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Monetary Policy and Contemporary Financial Crisis—Basic Concerns

Jacek Tomkiewicz
(Kozminski University, Warsaw, Poland)

Abstract: Goal of the text is to show number of challenges which must face today major central banks. Impressive engagement of the central banks in counter-crisis policy leads to many controversial decisions and its results are not clear both for economic theory and for real economy. For now, one cannot show full overview of central bank's policy—on the one hand, thanks to the expansionary monetary policy, recession was quite shallow and the risk in financial markets has declined, but on the other hand, few side effects of this policy can be mentioned, which can jeopardize economic stability in the future. Paper has theoretical character. Findings are based on literature review and analyze of major macroeconomic data. Text shows the most important areas which have to be investigated by central banks. There serious doubts about issues like: inflation targeting as a fundament for monetary policy, efficiency of monetary policy instruments and side effects of loose monetary policy.

Key words: central bank; monetary policy; financial crisis
JEL codes: E50, E51, E58

1. Introduction

Although it has been a few years since the onset of the financial crisis, and despite extensive literature on the subject, it is certain that we cannot yet talk about a consensus among economists regarding the most efficient economic strategies which should be implemented by state authorities and central banks in order to minimize the negative effects of monetary breakdown and prevent such downturns in the future. Since a substantial number of specialists are analyzing the current crisis, it would be unreasonable to expect an unequivocal opinion from them. However, nowadays we can't even talk about a relatively uniform position of main analytical centres, such as international research institutes such as the IMF, World Bank, or OECD. At this point, it seems worth mentioning that the interpretation of previous global economic breakdowns, such as the Great Crisis of 1929-1933, stagflation of the 1970s, was rather commonly accepted by mainstream economy, at least as far as their causes and recommended preventive measures on the side of economic policy were concerned.

The aim of this publication is to examine the whole range of issues which have not been addressed in theoretical economy, nor in present monetary policies, and which result in the fact that nowadays we are facing a very complex situation, where in spite of the significant role that central banks play in the economy, there is no uniform economic theory, which would justify the implementation of certain instruments of economic policy. The analysis shall be limited to monetary policy. The author is aware of the fact that similar problems can be found in public finance management, regulations, or structural policy, to name a few, however these issues are beyond the

Jacek Tomkiewicz, Ph.D., Kozminski University; research areas/interests: macroeconomics, economic policy. E-mail: tomkiewj@alk.edu.pl.

scope of this publication.

2. What Next with the Inflation Targeting?

Before the onset of the financial crisis, there was a consensus about the general principle behind central bank policy. Despite the fact that US FED (Bank of England, ECB and many other central banks follow the policy of direct inflation targeting) do not treat explicit inflation objective as their official target, there is no doubt that the dynamics of consumer prices is the most important parameter taken into consideration by monetary authorities in the majority of economies. More and more doubts have been raised on inflation targeting strategy, especially in the case EBC policy (Laski, Podkaminer, 2012), but the most important fact is that this manner of conducting monetary policy was evidently ineffective, which means it could not guarantee macroeconomic stability. Despite stable consumer inflation indexes, macroeconomic imbalance was growing, something which was reflected by asset price dynamics—financial instruments and real estates—which finally led to the crash in financial markets, with all the negative consequences for the real sphere of economy. Taking the aforementioned issue into consideration, should asset prices be included into central bank reaction functions? Should monetary authorities react to the rise of the so called "speculative bubbles"? Finally, do central banks have relevant instruments allowing them to react effectively to the situation on asset markets? Although it can be proved that central banks gave consideration to asset prices in their policy (Krzesniak, Kalicki, 2010), policy based on inflation targeting basically rules out reacting to speculative bubbles, as for examples means breaking Tinbergen rule—you cannot react with one policy instrument, here short-term interest rate, to the dynamics of consumer prices and asset prices (Siwinski, 2011).

Central bank policy aiming at reducing the likelihood of speculative bubbles forming raises serious doubts as to its efficiency, since a series of objective, difficult to solve issues can be indicated (Mishkin, 2011).

Recognizing that we are dealing with a speculative bubble, and not with a natural increase in assets prices resulting from better prospects of future cash flows, is a difficult task. However, if a central bank determined that the present value of given assets is higher than their intrinsic value and took an action, this would mean that the central bank is in possession of information unavailable for market players. Hence, this is basically an issue of asymmetry of information on financial markets, rather than of parameter levels of monetary policy.

Asset prices increase resulting from speculative expectations tends to be something very dynamic, so in order to prevent it, by "inhibiting" investors from investing in assets of this kind, monetary policy would have to be severely tightened, which would in turn definitely influence the dynamics of real economy.

Never is the whole market affected by speculative increase in prices, and central bank instruments (interest rates, minimum reserve ratio) do not allow to affect selected markets, thus monetary policy oriented towards preventing the growth of speculative bubbles would have very serious, negative side effects.

Increasing interest rates, which would be a reaction to the asset price rises, may be interpreted by financial market as a signal for changing the trend (bursting of a bubble), which for investors means the necessity to sell off the assets quickly, and it may consequently lead to a sudden crash of the market. Monetary policy that was intended to stabilize the market, may in fact lead to its destabilization.

Taking also asset price increases into consideration, apart from the dynamics of consumer prices, significantly reduces the transparency and reliability of monetary policy, which should be governed by clear, unambiguous rules.

In consideration of the above, it can be claimed that monetary authorities came to conclusion that costs of leaning against asset-price bubbles forming (leaning against) were higher than possible cleaning-up costs after the bubbles burst.

The situation presents differently from today's perspective. First off, the costs of "cleaning-up" after the crash on financial markets in 2008 turned out to be enormous. Secondly, it is precisely very lenient monetary policy of FED—the result of the dot.com bubble—that is frequently indicated as one of more significant reasons to trigger mechanisms which eventually led to the onset of crisis (Rosati, 2009; Roubini Mihn, 2011).

As it can be noticed, the ratio of consumer inflation as a monetary policy target raises serious objections, whereas it is equally difficult to establish the level of price dynamics which would be best for the economy. Before the onset of the crisis there had been a consensus about it, according to which the desirable annual inflation rate amounted to 2%—such inflation targeting is established for ECB and Bank of England, National Bank of Poland is "targeting" at 2.5%. Establishing inflation target at a lower level results from concerns regarding the redistribution effects of inflation (the higher the inflation, the higher the redistribution of income, which is its result) and from fear of the so called anchoring of inflation expectations—the lower the inflation rate, the more predictable it becomes.

Current financial crisis exposed dangers which previously were of purely theoretical nature, such as liquidity trap, deflation, interest rate 0 as the boundary for monetary policy. Today, we may ask a very significant question, which might have seemed heretical in nature a few years earlier—why is an inflation rate of 4% "worse" than an inflation rate of 2% (Blanchard et al., 2010)? Targeting a higher inflation rate should stimulate consumption, real interest rate ought to fall significantly, and in the future central bank interest rates would have to be higher, which in turn would enhance possibilities of monetary policy reactions in case of the next downturn. Obviously, it needs to be acknowledged that higher inflation involves a series of dangers that must not be ignored. Thus, the following issues may be mentioned:

- higher inflation is less predictable, and consequently it is more difficult to stabilize it at a higher rate,
- redistribution of income related to inflation both in national setup (price-to-wages, debts-to-savings ratios) and in the foreign one (real currency exchange rates), which hinders optimal allocation of resources in economy,
- a fall in real value of the savings aggregated, for example in pension funds in fully-funded systems, which has a negative effect on the standard of living of present and future pensioners, and consequently on consumer demand.

To sum up, there is certainly no simple solution to the issues described above. On the one hand, it is clear that obtaining a low inflation rate does not mean a macroeconomically balanced economy. On the other hand, if the catalogue of central bank targets is extended to include the so called macroprudential regulations (credit dynamics, degree of financial leverage, dynamics of assets prices, structure of assets in portfolios of financial institutions, etc.), the number of instruments would have to increase as well in order to include all the issues related to market regulation (Szpunar, 2012), which needs to have a negative effect on the monetary policy of the central bank. Incidentally, due to a large scale integration of global finance, the efficiency of state regulations may be insignificant, and it may be easily observed that there is still a long way to go for the coordination of supervision on supranational level.

As far as the optimal inflation rate is concerned, it may not be said that central banks are enthusiastic about increasing inflation targets. However monetary policy is perceived in a more flexible manner nowadays, i.e., more attention than before is paid to the possibility of influence on real economy sphere—output gap and consequential unemployment rate.

3. More Instruments Available in the Situation of Falling Efficiency of Central Bank Basic Instruments

In the times of the so called "Great Moderation", i.e., the period of stable and relatively high economic growth, which was characteristic for the well-developed economies (with the exception of Japan) since the 1980s, it was a common belief that a short-term interest rate[1] was an adequate instrument at the disposal of a central bank in order to influence current inflation rate and economic condition perceived as the rate level of the output gap.

Other instruments were unnecessary, as the doctrine of market economy says that long-term interest rates are determined by investment risk in a given country, which is frequently linked to the government's capacity to pay off sovereign debt, hence state bond yield is an index here. The position of a central bank as a lender of last resort was to protect deposits aggregated in commercial banks, and by no means could it be seen as an instrument of structural policy leading to arbitrary decisions as to liquidity of this or another entity facing insolvency.

In the face of the global crisis, the activity of central banks increased significantly, and was not limited to using traditional instruments, but a whole range of actions, which had not been taken in financial policies before that time, was provoked. New instruments may be divided into following categories (Reis, 2010):

(1) The policy of the so called "quantitative easing", i.e., increasing money supply by central banks.

The regulation of current liquidity through open market operations is a standard, commonly used strategy implemented by central banks. However the scale of money supply increase which could be observed since the year 2008 cannot be dubbed as "normal"—so far balance sheets of the Bank of England and FED have increased three fold, and balance sheets of ECB increased by almost as much.

(2) Extending the terms of interest rates affected by central banks

In spite of interest rates lowering by central bank to the lowest level in their history, the activity of financial system regarding issuing credits for small companies and households remains at a very low level, amongst others due to high risk prevailing in the majority of economies. Because of that, central banks took certain steps with the view of lowering long-term interest rates, which should encourage banks to finance long-term investments. Several examples of central banks influence on long-term interest rates:

- Extending the term of instruments purchased as part of open market operations—today in the balance sheets of FED and ECB, debt Treasury bonds with maturities of less than one year amount to 50% and 30%, respectively,
- In September 2011, FED carried out MEP (Maturity Extension Programme), exchanging shorter term Treasury securities for longer term Treasury securities,
- In August 2011 the head of Federal Reserve announced that interest rates would remain at 0 level at least till the year 2013,
- In December 2011 and February 2012 ECB carried out two rounds of LTRO (Long Term Refinancing Operations), handing out a total sum of 1 billion Euros in long-term loans (three-year) to commercial banks

(3) Extending the scope of financial policy

Traditional role of the state on financial market is primarily to protect commercial banks deposits and to conduct financial policy oriented towards stabilizing price levels. In both cases, commercial banks are transmission mechanisms of central banks, whereas the outstanding financial institutions such as investment banks

[1] It needs to be highlighted that almost all traditional instruments of central bank, such as a reference rate, a deposit rate, a collateral loan rate, open market operations, or minimum reserve ratio influence short-term interest rates only.

or insurance companies are not subjects of central bank interest. The number of mutual relations between financial institutions of different kinds resulted in the fact that, for fear of financial market crash[2], the policy of central bank needs to be oriented towards almost all financial institutions. Again, several examples of such actions of central bank may be pointed out:

- the position of a central bank as a lender of last resort reserved for commercial banks, i.e. banks that aggregate deposits from public, was extended to include almost all financial institutions, including investment banks and insurance companies,
- as part of open market operations, central bank accepts a whole range of financial instruments, which could not be earlier included into its balance sheets, as the risk involved was too high[3],
- central bank offers collateral loans secured with the pledge of financial instruments that were previously unaccepted. Already mentioned LTRO operations secured by bonds with ratings lower than AAA may be quoted here.

To a large extent, such a significant extension of central bank instruments results from the fact that basic tools of monetary policy, such as short-term interest rate, minimum reserve ratio and traditional liquidity regulation as part of open market regulations, are practically useless in the face of financial crisis.

As far as interest rates are concerned, the possibilities of monetary institutions have been practically exhausted, as the interest rate hit bottom line 0%[4] (FED, Bank of England), while nominal interest rate cannot drop below zero[5]). At the same time, it needs to be highlighted that despite central banks drastic lowering of interest rates, market interest rates do not reflect central bank's expectations. Indeed, secure assets yield fell significantly, but at the same time the difference between safe and risk bonds yield increased.[6] We are facing a situation, where central bank lowers interest rates, but it is not directly reflected by capital costs raised by business entities other than state Treasury.

Establishing minimum reserve ratio to be observed by commercial banks became practically pointless, as lending has practically stopped for fear of the creditworthiness of companies and households, and consequently banks aggregated substantial reserves that are not actually used for financing economic development. Since 2010, the level of US bank reserves has been almost two times higher than the level required and specified by central bank. Thus, any decision of central bank regarding reserve levels has no influence on market liquidity.

Central bank liquidity provisions as part of open market operations became far less effective, something which is related to the aforementioned phenomenon, namely high level of reserves maintained by the banks and consequent low lending rates. At this point, it needs to be highlighted that mechanism of money supply multiplier relies on conducting credit-deposit operations. Potential size of the multiplier depends on the level of minimum reserves established by central bank. If bank reserves are higher than those required, the size of multiplier increases, so the increase in money supply by central bank (aggregate MO increases) is not reflected in quick growth of broader aggregates such as M1, M2, M3. Incidentally, analyzing the dynamics of money supply

[2] It needs to be remembered that the fall of Lehmann Brothers triggered this crisis. Investment banks, such as Lehman Brothers, do not aggregate deposits from public, so it may be claimed that the state should not intervene to help institutions of this kind.
[3] Infamous MBS (Mortgage Backed Securities) of nominal value amounting to 1 billion US dollars can be found among FED assets.
[4] If we tried to apply Taylor's rule, it would mean that nominal interest rates should be lower by a few more basis points, as inflation pressure is practically absent, while the output gap remains high.
[5] In theory, a situation in which central banks establishes negative nominal interest rates is possible. However, it would imply a distortion of financial relations—no one is going to invest in deposits with negative return, and loans at negative interest rates would bring return on "nothing", but for the sheer fact of incurring a debt.
[6] The differences among returns on debt securities of different credit ratings provide a good example.

increase through the prism of broader aggregates, no confirmation can be found for the opinions saying that central banks "flooded" the markets with liquidity—the size of M3 aggregate in the USA and the Great Britain, the countries that openly apply the policy of quantitative easing, is lower than 4 years ago (data of FED and Bank of England).

Observing unprecedented activity of central banks, at least two questions arise:

(1) Did non-standard instruments applied by monetary institutions yield the desirable effects?

(2) In view of the falling efficiency of central banks instruments, should these measures have been used on such a scale, as obviously such policy has its side effects?

Ad.1 Undoubtedly, breaking what seemed earlier "the iron rules" of monetary policy such as, e.g., implementing the mechanism of last resort lender for institutions different than traditional credit-deposit banks can be discussed, but the fact that the activity of central banks was effective (Hamilton, Wu, 2011) (in case of, e.g., lowering long-term interest rates or restoring relative trust on international market) cannot be ignored.

Ad.2 Stimulating policy conducted with such intensity needs to have its side effects analyzed, something which shall be discussed later in this publication, but it is relatively easy to imagine the condition of the economy, had central banks refrained form the intervention on such a scale (Mishkin, 2009).

First of all, market interest rates, so those related to financing entities different than those having the highest rating, would have increased even more significantly, which for many business entities would mean restricted access to financing.

Secondly, central banks buying the whole range of risk assets (such as, e.g., MBS) greatly reduced risk in the system, which allowed for relatively effective functioning of the market, while it needs to be remembered that after Lehmann Brothers bankruptcy, international market came to a standstill, as certain institutions were not sure of solvency of other market participants.

Finally, expansive financial policies allowed to implement extraordinarily loose fiscal policies, which absorbed the fall of consumer demand and fall in investments on the side of private entities, and thus shortened and cushioned the recession.

4. How Long Can Super-expansive Monetary Policy Be Conducted? Does It Have Any Side Effects?

There is no doubt that the scale of financial crisis, which can be observed since its onset in 2008, required extraordinary reaction from economic policy, including unconventional reactions from central bank. However, one should not have illusions that the above described actions on the side of monetary authorities can be conducted endlessly, as:

- crisis did not eliminate the basic macroeconomic assumption, according to which inflation is foremost a monetary phenomenon, so money supply growth of central bank sooner or later must be reflected by inflation increase,
- in the long run, it is impossible for central banks to keep a whole range of financial instruments in their balance sheets, as it is not central bank's role to invest in a given economy sector,
- the possibilities of conducting expansive financial policy by central banks, even with the help of unconventional tools, are slowly depleting—the number of financial assets (that could be bought by central banks as part of money supply growth) available on financial market is after all limited.

In consideration of the above, the question if and when the shift from anti-crisis, unconventional monetary policy should take place is essential.

And again there is no simple answer to this question. On the one hand, it may be pointed out that the revival which can be observed in global economy has been far from satisfactory, as exemplified by unemployment rates, and, what is important, the dynamics of economy is lower than anticipated—in the last issue of World Economic Outlook (IMF, 2012), it is openly stated that previous forecasts needed to be verified, and unfortunately adjusted towards the worst.

As is the case with monetary policy, loose fiscal policy has its boarders, which are dictated by financial market demand for Treasury bonds. Even in the countries that do not have any problems selling their bonds (as it is the case in the USA and the majority of European countries), governments need to make an effort of fiscal alignment, as the costs of servicing the sovereign debt, and what follows, passing liabilities on to the next generation, start to imperil political stability. It also needs to be remembered that in the long run, the situation of public finance is going to be additionally hampered by progressing demographic changes (IMF, 2010a).

There are no doubts as to the fact that in the face of current global economy condition, fiscal alignment needs to be highly pro-recessive (IMF, 2010b; IMF, 2012; Perotti, 2011), so if monetary policy gets tightened during this period, the majority of economies will experience severe recession.

On the other hand, interest rates at zero level and the activity of central bank bulk purchasing assets on financial markets cannot be perceived as normal in the long run and a range of negative side effects of such policy that can significantly slow the growth rate in the longer period may be pointed out (BIS 2012).

Low interest rates do not perform their basic function, something which verifies the feasibility of investment. If capital cost amounts to zero, the pressure to for more effective management decreases.

Central bank policy relying on purchasing financial assets and maintaining low interest rates allows to keep uncertain assets on the balance sheet. It refers to the public sector as well, as its motivation for structural reforms is impaired by the access to cheap money on the debt market.

The central bank's presence on financial market has significantly distorted the information received by market participants, who observe valuations of financial instruments. To provide an example, is anyone able to measure fair value of MBS in FED balance sheets?

Capital cost close to zero is obviously an incentive to take greater risks in order to achieve desirable rate of return, which facilitates forming of the next speculative bubbles on raw material, currency or food markets.

Additionally, low interest rates in well-developed economies complicates the situation of emerging economies. Due to spread differences, carry-trade mechanism (borrowing money in currency with low interest rates and investing it in currency with higher interest rates) seems natural. This has negative implications for emerging economies:

- capital inflow appreciates currencies or increases inflation in emerging countries, which decreases their competitiveness,
- central banks lower interest rates in poorer states in order to prevent capital inflow and their level becomes inadequate from the perspective of their economies and leads, amongst other things, to the speculative increase in asset prices, primarily of real estates.

5. Summary

As far as economic theory is concerned, it may be claimed that events like the global financial crisis provide great opportunities for verifying our knowledge of economy, so economists should be satisfied with such extensive study material. However, the fact that economists have little to be proud of must not be ignored.

First of all, the onset of the financial crisis seems to have surprised almost everyone, which shows that the theory behind macroeconomic policies of governments and central banks turned out to be incompatible with reality.

Secondly, anti-crisis measures taken by authorities are motivated by current situation and intuition, rather than by deliberate and cohesive strategy behind them.

An example of such a problematic situation would be, e.g., the activity of central banks in the majority of well-developed countries, where their stimulation of economy raises a number of objections, especially when costs of these actions for long-term stability are concerned.

Summing up, although it has been over 4 years since the onset of the crisis, and despite extensive literature on the phenomenon, there are still more questions than answers, as to where global economy is heading for.

References:

BIS (2012). *Annual Report 2011/2012*, Bank of International Settlements, Basel.

Blanchard O., Dell'Ariccia G. and Mauro P. (2010). "Rethinking macroeconomic policy", *Staff Position Note No. 2010/03*, International Monetary Fund.

Hamilton J. D. and Wu J. C. (2011). "The effectiveness of alternative monetary policy tools in a zero lower bound environment", *NBER Working Paper No. 16956*.

IMF (2010a). "From stimulus to consolidation: Revenue and expenditure policies in advanced and emerging economies", Fiscal Affairs Department, Washington.

IMF (2010b). *World Economic Outlook*, Washington.

IMF (2012). *World Economic Outlook*, Washington.

Kalicki K. and Krzesniak A. (2010). "*Polityka pieniężna w strefie euro i USA a ceny aktywów w świetle doświadczeń z kryzysu*,[*Monetarypolicy in eurozone and the USA and assetprices in the face of the crisis*]", in: Kołodko G. (red.), *Globalizacja, kryzys i co dalej?* (*Globalization, Crisis, What Next?*), Poltext, Warszawa.

Mishkin F. S. (2009). "Is monetary policy effective during financial crises?", NBER Working Paper No. 14678.

Mishkin F. S. (2011). "Monetary policy strategy: Lessons from the crisis", NBER Working Paper No. 16755.

Perotti R. (2011). "The 'Austerity Myth': Pain without gain", BIS Working Paper 362, Basel.

Reis R. (2010). "Interpreting the unconventional U.S. monetary policy of 2007-09", *NBER Working Paper No. 15662*.

Rosati D. (2009). "*Przyczynyimechanizmkryzysufinansowego w USA* (*Causes and the mechanism of financial crisis in the USA*)", Ekonomista nr 3, PTE.

Roubini N. Mihm (2011). *EkonomiaKryzysu* [*The Economy of Crisis*], Volters, Warszawa.

Szpunar P. J. (2012). "Rola polityki makroostrożnościowej w zapobieganiu kryzysom finansowym (The role of macroprudential policy in preventingglobalcrisis)", Materiały i Studia nr 278, Narodowy Bank Polski, Warszawa.