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# Post – crisis monetary policy and social cohesion

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# Abstract

Goal of the text is show that although non-standard monetary policy conducted by major central banks is quite efficient in stabilizing post-crisis economy, there are few important side effects of such policy. One of the most important side effect of super-expansionary monetary policy is creating economic environment which favours financial sector and capital owners over working class what leads to higher income inequalities. Low level of central bank's interest rate does not mean that every economic unit has access to cheap capital. Ultra low cost of capital can be experienced only by the few selected players – financial institutions and strong corporations. The same can be said about the financing borrowing needs of the state – only few governments are able to borrow very cheap and others have to face huge power of financial market what leads to growing income gap between societies.

# Key words: financial crisis, macroeconomic policy, social cohesion

#### JEL: E63, E64, F2

#### Introduction

While assessing the effectiveness of anti-crisis macroeconomic policy from the point of view of the depth and length of recession induced by a crisis, it can be concluded that governments and central banks have fulfilled their role correctly (Mishkin 2009) - recession measured by a decrease in the GDP was relatively shallow and short, obviously with some exceptions, such as Greece or Spain, where symptoms of recovery in the real sphere cannot be seen until today. On the other hand, however, there are a lot of doubts about future effectiveness of monetary policy instruments - nominal rates of the central bank cannot be

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further reduced, the policy pertaining to the establishment of the level of minimum reserves of banks has practically ceased to be of any importance in view of enormous funds collected by banks. Dilemmas pertaining to the required reaction of the central bank to the appearance of speculative bubbles (Mishkin 2011). A lot of controversies arise in connection with the side effects of the expansive monetary policy implemented by main central banks in the world (BIS 2012). An exceptionally loose monetary policy constitutes a serious hazard for the appearance of speculative bubbles in some markets and emerging economies must face challenges connected with investors' actions who, within the so-called carry trade, destabilise exchange rates and increase the inflation pressure in countries, such as Brazil or India.

The aim of this text is to indicate that the monetary policy conducted since 2008 by the most important central banks in the world significantly contributes to the deepening of the level of income inequality in contemporary economies. In the first part of the text, apart from preliminary remarks, structural reasons for macroeconomic inequities, which have accumulated since 2007, will be presented. Next, channels of the influence of the monetary policy on the income structure in the current situation of the global economy will be analysed.

## Monetary policy and income distribution - preliminary remarks

A traditional analysis of relationships between the policy of the central bank and the division of income in the economy does not include a set of the so-called non-standard monetary policy tools implemented as a result of the 2008 financial crisis (Coibion, Gorodnichenko, Kueng, Silvia 2012). Main channels of impact of monetary instruments on the income structure are mostly the central bank's attitude to inflation and the influence of the interest rate level on returns obtained by owners of savings. Consent to increased inflation usually leads to increasing income inequality (Bulir 1998). This happens because, due to higher prices, employers' and high-ranking managers' income increases and their salaries depend on their companies' financial results, which improve quickly as a result of increasing revenues. At the same time, salaries of ordinary employees remain at the same level or at best are raised, but with a considerable delay. One should also mention social transfers here, which are usually indexed by the inflation rate, but always using the ex-post approach. In summary, the redistribution effects of increased inflation work in favour of increasing income inequality - the income of ordinary employees and those who receive social benefits grow more slowly than income of better-off social groups, i.e. entrepreneurs and managers.

What is interesting is that the disinflation policy also has a negative influence on the social cohesion level. The cost of a restrictive monetary policy aimed at limiting the inflation level is usually a decrease in the GDP dynamics and even recession. For example, it happened so in the USA at the beginning of the 1980s when Paul Volcker, the FED head at that time, announced that inflation is public enemy number one. Over a few years, it was possible to reduce the scale of inflation fundamentally (from 13,5% in 1980 till 3,2% in 1983 – further data for the same period), but it happened at the expense of recession and an increase in unemployment which goes up from 7,2% till 9,7%. The deterioration of the situation on the labour market always leads to income inequality (Gini increased in the USA from 34,7 till 36,8), as persons with low qualifications are the first to lose their jobs and, in consequence, income.

In summary, the monetary policy influences distribution of income mostly during the so-called monetary shocks, i.e. periods of a loose monetary policy when the inflation is accelerated and at a time when the central bank conducts a restrictive policy aimed at reducing the inflation rate. Both situations usually translate into an increase in income inequality, despite the fact that economic mechanisms are quite different. Thus, from the point of view of social cohesion, a monetary policy, which stabilises the price dynamics without unnecessary costs in the form of weakening the real sphere, is measured here mostly by the unemployment rate.

## Globalisation, income distribution, crisis

Serious arguments can be listed which show that growing income inequality is responsible for growing macroeconomic imbalance (Rajan 2010, Stiglitz 2012, Kumhof, Lebarz, Ranciere, Richter, Throckmorto 2012).

The past three decades in the world's economic history is a period of accelerated globalisation of economy understood as progressive integration of goods markets, capital and work. Enormous China and the entire area of the world previously belonging to socialist countries are included in the global economy and formal barriers, which previously limited the flow of goods and capital. Thus, we have a combination of demographic factors (a large increase in the labour force in developing countries), technological factors (a decrease in costs of transport, development of telecommunications techniques), cultural factors (common knowledge of English, standardisation of work tools) and political tools (inclusion of further previously "closed" economies in the global economy), owing to which the bargaining power

of the majority of employees decreases, which narrow social groups have a very quick increase in the income (IMF 2007, OECD 2011, ILO 2008). As a result, the share of salaries in the GDP decreases (the work efficiency grows more quickly than salaries) at the expense of the growing role of capital income (Piketty 2014); on the other hand, income inequity grows fast both among employees (salary inequity) and in the entire economy, as measured at the household level.

If production grows faster than the pay, the demand barrier is created - households cannot afford to buy goods and services, which are produced in the economy. Thus, there are two ways out - the consumption can grow faster than their income, but it is connected with an increase in private and/or public debt or an export surplus must be achieved. The USA, Great Britain and Greece are an example of the first model, while China and Germany have been following the other route.

The situation of the German economy requires an additional comment because this economy has an image of crisis-proof country. In Germany, the difference between an increase in work efficiency and increase in salaries is exceptionally high - in the 2000s, the level of remuneration increased nominally at a rate of 1.1% annually, which meant a real decrease. The fact that the traditional German thriftiness did not lead to an increase in the household debt does not mean that no negative processes occur there, which are a threat to the macroeconomic stability:

- pay stagnation and the resulting deficiency of the domestic demand, which means the necessity of keeping a surplus in the current account, which makes the economy dependent on the foreign demand – thus, it is not an accident that the recession in Germany in 2009 (-5,1%) was deeper than in the USA (-2,8%) place, which was the "centre" of the financial crisis,

- income inequity measured at the household level does remain at a stable level (Gini in 2000's is stable at the level of about 30), but during this time, a growing share of the national income is taken over by companies' profits, this, on the scale of the entire economy, the income structure is changing quickly to the disadvantage of households gaining income from labour – share of salaries in GDP declined from 75% in 2000 till 65% in 2007 (OECD data),

- a high level and dynamics of the GDP does not translate into affluence of households – despite the highest per capita GDP level among the countries listed below, the median of the

household effects is three times lower than in Spain and in Italy, household assets that were more than twice as high were collected by households in France and in Greece <sup>3</sup> (EBC data),

- it is difficult to say that financial surpluses of companies invested on the global financial market increased the affluence of the German economy – in view of the collapse of financial markets, losses on foreign financial investments were 20% of the GDP (estimates by the DIW institute), which required support from the financial sector in the form of public funds at an amount of 12.8% of the GDP, i.e. on a scale larger than in the USA or UK, where taxpayers had to pay 4.8 and 6.7% of the GDP, respectively to rescue financial institutions (IMF data).

In summary, it is not possible not to combine the accumulated macroeconomic imbalance, which led to the financial collapse in 2007 with trends in income division. Low household income dynamics makes it necessary to finance the growing consumption by contracting debt, and at the same time, quickly growing profits of companies reach the financial market leading to the formation of speculative bubbles and shaping the so-called global imbalances. Even if households avoided an increase in debt, as it happened in Germany, such a situation also contributes to the growing imbalance; this time, it is an external imbalance by the necessity of maintaining an export surplus and transfer of capital abroad.

It can be clearly seen that the crisis did not change the trend involving an increase in income inequity, mostly in highly developed countries. Despite the decrease in the inequity scale in the years 2007-2010, which resulted from a deep decrease in capital profits caused by a collapse of financial markets, the latest data show that the income stratification began to grow again (ILO 2013, Piketty, Saez 2013, OECD 2014).

## Side effects of loose monetary policy

Looking at the current picture of the status of the economy in the most important countries of the world, one might get the impression that the reaction of central banks to the financial crisis in 2008 was appropriate, as the following facts can be pinpointed:

- the recession in the most important economies was relatively shallow and short,

- no deflation was observed, except for the exceptional situation which occurs in Greece, where prices have gone down by 0.9% in 2013,

**<sup>3</sup>** The most important component of household effects which results in Germans' low ranking in the statistics is real property, as real property ownership is relatively uncommon in Germany.

- after a temporary panic attack on financial markets in September 2008 (just after the bankruptcy of Lehmann Brothers), the situation calmed down clearly, which can be seen in a decrease in interest rates on the interbank market.

- there was no run on the banks, the loss of depositaries' funds did take place in Cyprus and Iceland, but certainly it cannot be regarded as a lack of social trust to the banking sector,

- a low level of interest rates allowed for conducting a loose fiscal policy, which allowed for the operation of automatic stabilisers, which made the recession more shallow and shortened it.

On the other hand, however, it can be seen more and more clearly (BIS 2012, Hamilton, Wu 2011) that a loose monetary policy, and mostly the so-called non-standard instruments of the central bank are connected with a whole range of risks:

- the level of interest rates at an amount of 0 means that we have practically lost this the most important instrument of the central bank – in the case of another slowdown, it will not be possible to reduce the interest rate,

- an increase in the balance amount of central banks as a result of monetary expansion does not translate into an increase in the lending action – a large amount of funds provided by the central bank is "settled" in commercial banks' reserves, as these banks have collected reserves considerably exceeding the required levels. As a result, another instrument of the central bank - the minimum reserve - becomes useless,

- collected reserves of commercial banks are a potential threat for the future inflation, the lending action may begin to grow very quickly, which will be translated into a growing demand and inflation pressure,

- financial markets depend more and more on the quantitative loosening policy – markets respond to the announcements made by central bankers of forthcoming limitations of liquidity provided by falling indexes,

- the low cost of capital makes it necessary to conduct the so-called carry trade (search for yield), i.e. taking a short position in a currency with a low percentage rate and investing borrowed funds in assets with a higher return rate, which leads to the formation of speculative bubbles.

# Post-crisis monetary policy and income inequalities

An important consequence of the monetary policy implemented by central banks as a result of the crisis is the deepening of income inequity, which happens through several channels of impact.

First of all, the loose policy of the central bank means access to the cheap capital, but only for entities from the financial sector. Only financial institutions make direct transactions with the central bank, while other economic entities must use financial intermediation. As a result of such a situation, the financial sector may reach high profits practically without taking any risk. EBC actions are a good example of this situation. December 2011 and February 2012 within the LTRO operation, EBC granted to banks a "long" (i.e. three-year long) loan with an interest rate of 1%. The funds obtained were invested in bonds of Eurozone countries, and, as a reminder to you, the yields of Spanish and Italian bonds at that time was at the level of 5,11 and 5,55% (Eurostat data).

A policy meaning clear preferences for the financial sector, as compared to other sectors, seems not to take into consideration recent research (Arcand, Berkes, Panizza 2012), which shows that as long as efficient financial sector is necessary for the development of economy, its too large size may contribute to the formation of speculative bubbles, which destabilise the economy if they burst and require rescue actions on the part of the state.

The aforementioned pressure on the increase of prices of financial assets allows for obtaining high capital income, which is the speciality of financial institutions and owners of large savings. At the same time, owners of modest savings, who do not have the possibility of managing their portfolio in an active manner, practically do not have any income from their capital. The interest rate on bank deposits and current accounts is now practically at the level of 0, which, considering the inflation and fees to financial institutions, makes us receive a negative return on small amounts of savings. Income inequity is thus increased in two ways - income from the capital grows faster than remuneration and, at the same time, the diversification of income from the capital increases for larger rates of return for those who have a capital that is big enough to be managed actively.

Year	Top 10% income share-including capital gains	Return on SP 500 shares in 2009-2012 (in %)*		Nominal wages dynamics in US in 2009- 2012 (in %)	
		Total	Annual	Total	Annual
2007	49,74	return	return	growth	growth

Table 1. Selected data on income distribution in US

2008	48,23				
2009	46,5				
2010	48,04				
2011	48,13				
2012	50,42	78,7	16	7,2	1,8

\* Return on change price and reinvested dividends

Source: Author's own preparation based on data from The Top World Incomes Database and US national data

One of the reasons for the financial crisis, i.e. a careless lending policy of banks which granted subprime loans on a mass scale, i.e. the ones, where the borrower's creditworthiness was doubtful, had a fundamental influence on the bank's approach to the lending action. Today, this situation looks quite different. Despite the loose monetary policy of central banks, access to loans by entities outside the financial sector is very difficult. In addition, today it can be seen much more clearly than before the crisis how the financial market differentiates the capital cost according to the borrower's economic power. Before the crisis, the difference in the interest of 5-year corporate bonds between an issuer with an AAA rating and a BBB rating was approx. 1.5 percentage point, while at the beginning of the year 2014, it was as many as 4 percentage points and practically, the entire increase in the spread results from a decrease in the interest rate for the economically strongest entities (look at the below graph). A similar conclusion results from research by EBC, which regularly analyses access to the capital of small and medium enterprises - as compared to the year 2007, despite a reduction in interest rates of the central bank, the cost of capital acquired by small entities on the financial market increased and at the same time, its availability decreased as a result of collaterals required by banks.

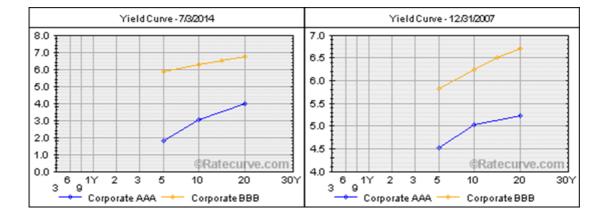


Figure 1. Ratings and yields of corporate bonds in US in 2007 and 2014

Source: www.bondsonline.com

A similar situation, i.e. differentiation of capital costs from the point of view of economic power, can also be seen in financing the public sector. Also here, the advantages of low interest rates are used by the largest economies enjoying the trust of financial markets.

Table 2. Yields (in %) of treasury (10-year) bonds of selected countries

Country/tim	XII	
e	2007	V 2014
Italy	4,54	3,12
Spain	4,35	2,93
Greece	4,53	6,38
Germany	4,21	1,33
France	4,35	1,84

#### Source: Eurostat

Changes observed above largely result from a specific return to normality - such a small difference between the profitability of German and Greek bonds certainly did not take into account a much worse fiscal policy conducted in Greece for years. The privileged position on the debt market of the richest countries is also connected with the monetary policy conducted by central banks. Apart from the obvious influence of increased money supply on the profitability of treasury securities, it is worth paying attention to other regularities as well, which can be clearly seen in the world's financial system.

A large scale of integration of the global financial sector reduces the effectiveness of the monetary policy as regards regulation of the money supply on the domestic market. As there are no limitations in capital movements, increased liquidity in the financial sector, which is provided by the central bank within the quantitative loosening policy or by granting loans directly to commercial banks, as it happened in the case of the LTRO operation can be used very quickly for the purchase of foreign assets. It is particularly visible in the Eurozone, where no foreign exchange risk occurs between its individual members (Turner 2014).

Another factor which facilitates the fiscal policy in the most financially reliable countries involves the behaviour of central banks of other countries, which must respond to actions by FED, EBC or the Bank of England. On the one hand, increased money supply in the USA or Europe leads to involvement in carry trade transactions, which increases the inflow of capital to emerging markets. On the other hand, it can be seen that safe deposits are being searched, i.e. currencies which are connected with a low risk of depreciation and

increased inflation. The Swiss franc is an example of such a currency. It began to appreciate very quickly against the EUR and the USD, which forced the Bank of Switzerland to block the exchange rate at the level of 1.2 francs for 1 EUR. It should be noticed that in both cases (capital inflow to emerging markets and to Switzerland), the balance amount of the central bank increases by means of an increase in foreign exchange reserves. Foreign exchange reserves of the central bank are invested in liquid secure assets, which, as a result, leads to increased demand for bonds of countries offering securities nominated in the world's reserve currency so the ministers of finance in Germany, the USA or Great Britain do not have any problems with financing their borrowing needs.

Table 3. Currency reserves level in the selected central banks in USD bn.

Country/year	2007	2013
Brazil	194	359
China	1996	3880
Switzerland	74	536

Source: World Bank

Differentiation of the costs of financing the borrowing needs of the public sector clearly increases income inequity at the international level. The richest countries have lower costs of public debt serving and, as a result, they are able to conduct a loose fiscal policy which accelerates economic growth. In Spain or Greece, the cost of debt financing imposed by the market imposes quick fiscal adaptation which, under current conditions, must be of the post-recession type (Perotti 2011), so the income gap between individual countries is growing.

#### Summary

Outbreak of financial crisis showed that global economy was far from equilibrium. If salaries are lagging behind labour productivity is has to lead to economic imbalances – growing household debts like it was in the US or unsustainable trade surplus which run China or Germany.

Unfortunately, it is hard to say that financial crisis made for politicians clear that growing income inequalities are unsustainable so radical changes in economic policy must be implemented to balance global economy. More likely scenario is continuation of above mentioned trends and long period of economic stagnation what can endanger social and political stability of the world economy.

One of the most important dilemma for policy makers is role contemporary monetary policy. On the one hand, set of non-standard monetary instruments brought short-term stabilization for global economy. On the other hand, structural causes of macroeconomic instability are still there. There are more and more evidences that income distribution structure is important source of economic and social instability. Contemporary monetary policy conducted by the most important central banks contributes to the growing income inequalities by giving preferences for the financial sector and capital holders over working class.

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