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U.S. interest rate policy in the 2007–2009 crisis

The 2007–2008 U.S. financial crisis brought about a peculiar situation in the interest rate policy. From December 15, 2008, the prime rate of the American central bank (FED) went into the 0-0.25 percent interest rate bracket. By this, the space to maneuver provided by the reduction of interest rates practically ceased to exist in FED's policy. This is not a unique case, as Japan applied the 0.25 percent interest rate for more than a year from the last quarter of 2001. This means that it is worth examining the parallelisms. On the one hand, we should explore how the interest rate policies could get to the point of losing their space to maneuver, on the other hand, we should find out whether the practically zero interest rate level is suitable for the handling of the financial and economic crisis.

SPACE TO MANEUVER FOR MONETARY POLICY AT THE TIME OF CRISIS

Starting out from the theories of economic sciences, the appropriate economic policy for reaching the Solow stationary condition (Mankiw, 1999, pp. 122–142) is characterized by anti-cyclicity, i.e. at the time of economic growth, the development of an overheated status is avoided, i.e. when the growth rate of production starts exceeding the growth of sales opportunities, and so, the development of a crisis is attempted to be prevented, while at the time of a crisis, it is expected to offset recession. At the time of dynamic growth, economic policy is able to ensure long-term growth reserves by curbing consumption and encouraging accumulation, while at the time of recession, this is done the other way round.

On the other hand, according to the monetarist equilibrium approach, which is based on the Ricardian equivalence proposition (in the case of budgetary policies, the non-Keynesian approach that believes in the positive effects of restrictions), the expectations of the players of the economy are not adaptive but rational. Thus, their expectations also incorporate the idea that through successful consolidation, there will be opportunities for future tax cuts. In other words, the future private incomes will increase, which may cover the consumption of the households already in the short term, and this is called the Ricardian behavior. (Friedman 1968; Szentes 1995; Bhattacharya 1999) Looking at the 2008-2009 status of the U.S. economy, however, it makes no sense to recommend restrictions, since, as it turns out from Table 1 and the analysis of the market of government bonds, the international credit

supply turned to the investment tool regarded as the most secure one, i.e. to the U.S. bonds, exactly because of the financial fears caused by the global crisis.

For the anti-cyclical monetary policy, at the time of a crisis, it is basically the increase of liquidity that may be a solution to offset the crisis, as in such a way, this policy encourages the banks, which are reluctant to lend, to increase the interbank loans and the portfolios of client credits, and motivates the households to consume rather than save. (Tarafás, 2001) The American central bank, as well as the budget policy, have been compensating for the economic recession in an anti-cyclical way since 2008. At the same time, it should also be concluded that the U.S. economic policy was procyclical between 2000 and 2007, as the growth period (2003-2007) was also heated by the tax cut program and the war-related expenses. This twofold economic policy behavior, however, was a very hazardous game for the long-term sustainability of public finances.

As it turns out from the joint examination of the IS-LM system and the AA-DD-curves (Samuelson - Nordhause, 1985, pp. 320-321; Mankiw, 1999, pp. 318-325; Krugman -Obstfeld, pp. 492–550), the reduction of the central bank base rate increases the need for keeping cash in the monetary market, i.e. the demand for money, along with which the demand in the goods market also rises, bringing about inflation and/or the depreciation of the exchange rate in the short run. In other words, increasing liquidity can be attained in such a way that the central bank is able to increase the money supply and decrease the yields on the savings. One of the tools to do so is the decreasing of the interest rates, which also moderated the real yields of the savings. However, this tool is faced by obstacles in as many as two cases. What practically happens is that a reversed liquidity trap¹ is created, i.e. *the* interest rate may decrease to zero but this is not

sufficient for releasing such an amount of money and channeling it to the economy whose spending would be able to reignite the growth of the economy. Or, in spite of the minimum value of the base rate, the available cash partially flows to the savings that bring a minimum amount of yields, rather than to consumption and investments. On the one hand, the nominal interest rate may be reduced to zero at most, which level will of course result in a negative base rate in an inflationary environment but even this negative base rate has limits depending on the zero nominal interest rate and the inflation. The other constraint is the lack of inflation, i.e. the direction of the price change. In the case of a deflation (decrease in the price level of the goods market), the price change offsets the reduction of the nominal interest rate, i.e. a positive real interest rate is possible also with a zero nominal interest rate. This phenomenon, in turn, will weaken the efficiency of the economic policy even more, which policy responds to decreasing consumption by a reduction of interest rates. (Erős, 1998) As is seen in Chart 1, the central bank may sustain a certain interest rate level in vain if the consumer and producer price levels of the products and services change, as this will change the purchasing power of the savings anyways, independent from the central bank's interest rate decisions. At the time of the crisis, when consumption falls back, or the prices of the global market decrease, the households can be encouraged to increase their current consumption less and less successfully, when the nominal interest rates fall. In other words, the limited efficiency of the interest rate reductions executed by the central bank with a view to boosting consumption will deteriorate when inflation slows down, or deflation grows. All this means that if the central bank is late in decreasing the interest rates that are aimed at boosting consumption, then the slowing price increase or accelerating price decrease developing as consequence

of the fallback in consumption can only be counterbalanced by a higher-risk, higher-extent cost cut, which would consequently cause a larger swing in the monetary market. In turn, the regularly delayed interest rate reductions will always induce another reduction in interest rates, which is, however, limited by the zero nominal interest level.

If the interest rate reduction by the central bank reaches the zero interest rate level, then the chances to reduce interest rates are exhausted. However, there are several alternatives presented by direct money supply. The central bank is also entitled to sell their own money for foreign currency, or they may also pump extra cash volumes into the economy through purchasing securities. However, by doing so, they undertake higher risks related to the inflation-related threats following the crisis, since it is a question how the value of the securities or the foreign exchange will evolve, from which financial assets the later cash withdrawal should be covered (see the costs of sterilization, Jakab – Szapáry, 1998).

FED'S INTEREST RATE POLICY SINCE 2001

The interest rate policy followed by FED between 2001 and 2009 can be strongly criticized if seen from a perspective of a decade. Before we say anything about the zero interest rate, we should be aware of the fact that *FED*'s *fluctuating interest rate-related decisions played a very important role in the collapse of the market of mortgage bonds in the United States.* In the early 2000's, the interest rate that was reduced to as low as 1 percent (from June 2003) was meant to contribute to the indebtedness of the

Chart 1





The individual curves in the diagram illustrate the value of the real interest rate in the case of a predefined nominal interest rate, not lower than zero, as long as the price change in the goods market has various directions and extents.

Source: own edition

households and the expansion of the mortgage loan market. With a few percent interest, the U.S. households got the opportunity to take out loans with 20-30-year terms, to be covered by the real estate that they owned, or had just purchased. FED is also somewhat responsible for that, through the process of securitization (the mixing of the bonds that provide the funds for the mortgage loans into complex securities portfolios), high-volume mortgage lending became possible, although responsibility primarily rests with the supervisory authority SEC, i.e. the U.S. Securities and Exchange Commission. Due to the latter, the wide supply of credits allowed that the clients to be excluded on the basis of traditional credit rating receive credits (subprime), or that a second mortgage can be registered on already pledged real estate (Madura, 2007; Király et al., 2008). Then, when several million U.S. households became indebted in such a way that the mortgage registered on their properties only covered 80-90 percent of their debt, due to the inflationary effects, FED started to increase the interest rates and in the period of 2006–2007, they gradually took the values up to 5.25 percent. What is more, the interest rate fluctuation strengthened the cash flow increase that arose from the repayment of credits, which was the result of the fact that the indebted households had to fulfill a debt service that was initially of a low amount, then gradually or exponentially increasing, and becoming interest rate-adjusted after the first two years.

However, in the last quarter of 2008, the interest rate was decreased in giant steps down to as low as 0.25 percent. These significant changes of direction shook the trust in the interest rate policy both amongst the indebted and the saving players of the economy. The bond issuer of the U.S. State Treasury is currently in a lucky position from the aspect that, due to the global nature of the financial crisis, it is still the American government bonds that are the lowest risk investment in the world, the result of which is that substantial savings flowed to the market of U.S. government bonds in the global economy. As consequence of this, the American state debt can be financed with a minimum nominal interest rate. (See Table 1)

Table 1

YIELDS OF THE U.S. TREASURY NOTES AND GOVERNMENT BONDS DURING THE CRISIS

(poroont)		
Term	March 2009	April 2009
6-month Treasury notes	0.42	0.32
1-year Treasury notes	0.62	0.49
3-year bonds	1.31	1.33
5-year bonds	1.82	1.89
10-year bonds	2.86	2.92
30-year bonds	3.64	3.79

Source: U.S. Federal Reserve

From a money market perspective, what happened in the recent years was that *FED* first created substantial money supply and indirectly, the indebtedness of the households, then they started the prevention of the increased inflationary threats of the increased money supply but by doing so, they made the indebted households insolvent. Finally, they attempted to manage the crisis that evolved in such a way by a repeated oversaturation of the money supply (liquidity).

What does a zero interest rate actually mean? In fact, FED's prime rate is not exactly one single value but it targets a so-called interest rate bracket between 0 and 0.25 percent. Interestfree money is of course not valid for all credits but it refers to the money issued by FED to the commercial banks, interbank lending. Thus, if an entity repays their debts not in their capacity as a financial organization, the individual risks of these entities will continue to be added to the 0.25 percent. This means that at the moment, the corporate credits are charged by interest rates of about 4.5–5.5 percent but there may be even as high as 14 percent interest rates among the mortgage loans (see Chart 2).

On the other hand, the zero interest rate bracket can be interpreted in such a way that FED issues as much money as the banks need for their own liquidity. The situation is that one of the gravest problems of the financial crisis is that the commercial banks did not dare lend to each other in the last quarter of 2008, thus the supply side of the credit market was practically paralyzed. Liquidity-aimed money supply is well-characterized by that, while between January and August 2008, a total of 900 billion USD extra money supply was issued, this value soared to 2,000 billion dollars by the end of December.

Furthermore, lower interest rates also serve the purpose that FED could make the consolidation or buyout of the defaulted mortgage loan sellers cheaper. This becomes possible because the bond returns in the secondary market decreased in general as well, due to the lower prime rate. Those "junk bonds" from behind which the coverage and repayment practically disappeared are attempted to be withdrawn from the central bank and the government funds. Up to the first quarter of 2009, FED used appr. 600 billion dollars, while the central administration spent 700 billion dollars on crisis management.

PARALLELISMS BETWEEN THE U.S. AND THE JAPANESE FINANCIAL AND ECONOMIC CRISES

From a financial perspective, quite a number of similarities can be drawn between the 1989–2002 financial crisis of Japan and the 2007–2008 crisis of the USA, which can be summed up as follows: *fundamental mistakes, delays, overheatedness, real estate bubble, zero interest rate paradox, the vicious circle of deflation, recession.*

Chart 2



Source: U.S. Federal Reserve

In the protraction of the Japanese financial and economic crisis to fifteen years, the fundamental errors related to economic policy, primarily those of the institutional kind, played a significant role. The strong intertwining of political and economic management is the reason for the slow and distorted adjustment process of the Japanese economic policy and the Japanese corporate sector. In the Japanese bank sector, bad loans of a total value of 1200 billion USD, which later the debtors were unable to repay, could accumulate because on the one hand, the owners of the banks and the production companies were strongly intertwined (keiretsu system), on the other hand the companies that had strong informal ties to politics were able to achieve wide-ranging state guarantees for the credits. In the same way, it was the consequence of these intertwinings that the Japanese economic policy first tried to save the market players like banks and companies and only took the required adjustment measures (interest rate decision, privatization of the Japanese Postal Services (Japan Post), etc.) with delay. The Japanese crisis was preceded by a dynamically growing upturn in exports, the income from which generated overpricing in the domestic consumption/ investments. The crisis presented itself in the overvaluation of the real estate market assets in the Japanese case as well, then the prices of shares also got unrealistically far from the asset values of the companies, which resulted in a price bubble and eventually the real estate and stock market prices collapsed (Ozsvald - Pete, 2003).

The first mistake was made by the Japanese bank when it decreased the interest rates between 1985 and 1988 and it only started increasing the interest rates too late, in 1989, thus it was not able to prevent the bubble that evolved in the market of fixed assets. A similar phenomenon can be observed in the U. S. case as well. The reduction of interest rates, which was aimed at boosting the economy, and which can be seemingly maintained with a low inflation rate of consumer articles, resulted in that the significant part of cash savings flowed into the stock and real estate markets, which assets are not taken into account when price stability is measured. Thus, the real estate market may see the evolution of overvaluation, price bubble, and credit risks, with almost marginal monetary attention. All this will become unsustainable when the increase in incomes overheated by the low interest rates and other procyclical tools applied by the economic policy causes inflationary threats in the market of consumer goods as well (see Chart 3, in the case of Japan, 1988-1989, in the case of the USA, 2004–2006), to which the central bank will of course respond by increasing the interest rates and withdrawing the oversupply of money. By then, of course, the real estate market will have undergone a certain level of speculative price increase, just as the real estate market will have gone through the allocation of cheap credits, this is why the increasing interest rates and the indirect or direct money withdrawal by the central bank will cause a collapse both in real estate sales and in credit repayments.

The Bank of Japan reached the zero interest rate level (which technically means the abovedescribed interest rate bracket) in 2001, and FED in the last quarter of 2008. In both cases, the purpose was to inject such cheap money into the economy and to make it worthwhile for the households to save incomes to such an extent that it should make internal consumption grow, as a result of which the economy will start growing again, after the recession. (Of course, besides these steps, both in the Japanese and in the American cases, there were significant budgetary bank rescue efforts and an increase in state investments, to offset the missed consumption of the households.)

However, what monetary policy should face is that even if it reduces the interest rates to zero,



Source: Bank of Japan

with which the commercial banks get money almost for free, this in itself does not guarantee that the households will spend all their income rather than saving them, what is more, that they would even take out further consumer loans. In the American case, it was also the fluctuating central bank base rate that caused the excessive risk-taking of mortgage lending in the real estate market, and economic policy got to the level with the central bank base rate that it was not able to define a real interest rate that was low "enough" for the market to prevent the decline of consumption and investments. According to the method governing FED introduced by two of their analysts Wang and Wu (2009), the Taylor Rule, in 2009, it is already a negative nominal interest rate that would be ideal for reaching the growth target.²

This phenomenon of the zero interest rate has several explanations. On the one hand, it is very probable that the central bank gets to the limit of interest rate opportunities because they keep responding to the changes in the economy with constant delays or to an insufficient level, so a new adjustment will always become necessary, which is the reduction of interest rates in this case. This also holds true for the two specific cases. On the other hand, the money provided to the commercial banks for free will not automatically become free money to either the households and the companies, or in the interbank credit market. Especially if a slowdown or narrowing of the economy is witnessed, as at such times, it is the individual risk of bankruptcy of the market players that will grow. Orders may decrease, jobs may be terminated. The interest rates of the consumer and corporate loans will not necessarily decrease as a result of this, what is more, they may even grow, as has already been mentioned in relation to the U.S. interest rates. Third, the households may start counting on years of poverty, due to which they will start accumulating their money even in spite of minimum deposit interest rates. In the Japanese case, this is even more so because of the protraction of the crisis and the high willingness to save even in normal circumstances but this saving behavior can also be

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discovered in the American case by the end of 2008, although in the long-term analysis prepared by *Magas* (2008), a continuously increasing level of indebtedness and decreasing net saving trends were visible in the period between 1998 and 2007. In 2008, consumption still fell by almost 4 percent and by December of that year, the net saving position of the households reached +3.6 percent as compared to the GNP, it was already at a level of 4.2 percent in March 2009, while in 2007 it was barely 1 percent (data source: U.S. Bureau of Economic Analysis). True, as compared to the 15.1 percent net position of the eurozone, this is still low. (Eurostat, December 2008)

Deflation is the fourth contributing factor. Economic recession also arises from the decrease in consumption. The reduction of demand in the goods market involves the falling of the prices, which is able to trigger a deflationary spiral. Declining consumption and decreasing prices encourage the producers to moderate output, which at the same time also eliminates some of the jobs and/or the paid salaries. The incomes of the households that are narrowing in this way will further reduce consumption and prices, which, in turn, will strengthen the above-described willingness to save money, since the households see their negative expectations in the effects of the deflationary spiral as justified. By this, the deflationary trap (or the vicious circle of deflation) will develop, from which the only way to get out is for the producers to sense an increase in the total demand from any (state or private) funds.

In the case of Japan, in several quarters between 1998 and 2001, there was an absolute decline in consumption, which coincided with the deflationary periods and it actually created the deflationary trap (Ozsvald – Pete, 2003). In the fourth quarter of 2008 and the first quarter of 2009, the USA also saw a decrease in product prices, i. e. deflation. In November 2008, the monthly price decrease was 1.7 percent. By 2009, the forecast on the annual level (e.g. IMF) anticipated a 0.4 percent price reduction in the U.S. economy. Of course, the substantial decrease in oil prices was an important cause of deflation (in the course of one year, i.e. from 2007 to the end of 2008, the oil prices decreased from 147 USD per Brent barrel to a level of 36-46 dollars, which already rose to a value of around 56 dollars in the second quarter of 2009 with an appreciating dollar), and besides this, the price level of motor vehicles and services also went down. This was only strengthened by the appreciation of the U.S. dollar in January, since the, perhaps transitional increase in the purchasing power may mean further USD price decrease in the American market. The joint decrease in consumption and price levels set off a self-generating spiral in the earlier Japanese case, the point of which was that as consequence of the decreasing prices and consumption, production also declined. As a result, quite a number of jobs, i.e. further sources of income of the households ceased to exist. This was sensed by the Japanese households as the deepening of the crisis, this is why they further increased their savings to the detriment of consumption. This vicious circle also set off in the USA in the last quarter of 2008 as consumption and borrowing by the households declined, the prices fell, the termination of as many as five million jobs, which process did not even stop in the second quarter of 2009, although some slowdown can already be experienced. And it is a fact that if the U.S. households do not increase their consumption, then the export-oriented Europe, Japan, China, etc. will all suffer from the American stagnation.

The final outcome of the crisis in the case of Japan meant that the Nikkei Stock Exchange index fell from the 40,000 to the 6,000–8,000 range by 2002, and it could only rise up to the 13,000–15,000 range by 2008. As for the banking sector, several banks merged and a high number of banks were saved by the central budget after the panic was over, thus the banking sector got rid of defaulting loans and banks that had bad credit portfolio structures. The most important development, however, was that monetary policy became ineffective, and the liquidity trap and the deflationary spiral came to exist. In other words, the Bank of Japan could not make access to money even cheaper, while they pumped more money into the economy, this money did not appear in the market of consumption articles and production tools as demand and inflationary pressure (Ozsvald – Pete, 2003) (see Chart 4).

On the basis of the Q2 2009 figures, the same holds true for the American situation and the Japanese crisis with regard to monetary policy. A substantial amount of toxic credits came to exist, which also adversely affected the bond market through the indirect impacts of securitization, and, through the bond market, the portfolio of *sovereign wealth funds* also suffered significant impairment. The U.S. federal government had to carry out a bank rescue act. Some banks were compelled to merge. The interbank credit market froze between September 2008 and February 2009, i.e. the commercial banks did not even dare lend to each other because of the bankruptcies of the banks, due to which the bank transactions of the non-financial companies also became partially impossible. This solvency trap, in turn, already had an adverse effect on trading between the companies (Soros, 2008).

FACTORS OF OVERCOMING THE CRISIS

As regards the way out of the crisis, when this study is being written, the U.S. economy is far from recovery. In the case of the Japanese economy, three fundamental factors contributed to overcoming the crisis (Ozsvald – Pete, 2003). The first factor was the improvement of the financial reliability of the banking sector, as well as the application of stricter



Source: IMF World Economic Outlook database, April 2009, f = forecast

credit supervision and lending rules. This process was launched in the case of the U.S. money market as well, in a natural way. The second factor was the structural transformation of the corporate sector, which is primarily aimed at attempting to transform the intertwining of the non-financial and banking participants of the keiretsu system by rendering the Japanese commercial banks less interested in the high-risk lending to companies that belong to their groups. On the one hand, the crisis compelled the Japanese corporate sector to become open to foreign investors. In a certain sense, this process also started off in the U.S. economy, since in this case the structural problem is that, numerous such global market oligopolies have operated in the U.S. corporate sector so far whose problems of cost efficiency and competitiveness had been familiar for a long time. This purification is the most conspicuous in the U.S. automotive industry, at the General Motors and Chrysler groups. The third contributing factor to the Japanese recovery was the acceleration of export growth, which made up for the missed internal demand, increased the demand for labor and spendable incomes, which, as an external factor, could reverse the anticipations of the Japanese households. No such external factors can be counted on in the case of the U.S. economy, as it is the USA that is the largest commercial market in the world, while otherwise they spend 85 percent of their national income on internal consumption. Thus, after monetary policy had become ineffective, nothing else but budgetary intervention remained. As consequence of this, the U.S. Treasury Department plans a 12 percent GDP-rated budgetary deficiency in 2009, which means that roughly half of the federal expenses, which were raised to 25 percent of the GDP, are planned to be covered from credits.

The 2009–2010 plans for boosting the economy follow the so-called Keynesian guidelines of eco-

nomic policy almost to the textbook level (Keynes, 1926; quoted by Szentes et al., 2005; Mátyás, 1996), according to which the missed market demand should be offset by increasing the incomes of the households through raising state consumption and investments, or through tax cuts. There is no other short-term opportunity that would present itself for the moderation of the impacts of the crisis, anyway. To put it very simply, the thing is that the U.S. economy is sustained, or its growth is driven by its own internal market consumers. The crisis management program focuses on stopping this self-generating process. One of the key objectives of the program is to keep as many as 4 million jobs. This is attempted to be achieved primarily by launching infrastructural investments through the construction industry and saving the car manufacturing companies from bankruptcy. And here we have come to discuss the limitations of the program as well. Neither the bank consolidation nor the saving of the automotive industry will boost the U.S. economy, since they are only sufficient for keeping the companies, which are otherwise in a bankruptcy situation, alive. Infrastructural investments will increase the economy in the long run not because they are realized, either but they create opportunities for more cost-efficient or higher capacity economic solutions. In the short run, however, the decline of production can be witnessed, so there is no need for increasing capacities. The crisis management package is based on the goal that the U.S. economy should weather the transitional crisis with relatively low losses. The key to success is the restoration of trust in the money market as soon as possible, ensuring continuous money and credit supply (i.e. liquidity), the restoration of the banks' courage to lend to each other, so that the clients of one of the banks could get access to such credit funds which have been saved by the customers of another bank. If this process starts, then it will really

make sense that the administration creates demand through capital investment projects, for which it will be worth increasing construction industry resources and jobs. The income generated in such a way will, in turn, reverberate to other sectors in the form of orders, or to the households as consumption. The next step of key importance will be to ensure that this reverberating effect should boost the other sectors before the state investments are completed. The biggest problem of the U.S. economy is the very fact that demand in the internal market is decreasing. The increasing of the disposable income through the moderation of the taxation of personal incomes will only be capable of halting the economic slowdown if this covers the consumption of the American products rather than that of the imported goods. Through tax cuts, however, the administration loses the very control over the spending of the national income. The program also contains the extension of health insurance and rendering the pension savings more secure, as well as the rescheduling of real estate loans but these will not exert short-term effects.

In the case of the American recovery, we can count on the following. While consumption is not growing and the opportunities of industrial production keep narrowing, not even the 8 percent unemployment rate in the second quarter of 2009 is likely to decrease. (In the labor market of the USA, an unemployment rate of 5–6 percent is typical in the years of normal economy. In September 2008, it was 6.1 percent, while already 6.8 percent in November.) This means that in the first quarter of 2009, the aggregate purchasing power of the American households came to be lower than in the last quarter of 2008, which will now probably result in the reduction of consumption.

If the deflation to be protracted for the whole year should still not occur, the U.S. economy will then have to face the destructive effects of inflation itself. The situation is that the extra money supply of over 1,000 billion dollars issued in the past few months may appear as demand in the product and investment market at any time. There is of course a central bank remedy (money market sterilization) in place for such an event but in this case, it is the very prime interest rates paid for the one-day deposits that should be raised, so that these amounts should be put aside through the commercial banks' deposits, instead of unnecessary spending, thus avoiding the pushing of prices upwards. This, however, acts against the 0-0.25 percent interest rate bracket objective. This means that the American zero interest rate unfortunately resembles the earlier Japanese interest rate policy also in that it was extorted by a mistaken series of decisions taken by the central bank and at the same time, the interest rate was also reduced too late, so the central bank practically resorted to desperate means and did not have any actual room left for maneuvering in boosting the economy.

Perhaps the missed consumption of the households could be replaced from the budgetary funds, though the U.S. budget policy of the past 8 years could weaken public finances in such a way that crisis management with fiscal tools now involves a significant increase in the country risk. (The Bush administration started their activities by significant tax cuts back in 2000, the Iraqi war cost the U.S. approximately 3,000 billion dollars according to Joseph Stiglitz's calculations, and the management of the financial crisis to date incurred the public finances costs of at least 700 billion dollars. The total U.S. GDP is 14,300 billion USD.)

During the years, FED has practically maneuvered itself into a position that leaves no space for movement, in which only very shortterm problems can be handled by quick fixes, although the problems are partially due to FED's subsequent decisions on interest and money supply.

RISKS INHERENT IN PUMPED-UP LIQUIDITY

The mid-term evolution of the increasing money supply is the key risk factor. The first step in the management of the 2007–2008 U.S. financial crisis was to give the banks, and through them, the economy, access to money through the central bank rather than the interbank money market. This action was meant to counterbalance the deflationary trends but it is a question what will happen to the extra cash supply of several hundred billion US dollars issued in the framework of the bank rescue package. In all probability, withdrawal will be completed by increasing the interest rates, which will further strengthen the threats related to the U.S. interest rate volatility.

As long as the willingness to save funds, because of the crisis situation, develops and grows as a trend in the American households as well, which will probably happen in the case of a protracted recession lasting for several years, the increase in money supply may not result in growing consumption but rather, in the increase in bank deposits and investment funds. In this case, monetary stimulation would, in turn, remain ineffective, however, the coverage for buying the new U.S.government bonds would increase, which brings up the risks posed by the increase of the gross GDPrated 87 percent state debt in 2009.

In the short run, the fulfillment of the above-mentioned goals such as the cheap buyout of the bad bonds from the market and the pumping up of liquidity will be successful but FED has sown the seeds of serious risks for 2009 and 2010 in the American economy.

First, it is a question whether the increased liquidity will be able to sustain consumption and capital investments. One of the paradoxes of the 2001–2003 Japanese near-zero interest rates was that even with the free of charge credit funds and the zero yields, the Japanese households increased their savings and decreased their consumption. As a result, not even the implementation of capital investments that increased production in the internal market made sense in this period, thus the Japanese economy actually stagnated for several years.

What we can currently also see in the American case is that the low rates are not able to boost business developments and the consumption of the households, as both sectors have become considerably indebted since 2001. Those, on the other hand, who did not lose their incomes or jobs, or are not indebted, are also waiting both with regard to capital investments and consumption. In the second half of 2008, consumption stopped growing, and industrial output decreased by 7 percent. What is more, as has already been mentioned, it is not all that cheap to receive credits, since the individual risks keep the interest rates of the credits high. Although it is true that the willingness of the Japanese and American households to save and consume generally greatly differs from one another, in the upcoming few years the U.S. households will actually be compelled to save high amounts and to consume less, only in this case the present "savings", in fact, the debt obligation, is meant to cover past rather than future consumption.

It is a short-term problem of the interest rate reduction and the increase of liquidity that the interest rate applied in the market did not follow the reduction of the central bank base rate (the interest rate that refers to the one-day central bank credit provided to the commercial banks) from 5.25 percent to below 0.25 percent. The interest rate of the bank credits and mortgage loans provided to the households and companies still preserved the 2007 level. The situation is that as a result of the money market and real estate market crisis, the decrease in the base rate was offset by the decreasing volume of orders and the increasing default risks arising from the growing rate of unemployment.

IMPACT OF FED'S ZERO INTEREST RATE ON THE OTHER NATIONAL BANKS' SPACE TO MANEUVER

The American crisis and the related interest rate reduction affect the interest decisions made by other national banks as well. On the one hand, in order to boost the economy, the prime rate was reduced where possible, on the other hand, FED as the central bank of the economy issuing the lowest risk government bonds had set the minimum interest rate level low, thus, also in order to avoid the unnecessary strengthening of exchange rates, which occurred because of the excessive interest rate differences and which narrowed the export opportunities, the interest rates had to be cut, for example, in the case of the EU or the United Kingdom. Japan applied a mere 0.5 percent interest rate level even before the crisis (see Chart 5).

Thus, it is a side effect of FED's zero interest rate that a very high number of other central bank base rates also started to approach the zero level, so practically the nominal interest rate's room to maneuver is starting to disappear not only in the USA but also in the other developed economic areas.

At the same time, there are some economies where the interest rate level is seemingly far from zero (for example, Poland applied a 4 percent level, while Hungary and Romania one of 9.5 percent in May 2009). In fact, however, the room to maneuver for such countries in the reduction of interest rates aimed at boosting the economy also ceased to exist, as these national banks are compelled to keep their interest rate levels, due to the excessive depreciation of their national currencies and in order to ensure the sellability of the government bonds. Thus, by the middle of 2009, the space for movement of the interest rate policy, which



Source: ECB, Bank of England, FED, Bank of Japan, Czech National Bank

was aimed at offsetting the crisis, ceased to exist not only for the U.S. economic policy but also for all the developed regions. In fact, the central banks are not able to encourage the market players to transform the extra funds into spent incomes by direct cash generation either (such as overnight credits, purchase of securities). In such a sense, the inability to act from a monetary aspect transitionally harmonized monetary policy by itself on a global scale.

MONETARY GOVERNANCE OF THE WORLD?

Having seen how lax regulation used to be at the time of the 2008 financial crisis, those claims that concerned the rethinking of the authorization of the international financial institutions, and the extension of their competences, gained renewed strength. On the other hand, in the past few months, it was the system of interstate institutions such as IMF, EBRD, the EU, etc. that helped out several countries at the time of the fluctuation or collapse of their respective national money markets. As a consequence of this, the voice of these institutions in the national economic policies became stronger. We wonder whether the time when control over the globalized economic, first of all, financial processes can be taken over by the international economic organizations, has come. Is it possible that international cooperation will be replaced by supranational governance?

It is not easy to answer this question, which is also indicated by the fact that a theoretical dispute between the believers in the market and those who are for institutional governance has been going on for several decades, on the issue of whether more or less global supervision would be necessary (Gilpin, 2001; Kindleberger, 1988; Minsky, 1982) *Joseph Stiglitz* (2008), who has been urging the structural transformation of the international financial institutional system since the late 1970's, also identifies the fundamental roots of the 2008 crisis in that nobody has done anything to eliminate the imbalances (i.e. against the lax lending regulations of the USA, the hectic FED interest rate policy and the lack of control over the credit rating agencies). Thus the market pays the price for the unmanaged problems that have accumulated and mutually strengthened each other. It is side by side to this international institutional control that it is usually mentioned that the behavior of the market players is driven by the alternating conditions of greed and fear rather than rational consideration, which, using Susan Strange's expression, has led to the development of "casino capitalism", with substantial fluctuations, uncertainties and responses difficult to forecast. Based on this, those who are for the institutions have come to the conclusion, not only now but also in relation to the earlier global financial crises, that the global financial system should be transformed in a direction that will make the regulatory system perfect and uniform, one that will harmonize the monetary policies and the financing programs. Besides, a global reserve currency that would be capable of replacing the US dollar would be necessary, whose value is not exposed to the errors of the U.S. economic policy and the recession of the U.S. economy. The uniform regulation would also be suitable for changing the fundamental features of bank accounting and to make it avoidable that the players of the bank market keep masses of the bad debts, now called "toxic", hidden by applying various bookkeeping techniques.

On the national level, the U.S. Securities and Exchange Commission (SEC) is responsible for several failures in the execution of its crisis prevention task. First, it was not able to ensure the observance of the transparency rules and laws

that were meant to protect the investors and reduce the risks inherent in the decisons. Practically, the managers of the investment funds and financial companies were "allowed" to beguile the investors with false figures. Within a single decade, this was already the second significant act of deceit, since the Enron scandal started off in the very same way in 2001. Second, SEC did not enforce its regulatory and control rights in order to ensure the observance of the accounting rules and the truthfulness of the financial statements. It was first of all the financial companies AIG, Lehman, Bear Stearns, as well as the Fannie May and Freddie Mac funds that were able to roll on their financial weaknesses in secret for a long time (Soros, 2008). Among others, these are the financial players whose bankruptcy in September 2008 destroyed the interbank confidence of the financial markets. SEC proved to be a total failure during the supervision of the credit rating agencies as well, since it the false ratings issued by the latter that allowed the mixing of actually unsecured mortgage bonds into bond portfolios, and the sale of these bonds in high volumes. The key failure was that SEC did not manage to protect the small investors, who are the least capable of getting comprehensive information on the risks by themselves, this is why it would be the responsibility of the investment protection institutions to call their attention to the mistakes and risks. It is also an institutional failure that such pilot game-like businesses like Madoff Investment Consulting were allowed to operate for several years/decades. The responsibility for the failure should be shared by the U.S. central bank (FED, i.e. the Federal Reserve) as well, not only on account of the mistakes of prevention but also for those of crisis management, during which they saved certain financial companies like AIG, while they let others like Lehman Bros go bust, so eventually the freezing of the interbank mar■ STUDIES ■

kets because of the loss of trust could not be prevented.

If we assume that appropriate regulation is capable of preventing crises, as it signals to, and what is more, compels to correction, in due time, all those state and market players who make erroneous decisions, then global financial governance has never been more justified than at the beginning of the 21st century, in the period of accelerated globalization, in which there are practically no isolated national money markets. It should be noted that the need for this kind of transformation of the international institutional regulation is nothing new, as it emerged as early as almost forty years ago. The current crisis has only significantly increased the chances for the key players of the global economy to bring themselves to execute the reform of the international institutional system. Henry Kissinger, for example, is already considering the possibilities of a substantially new global (economic) order. Of course, it depends mostly on the United States whether there will be any meaningful shifts. It is exactly because of this that those who believe in the strengthening of institutional regulation are positive about practical implementation, as the U.S. economy is one of those that are the most severely affected by the current economic downturn.

There are, however, such questions which do not make the path of global governance all that smooth for the very United States which has so far strongly believed in the efficiency of market mechanisms, even if President Obama would like to move away from this direction with regard to the social supply system. In general terms, the institutional problem arises whether it is possible to create such an organization which is capable of fully handling and monitoring the money market processes and movements that involve values of several thousands of billions of dollars on a daily basis, one that is able to make the appropriate decisions of intervention. At the moment, not even the IMF is

able to do that, as confessed by its own management. As regards the forecastability of the 2008 financial crisis, the analysts are wise only in retrospect. There were very few who could anticipate at all, or even voice this opinion of theirs, that there were very serious problems in the U.S. real estate market and lending regulations, and there was in fact no one who understood that the collapse of the American real estate and bond market would act as a firebomb and trigger the collapse of all the elements of the money market, which had each been regarded as low risk separately, which would eventually ruin the real economy as well. In other words, the doubt arises whether a global financial regulatory organization equipped with a wide competence and an arsenal of tools will distort rather than correct the market processes.

As regards the threats inherent in global governance with regard to the curbing of national competence, it should be pointed out that participation in each international coooperation is the voluntary decision of the individual states. From the experience gained in integration and internationalization to date, it can be concluded that international organizations with wide competences have basically been established in those areas where international regulation results in more efficient solutions for the individual states than the national framework. The European process of integration is an excellent example for this, which shows that the states have already made up their minds on the regional level to establish international regulatory institutions in the area of controlling monetary policy, bank regulation and financial services. This seems to be a followable path for the totality of the developed and rich economies as well, even if there is no single currency to replace the national currencies but a reserve currency consisting of the combination of international currencies will dominate the money supply (technically, this has existed

for several decades, as SDR established by the IMF). Even if there is no single prime rate, internationally harmonized decisions may be made. Obviously, only those national money markets which may incur risks to the global money market are worth involving in even tighter cooperation than that of today.

However, it is absolutely improbable that the states should establish not an international but a supranational financial regulator, one that is detached from the representation of the national interests and delegates. There is no willingness to do that at all. Not even the European Central Bank, which has the widest competence, and is a non-state level financial governance organization can be considered supranational, as in its Governing Council, which is responsible for making the decisions, besides the independent chairman and vicechairmen, the president of the national bank of each member state in the eurozone represents the national interests.

What seems to be more probable in the foreseeable future is the strengthening of the national financial supervisory bodies. It is not their authorizations that will be extended because they are wide enough but not appropriately utilized, but the tools and drivers of executive efficiency will be strengthened. It is a double institutional problem that should be resolved. On the one hand, there is a "principal-agent" problem, according to which the U.S. government authorized SEC to execute comprehensive control, to get the players of the economy comply with the regulations, to issue warnings and to launch actions against those who violate the rules. However, it seems like so far, there had been nothing to encourage SEC to act with utmost prudence. In this respect, it is practically a stricter accountability and control of SEC that could improve the efficiency of prevention. The other institutional problem is a simple increase of capacities, which first of all means headcount increase and

the development of forecasting models focusing on the supervision of the financial markets and forecasts related to them.

On the international level, harmonization is more conceivable than a global controller, which had already been applied in the EU's system of financial supervision, the point of which is that the national supervisory authorities mutually recognize the efficiency of each other's supervisory activities but in return, they also give each other strict guarantees to ensure genuinely efficient operations (see EU single licence in the bank sector). In 2009, each government is dealing with the quick fixes and is managing the economic recession but in the economic disputes, inquisitions about the responsibility of the supervisory bodies have already commenced. What is more, the U.S. Congress is in the process of calling the senior managers of SEC and FED to account. After the crisis, new action plans on the regulation of financial services are likely to appear both in the EU and in the USA in order to strengthen regional/national level supervision.

SUMMARY

The 2008 U.S. and the 1989–2003 Japanese failures of economic policy are excellent illustrations of the phenomenon that delayed recognitions and responses by the decision-makers, on the one hand, gradually eliminate the space for movement and effectiveness arising from the tools of the economic policy. On the other hand, through these delayed responses (the excessively belated anti-inflationary measures), economic policy misleads the market, the players of which can accommodate to the new situation at the time of the delayed adjustment only by making significant sacrifice. The interest rates that decreased to the zero level as a result of the procrastination annulled the anti-cyclical room to maneuver inherent in the interest rate

decisions, thus practically there was no other monetary solution left for stopping the deflation that emerged simultaneously, and which further strengthened the recession.

It is also an important conclusion to be drawn that the institutional supervision of the money markets is not to be neglected. The improvement of institutional regulation and making rules stricter are unavoidable. Although it is true that doubts may arise about the durability of this, as numerous earlier regional or global financial crises had made the institutional regulators realize that the strength of financial supervision was a key success factor in avoiding crises. The last examples that cast light on it were the 1997 Thailandian crisis and the Latin-American crises of the 1990's.

It becomes absolutely clear from the U.S. financial crisis that errors in the economic policy, the corporate information system and the institutions may also occur independently from each other, while they jointly undermine and destroy the global market.

It is increasingly clear that the stability of the global money market made up by the national markets is to be regarded as a global public asset or public service, this is why national regulation is not efficient, as this may create external impacts (for example, investment funds outside America were lost entirely or partially because the overheated U.S. real estate and mortgage loan markets). In other words, it would be necessary to assign the "ownership" of the money market supervisory services to a global level, by following the recommendation of the Coase school of ownership (Mátyás, 1996) that can be applied in the international organizational theory, i.e. to establish an international financial supervisory system and to develop uniform international standards in the area of regulation. These needs were identified in relation to the American crisis as well but the willingness of the states to implement these ideas is scarce as yet.

NOTES

¹ A liquidity trap means that speculative money demand siphons off all the cash amounts, independent from the evolution of the interest rate, the flexibility of the monetary demand function has become almost infinite, since speculation counts not only on the current interest payment but on the future inter-

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² According to FED's internal calculations, in May 2009, a -5 percent central bank base rate would be necessary (the daily Napi Gazdaság, April 27, 2009).

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