eventual inversion bring about a recession and the progression of unemployment.

The traditional logic underlying the monetary tightening effects represent an increase in the short-term rates is the progressive propagation of this increase toward longer-term exchanges. The industrial and housing investments respond to this rise of long-term loan conditions and decrease. The global demand then reduces, thus increasing the probabilities of going into recession. This classical scenario includes reducing the rate gap at the beginning of the contamination process of diverse market segments of loans, however this decrease is temporary and stops after long-term rates finally adapt. In 2005, Alan Greenspan expected things to happen in this way.

Adrian et al. think that a monetary policy can behave in another way. The increase in short-term interest rates seems a threat to them for the return on loan operations. The financial intermediaries and the banks

indeed borrow over the short term and loan over the long term. The decrease of the rate gap is, therefore, seen as a narrowing of marginal profit made on the operations and incites different intermediaries to restrict their credit offers and to increase their risk premiums; these phenomena are, therefore, an impact on global demand and real activity.

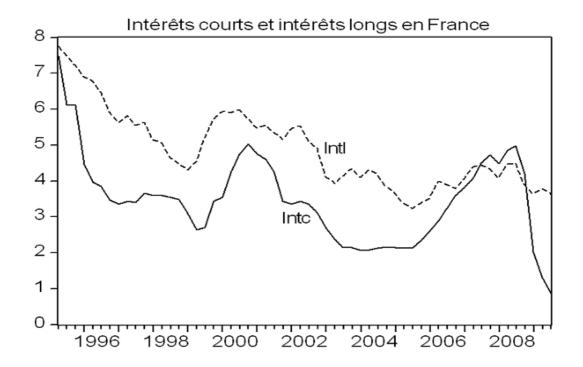
Their empirical study first endeavors to show the positive link that exists between the rate gap and the net margin of financial intermediaries (in practice commercial banks). They conclude by stating the statistically significant character of this link. Reaching another level, they come to consider that the interest gap predicts recessions well because it predicts a decrease of future return, a decrease of future asset values and a weaker value of the net margin on loan operations.

Conversely, a rate curve with a steep slope is a promise of a greater upturn as it helps to restore the profitability of new loans and thus supports the rise of credits for the real economy. This remark is interesting in two ways: it helps understand how the easy policy of 2002-2004 could stimulate the rise of credits and the risk taking behavior of the financial intermediaries; it also gives some light on the chances of a rapid upturn of the global economy after 2009. In fact, the policy set forth by the central banks in reaction to the crisis caused a great increase in the rate gap as early as the end of 2008. In Graph VI, the last segment of the curve representing the rate gap in the United States shows the recorded progression. In France, the gap becomes positive again at the beginning of 2009 (see Graph IX).

Rate gap and monetary tightening

Studying Graph VI confirms the monetary tightening put in place by Alan Greenspan and Ben Bernanke during 2004 and 2006. The rate gap decreases and becomes negative at the end of 2006, thus making a slide into recession more probable. For the Euro Zone, and more particularly for France, the joint movement of short-term and long-term interest rates (Graph IX) can be followed. Knowing that the former represent the monetary policy of the European Central Bank rather well, the rate gap starts to decrease after 2004 and inverts after mid 2007; it stays in the negative zone for about a year and a half.

Graph IX Rates and rate gaps: France 1995-2009
(Source: FRB St Louis)



Both retrospectives unfold identically with a delay (about two quarters late) in the case of Europe (France): a decrease in the gap rate corresponding to a monetary tightening brought on by an inversion after about two and a half years. The economic recession began approximately one year after this inversion.

The rate gap forecasting approach, being thus based on the theoretical analysis of the transmission given by economists and the Federal Reserve Bank of New York, has thus highlighted how the monetary tightening of 2004 could prepare the way for the economic recession of 2008. The monetary policy is thus in part responsible, not only in the creation of the housing and financial bubble, but also in the bursting of this bubble and the economic recession under the influence of restrictive monetary policies that were then put into place. The American Central Bank was involved in both stages of this scenario, and as for the European Central Bank, it was involved in the second stage, with a slight delay.

Moreover, the central banks were rather slow in perceiving the danger of the crisis and threats of an economy slowdown. Late in 2008, they did not seem resolved to vigorously change their policy to adapt to the new perspectives...

Approaching the conclusion

According to Robert Hetzel (2009), the collapse happened in the second and third quarters of 2008. Despite significant deterioration of the American economy, the Federal Reserve was satisfied with maintaining its intervention rate at 2%, which was reached on April 30th, moreover allowing anticipation of ulterior recovery from this rate to develop. Even before the development of destruction of wealth caused by the decrease of stock market values in September, the implicit tightening of the monetary policy probably triggered the real beginning of the recession. The sudden gas price increase was combined with this more restrictive policy and the financial crisis to thus deepen the stronger postwar recession.

The monetary policy carried out by other large bodies (United Kingdom, Japan, Euro Zone) is characterized by similar hesitations at the same period. The Bank of England maintained its intervention rate at 5% during the whole summer of 2008, and only lowered it on October 8th. In its defense, it can be said that it no longer had much of a lowering margin for the intervention rate that had already been reduced to 0.5%.

Finally, when it comes to the Euro Zone, the decisions are even more surprising, the European Central Bank was obviously wrong in its forecasts during the first two quarters of 2008. Its monetary policy was explicitly tightened until the summer (in July: increase of the intervention rate from 4 to 4.25%). Fears of even greater inflation, combined with the rising prices of raw materials and the wage growth in some countries of the zone explain this mistake.

Thus, Axel Weber (2008), President of the Bundesbank and probable candidate to replace Jean-Claude Trichet, declared at the University of Constance as late as June 25, 2008:

"Even though financial stability is of vital interest to the Eurosystem, our primary objective is the maintenance of price stability in the euro area."

As well as, "This confirms that the current upward pressures on the euro-area inflation, which result largely from sharp increases in energy and food prices at the global level, are rather persistent."

Finally, "Furthermore, economic growth is slowing down on a global scale, even though, as far as the euro area is concerned, we do expect it to remain robust, but certainly less dynamic in the quarters ahead."

It can be seen that this excessive priority given to the inflation of consumer prices, the neglect of taking these recessionary aspects of the increase in price of gas and basic products into account, and a certain

nonchalance toward immediate financial threats have led to this blunder by the European Central Bank.

The ECB made up for it at a later date (October 8th), but still regretted its diagnostic errors and its lack of responsiveness to the alarming international economic context. It can be all the more regretted considering the standard delay of action, such errors have probably had repercussions for a rather long period of time afterwards.

For Robert Hetzel, a bad monetary policy, characterized by the neglect of lowering rates, let alone their European increase, could be considered as the primary cause of the extraordinary decline of the economic situation in Europe and Japan from the spring and summer of 2008. The propagation of the slowdown from the moderate recession of the American economy does not seem to have played as significant a role. However, naturally, this does not mean there was not propagation as far as the financial crisis itself is concerned.

Conclusion

All together, the monetary policy, especially the American one, can be blamed for the remote role (2002-2004) it played in the creation of the speculative bubble which led to a financial crisis. It also has a part of the responsibility through its restrictive direction during the 2004-2006 period; this time, a direction shared by other central banks. Finally, it is more immediately involved through its lack of clear-sightedness and responsiveness in the first months of the recession. However, the way the central banks then dealt with the serious issues that resulted from the crisis itself probably does not call for similar criticism...

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