

Miklós Losoncz

# *The U.S. credit crisis and its implications on global economy*

*Stemming from the subprime mortgage market, the credit crisis started early August in 2007, and it was not before long that it spread to other segments of the U.S. and global equity and financial markets. The crisis has, either directly or indirectly, affected the financial sector and real economy of all countries that are steadily embedded in world economy. At the same time, inflation pressure is rising due to high energy and food prices and other factors. The Federal Reserve, the central bank of the United States, now faces, along with other central banks, the conflict of risking accelerated inflation while fighting recession, whereas actions against inflation could increase the probability of economic slowdown. Against this background, central banks are contemplating which of the two “devil’s alternatives” carries the least risks and implications. The measures taken by the Fed in recent months have been aimed at avoiding recession. The rest of the world cannot escape the impacts of the financial crisis and the growth deceleration or slowdown of the U.S. economy, either.*

*The first part of this essay exhibits the reasons and phases of the credit crunch, and also the crisis management requirements. The second section provides an overview of measures taken so far to tackle the crisis and their limitations. The third part analyses the effects of the credit crunch on global economy and Hungary, and the fourth chapter offers some general conclusions.*

## PHASES OF THE FINANCIAL CRISIS

Financial crises are an inevitable phenomena of capitalism, inseparable from it. The end of each financial crisis sows the seeds of the next one. One of the explanations is offered by American economist *Hyman Minsky's financial crisis model*, which consists of seven stages.<sup>1</sup> The first stage always starts with some misalignment or changes, representing an event that changes people's expectations of the future. Subsequently, in the second stage, prices start rising in the sector involved. The third phase is characterised by borrowing with favourable conditions, also supported by so-called financial innovations. The fourth stage is dominated by overdemand when the market depends on supplementary demand generated by major “suckers”. The fifth stage is euphoria when less-informed customers also demand a part of the wealth already obtained by those before them. They laugh at warnings given by those crying balloon – prices completely detached from real economy basis – because the projections of such sibyls are not coming true for long (thus the balloon is inflated even more). In the sixth stage, insiders take their profits. The seventh phase is of a sudden sobering. But it's too late: Many have burned themselves. This model showcases common and general features of financial crises. Of

course, reality is much more complex, as each crisis is different.

■ The *first phase of the current cycle* started in the early 2000s when interest rates fell across the globe for reasons not discussed here. In the United States between 2001 and 2003, low interest rates did not encourage investments, because there were significant surplus potentials in the economy. Instead, borrowers used low-rate loans to refinance mortgages, purchase new real estates, and finance consumption. This assessment is made somewhat more detailed by a substantial 10-percent increase of real estate prices back in 2006 when the 6.5-percent U.S. prime rate was regarded high. Consequently, this powerful price increase can rather be attributed to a speculation momentum, which had made its mark before the wave of prime rate cuts.<sup>2</sup>

■ In *the second stage*, mass real estate purchases on low-rate loans caused the prices of homes – and more generally, those of real estates – to balloon first in the United States and then in other countries. In real terms, home prices in the United States increased by 86 per cent between 1996 and 2006.<sup>3</sup>

■ In *phase three*, lending was encouraged by so-called financial innovations, as well. Mortgages, backed by homes and real estates as collateral, were 're-bundled' by lenders, often as very complicated financial instruments, and sold to other investors. (It is to be noted that many experts question the innovative nature of these designs). Consequently, risks of services provided by them were transferred to others, as these mortgages were gobbled up by banks investors across the globe. In this stage, real estates were purchased on loan on a mass scale not only for own use but also for speculation purposes.

Borrowing activities also include *carry trade* when market players raise loans in a low-prime-rate currency (the Japanese yen, for instance) and invest them in instruments denominated in

high-interest-rate currencies (New Zealand dollar, Australian or U.S. dollars, for example), or in the commodities markets, or in high-risk, high-gearing speculative transactions in risky markets (developing or emerging countries). Carry trade contributed to the development of bubbles on FX markets at a significant extent (causing significant depreciation for the Japanese yen and an excessive firming for target currencies, including New Zealander and Australian dollars), and also inflated stock market bubbles.

Beside other factors, low interest rates also encouraged investments in futures in commodities and energy markets (oil markets, predominantly). In addition to traditional market players, institutional investors (mostly investment funds) also emerged in these markets, and at a smaller extent individual speculators also played the trends. Futures contracts for crude and heating oil as well as indices became separate investment departments. Speculation on mercantile and energy markets – not independently of price developments of underlying products due to fundamental reasons – also bloated prices, although experts have yet to reach consensus regarding the extent of its role.

■ In *the fourth phase*, lenders were offering property-collateral loans with the reasoning that real estate prices were going to increase faster than loans costs, thus loans could be refinanced later by other loans, perhaps with better terms and conditions. Even lenders with a more aggressive approach thought borrowers would not become insolvent, because the price increase of their real estates, serving as collateral, would not jeopardise loan repayment (provided borrowers have income to pay instalments).

■ It was in *phase five*, the time of euphoria, when subprime mortgages appeared as financial intermediaries provided loan even to customers that did not have regular income to meet payment even on interest.<sup>4</sup> *Warren Buffet*, one of

the most successful U.S. investors ever, called subprime mortgage instruments 'financial weapons of mass destruction'. Effected mostly on loans in hopes of high returns, high-risk and high-leverage investments of hedge funds bore fruit in this stage of euphoria.

■ After that came *stage six* with profit taking actions and falling market prices to be followed by *stage seven*, the sobering, from the second week of August 2007. This has also been called a Minsky moment, when lending channels dried up for bad and good debtors alike, and banks no longer wanted to provide loans for one another due to a confidence crisis. As things go in such cases, and also driven by the internal logic of markets, panic swept financial markets. To cover their losses, market players had to sell other, non-loss-making, financial assets at any price. Problems emerging in the subprime mortgage market immediately spilled over to other risky segments of the financial market, including the market of prime mortgages, commercial real estates, vehicle loans, bankcards, stocks, foreign exchange, and corporate loans, as well as *monoline* insurers that guarantee principal and interest repayment on bonds should the issuer default. go bankrupt. The market of these latter companies are called Credit Default Swap market (CDS). At the same time, demand for U.S. government securities surged as they are generally regarded as low-risk or no-risk instruments.

Receiving less attention because it affected a smaller scope of market players and faded out without visible tensions, a significant percentage of carry trade positions were also terminated. Futures commodities and energy markets too were impacted by the sobering at a lesser extent.

The present crisis affects a wider scope of markets and market players than the financial crisis in 2000/2001 when the tech bubble burst. Contrary to the calamity in 1997/1998, this crisis was born in leading economies of the developed world and not converging countries, pro-

jecting a harder and longer period of time until it is resolved.

## REASONS OF THE CRISIS, REQUIREMENTS OF CRISIS MANAGEMENT

*There were three interacting factors at play behind the crisis.* The first, falling real estate prices that triggered a slump in home construction. This alone could cause the U.S. economy to tumble into recession. The supply of residential property currently exceeds demand by 200,000 to 300,000 homes. This has to disappear for the lending market situation to improve. Home prices should drop by 20 to 30 per cent. The *second* factor is the *problems of the subprime mortgage market* that triggered the lending market turmoil. The third, a *slump in mortgages and stricter terms and conditions for refinancing existing loans*, which affects the economic growth of the USA via a decline in retail consumption.<sup>5</sup> Investments in real estate sector and cash mobilised mortgage refinance accounted for the economic growth of the past six years at a rate of two-thirds and one-third, respectively.<sup>6</sup>

The magnitude of these problems is well reflected by the fact that the subprime mortgage meltdown has affected 2 million low-income debtors with risky credit rating. The total of their debts is estimated at USD 500 million to USD 600 billion (the entire mortgage portfolio mounts to USD 10,000 billion). The size of the U.S. bankcard market is identical to that of the prime mortgage market. The CDS market is estimated at USD 45,000 billion. The monoline insurance market totals at USD 2,400 billion. There are no accurate data about the losses of financial intermediaries on the back of the mortgage market crisis, but conservative estimates indicate USD 400 billion. According to the International Monetary Fund, losses may reach USD 1,000 billion.

*As the most significant new feature of the current crisis, financial intermediaries have spread their risks across the financial system by various derivatives products (futures instruments, etc.). This is also called 'shadow banking sector', a financial sub-market consisting of designs and structures operated on capital gearing that came about on the wake of the upswing of the real estate market and are outside the control of regulatory authorities and deposit insurance.<sup>7</sup> Devised in the scope of financial innovations, the order of the capital-gearing futures and other speculative positions is identical to that of the U.S. GDP.*

In the third phase, financial intermediaries reaped significant short-term profits by re-bundling risks, but in well-working market it does not necessarily mean lower risks for the new product than for the underlying product, while diversifications can only be successful if there's no correlation between risks (but there is). Ultimately, macroeconomic shocks affecting real estate prices and borrowers' repayment ability do have an impact on the probability of bankruptcies in the mortgage market.<sup>8</sup>

Earlier, when debtors defaulted in loan repayment, their mortgages were rescheduled, because this solution was less disadvantageous for both the debtors and the lenders than foreclosure of the mortgaged real estates. Securitised debts, however, cannot be rescheduled. Undoubtedly, individual risks of financial intermediaries were eliminated (mass bankruptcies in the banking sector were not to be expected), but risks in the entire financial system were not avoided, and, consequently, the risks in the entire financial system must have increased. Recovery from the crisis is made harder by the fact that neither the volume nor the location of derivative financial instruments is known with any accuracy. Termination of speculative positions also take a longer time, increasing the probability of a long crisis.

*The conclusion that the crisis has been the*

*result of errors in the financial system can also be drawn from the Minsky model: While a liberalised financial system gives players the opportunity to reap outstanding profits, it generates errors that strengthen each other. Lack of stability is an inherent quality of an unregulated lending regime, and the system gravitates toward instability. It allows a small number of insiders to reap giant profits while generating huge losses for millions.*

*According to another explanation with a smaller scope than the Minsky model, and therefore being more subjective, the crisis is attributable to the Fed's lax monetary policy. Granted, the U.S. benchmark rate had been negative in real terms in the 31 months preceding April 2005. A similar phenomenon had last been seen between 1974 and 1977, as a consequence of which the biggest inflation wave of the 20th century swept the United States.<sup>9</sup> However – as already mentioned herein – real estate prices had started rising before monetary policy was eased.*

*According to a fundamentalist approach, the crisis was basically triggered by capital exported from Asian converging countries (China, mainly), oil exporters, and some developed countries that had had a surplus in current accounts.<sup>10</sup> The USA's huge current account deficit – stemming from the consumption of low-saving, credit-bound households and also from public overspending – was financed by this global surplus in savings. The magnitude is well reflected by the fact that three-fourths of the global surplus in recent years has been absorbed by the U.S. economy. The global surplus not only reduced real interest rates but it required substantial demand for deposits in capital importer countries, the USA predominantly, which had partially been present already as a lively household consumption.<sup>11</sup> The Fed could have managed to avoid the lending market boom that fed the financial crisis only by starting a long recession or economic stagnation. The Fed had no intention or legal author-*

ity to do that. The only action to offset the capital influx was the expansion of loan supply.

As for crisis management, it is among legal objectives and responsibilities of central banks to ensure macroeconomic stability (attaining and maintaining price stability being the most important component) on the one hand, and to sustain the operation of the financial system on the other hand. Central banks' obligation to reach their decisions by keeping the demands and requirements of real economy in view stems from the first objective.

As for the second objective: In line with the reasoning preferred by *Walter Bagehot*, a 19<sup>th</sup> century British economist (who had been the editor of *The Economist* for 17 years), central banks are not tasked with rescuing certain institutions from failure but with maintaining the liquidity, or solvency, of the financial market. The most efficient tool available to central banks is to allow the banking sector to raise unlimited loans at a penalty rate (which, of course, is higher than the current prime rate). Lack of penalty rate (and also preferential rates or even prime rate cuts) or saving certain institutions from bankruptcy leads to a negative precedent, suggesting to market players that the central bank will rescue those in dire straits. Nowadays, it is regarded a *moral hazard*, in other words the price of market players' risks are paid by the community. At the same time, nothing justifies that others – taxpayers, ultimately – should take responsibility for market players' bad decisions.

## MAIN FEATURES, POSSIBILITIES, AND LIMITATIONS OF CRISIS MANAGEMENT

Crisis management began spontaneously and relatively early by sovereign wealth funds (SWFs). Established by oil producers and Asian countries with substantial current account surplus, these funds manage govern-

ment capital, making investments in high-return assets (stocks, and other financial and real assets). Since the beginning of the subprime mortgage meltdown these funds have invested USD 69 billion in banks involved in the crisis, saving Citibank and Merrill Lynch from bankruptcy, among others. The capitalisation of the 29 sovereign wealth funds is estimated at USD 2,900 billion, which is less than 2 per cent of the total of securities in circulation across the world, but higher than *private equity* and hedge funds.<sup>12</sup> As opposed to hedge funds, SWFs are not necessarily driven by short-term profit objectives. At the same time, the operation of these funds are not transparent, their investment objectives are not public. Their managers are seldom obliged to report to regulators, shareholders, or voters, but at the same time they do have political clout over the governments of their investment targets.

### Possibilities

*When the U.S. subprime mortgage crisis had erupted, the Fed and the European Central Bank increased interbank markets' liquidity by various aligned techniques* in an attempt to offset the implications of the confidence crisis. The series of measures implemented by them and other central banks intended to ensure smooth operation for the financial system and to prevent the turmoil of financial market from spilling over to real economy. The British central bank aimed to meet the requirements defined by *Walter Bagehot* when it was willing to improve the liquidity of the interbank market by loans at penalty interest rates and had no intention to save financial institutions from going under. This attitude, however, was short-lived. Fearing a cascading panic, the Bank of England and the UK government saved Northern Rock, a medium-sized British mortgage bank. Banks affected by the financial crisis were thrown a lifeline

in Germany too. Based on past experience, additional decline of confidence in the financial sector can trigger recession even if there's no recession in sight. The Fed did not heed the recommendations mentioned here, lowering the federal funds rate (the interest rate at which commercial banks lend to other banks) gradually to 2 per cent from 5.25 per cent. The European Central Bank did not respond to the crisis by lowering the prime rate.

*Pressure exercised by financial intermediaries and political players must have played a part in the Fed's prime rate cutting actions.* The expected favourable impacts of the prime rate cuts on real economy will manifest themselves with a lag of 12 to 18 months, at the time of the presidential elections in 2008 in a best-case scenario. Against the current backdrop in the United States, the monetary easing will have expansion impacts. Consequently, a relaxed monetary policy encourages mortgage refinancing by making it easier, and contributes to the U.S. dollar's easing against major currencies, bolstering exports as a result, and also lends financial institutions strength.<sup>13</sup> Not the least, as a result of central bank interventions (including prime rate cuts) the peak of tension in global financial markets has undoubtedly been abated, but it's too early to say the crisis is going to be over soon.

*By the powerful prime rate cutting action, the Fed has signalled market players that it is doing everything it can to avoid recession.* Also, this step is an indication that the Fed is fearing recession more than inflation. (The European Central Bank's monetary policy has to focus on price stability solely). Core inflation, calculated without food and energy prices, was 2.4 per cent in December 2007 in comparison to the preceding months, but the full inflation rate was even higher. Under regular circumstances, this may have given rise to concerns, but not now. Amid dwindling real estate prices and recession fears, the development of a prices/wages spiral

is highly unlikely, and rising food energy prices on global markets is outside the power of the U.S. monetary policy.

The assessment that the loan intensity of the U.S. economic growth has increased significantly must have been behind the prime rate cuts. For a long time after 1950, one dollar of GDP growth generated USD 1.50 of loans. This ratio increased to USD 3 dollars in the '90s, but surged to USD 4.50 by 2007. At the same time, the debt portfolio of the financial sector also expanded. Also, 70 per cent of the USD 4,500 billion debt increase between 2003 and 2007 comprised loans with collateral based on price-sensitive real estates or securities (stocks, for instance).<sup>14</sup> However, declining prices of underlying products may jeopardise the financial sector, and through it, real economy as a whole. By creating appropriate liquidity (or, more simply, pumping cash into the system), the Fed wants to make it possible for borrowers to finance their debts. This step makes forced selling of collateral securities and real estates unnecessary, which would otherwise trigger additional financial disruptions. Also, it is the express objective of the Fed to restore confidence in lending.

### Limitations, risks

*Reducing the Fed's prime rate is insufficient in itself to decrease imbalance accumulated in the economy.* The impacts of a prime rate cut manifest themselves in stock markets first. However, the majority of analysts say American stocks are not cheap, and lower interest rates by themselves will not necessarily trigger a permanent and large-scale upswing in stock markets. The impacts of a prime rate cut come about in force 12 to 18 months later in economy, particularly in the corporate sector, including profits that define share prices in the long haul. Additional decline in U.S. real

estate prices is unavoidable. Also, it takes a longer time for lending markets to take down distortions accumulated in those 'seven years of plenty'. Secondary impacts (weak consumer demand, bad loans in the banking sector) are just beginning to show.

*The central bank's prime rate policy, however, has other limitations.* One of the most important, the central can only influence the price of loans, it cannot persuade banks to expand their loan supply. Due to losses incurred in stock markets and lending activities as well as increasing risks, financial institutions, irrespective of the prime rate, are expected to cut back their lending activities by making lending terms and conditions stricter, in other words they are avoiding risks. Not to mention the fact that households are focusing on reducing their debts – repaying their loans in other words – rather than borrowing more. In the corporate sector, prime rate cuts are only efficient when corporates run a large debt portfolio. This is not the case at all at the moment. In a recession or recession suspect environment, corporates do not start immediate investments when interest rates are falling unless they expect the interest rates of variable-rate loans to stay low for a longer term. But interest rates stay low only when there's no inflation pressure, or the central banks acts to curb it. That's not the case in the USA at present.

Central banks can influence the short-term end of the yield curve, the yields of long maturities are determined by financial and equity markets. Reducing short-term interest rates does not trigger lower rates for longer maturities, thus the yield curve becomes steeper. This is a natural phenomenon in times of recession, but excessive steepness in the yield curve means big problems for the central bank. The yields of securities with longer terms may increase further when bond markets are not confident enough in the Fed's commitment to reduce inflation. Additional yield increases for

the other maturities cannot be ruled out. Banks are profiting from this situation, because they raise short-term loans with lower rates which then they lend with low or no risks for longer terms. When short-terms yields are dropping and long maturities are rising, the banking sector earns risk-free profit. Against this backdrop, the greatest beneficiaries of a prime rate cut are not households or corporates, but credit institutions.

If this relaxed monetary policy keeps up long enough, cheap money travels from the financial sector to other segments of the economy, but it has a price: Higher inflation and lower buying power.<sup>15</sup> With time, the position of the financial sector improves so much that an all-out irresponsible lending upswing may begin.

The risks of monetary easing include the continuation of an extremely low savings level in the United States for an indefinite period of time, erosion of confidence in the U.S. dollar, and acceleration of inflation via the dollar's easing. A relaxed monetary policy could contribute largely to the restart of the aforementioned cycle of financial speculations and create financial bubbles, whereas real economic processes and inflation trends do not necessarily justify such an extent of prime rate reduction.

*Risks are not just domestic but international.* With the slow-down or slump of domestic demand, the USA's current account deficit decreases, which in turn reduces pressure on other countries to modify their real exchange rates, fiscal, structural and monetary policies, which forced the USA at a great extent to absorb the huge surplus savings of the world. Consequently, the key to resolving the crisis is not held by the U.S. economic policy alone. Other countries of the world, especially those running large surplus in balance of payments, should pursue an economic policy that allows the U.S. current account deficit to be reduced without causing any long-lasting decline in global economy.<sup>16</sup> International cooperation is

needed in the area of interest rate reduction, to hinder the U.S. dollar's easing, for instance.

Limitations of central banks' prime rate policy can be underpinned by with historic examples. Between 2004 and 2006, the Fed increased the prime rate, but it failed to cool loan demand supply off. The prime rate listed by the Japanese central bank was barely a notch higher than zero per cent in the 1990s and even for a long time after 2000, yet it did not encourage borrowing. Similarly, lending activities did not grow in Germany in the 1990s in spite of low interest rates. (This is one of manifestations of Keynes's liquidity trap).

Based on all the above, *economic policy decision-makers must not rely on monetary policy alone*. Unconventional crisis management methods are to be encouraged, including, for example, assistance for trouble-ridden homeowners in the United States (in the form of debt rescheduling, etc.) that purchased their homes on loans for their own use, and for speculation purposes. *Another component of crisis management – or rather, crisis prevention – is supplying market players, especially private investors, with appropriate information of investment risks.*

## Incentives

*It's wise to complement crisis management with well-aimed fiscal policy incentives* (tax relief, step-up in certain budget expenditures). The institutional background of it is intended to be fortified in the United States. A number of reasons can be listed in favour of a diversified approach, one that is building on monetary and fiscal policy alike:

① In a world where the impacts of economic policy measures are hard to estimate, the final result is less unpredictable when various economic policy tools are deployed.

② Families, bearing the brunt of recession, are burdened most directly by recession,

whereas monetary policy has immediate effect on financial institutions.

③ Deploying fiscal policy in crisis management spares monetary policy from cutting the prime rate, and therefore the pressure on the U.S. dollar to ease against major currencies will not increase further. Thus, inflation pressure through the FX rate and international instability in the wake of an easing dollar can be avoided – or at least lessened.

④ Relying partially on fiscal policy reduces the chance for financial bubbles to emerge on the back of low interest rates.<sup>17</sup>

⑤ Former U.S. Secretary of the Treasury *Lawrence Summers* mentions as an additional argument that the diversified economic policy mix is also backed by the intention of ensuring steady demand against decreasing consumer spending, because cutbacks in expenditures would cause additional decline in employment, and hence in income and consumption.

At times when recession looms on the horizon, *fiscal incentives are the fastest and most reliable tool to provide short-term stimulus for economic growth*. Applying them, however, requires great care, because using them at an inappropriate may inflict a number of side-effects. To be efficient, fiscal stimulus must be implemented *on time*. The relevant bills have to be passed mid-2008, and implementation shall start immediately. Fiscal incentives should be *aimed* at low-income individuals and whose income has dropped recently, and hence they are excluded from the lending market. Ultimately, fiscal incentives have to be decidedly and credibly *temporary*, meaning it cannot increase public sector deficit for more than one year from implementation. Summers says a USD 50 to 75 billion program, estimated to run for two or three quarters, would boost GDP growth by 1 per cent as a result of multiplier effects, while taking most of the burden off monetary policy at the same time.

Fiscal policy incentives may be especially important if the Fed uses up the ammunition of



its heavy weaponry in the near future by refusing to reduce the prime rate further and economic processes are not going as expected. Approved by the U.S. legislation, the USD 150 billion tax cut plan is not the ideal solution by far (why should it be, it's being done by politicians), but undoubtedly contributes to lifting some of the burdens off monetary policy.

As another component of crisis management, the interest rate of variable-rate mortgages is frozen for five years, impacting nearly 1.2 million borrowers. Estimates indicate increasing interest rates for USD 450 billion total of mortgages in 2008. The program is undoubtedly beneficial in the short term, but a lot of negative side-effects are to be expected in the medium term.

*Beside monetary and fiscal policy, regulation is also part of crisis management.* Credit reference agencies and regulatory authorities also played a major role in the development of the credit crisis. Credit reference agencies' conflict of interest was that they were paid by issuers of securities they appraised, not investors, and they were not accountable, because their assessments were regarded as opinions. One of the solutions suggests that investors should pay credit reference agencies; however, investor demand large enough for credit assessors to make ends meet is doubtful. The other solution would be to intensify competition among oligopoly credit reference agencies. Theoretically, credit rating could be decoupled from regulation, and investors would assess bond risks on the basis of market information and expert views, like in the case of stocks.

Also contributing to the crisis, the incentive system of banks left the rules of risk management and prudence unobserved in non-regulated segments when rewarding agents. Risky deals were accounted by many banks as off-balance-sheet items.

The monetary and fiscal policy of the United States in themselves, without international col-

laboration, are unable to remedy the worldwide imbalance behind the financial crisis. And international cooperation has just begun to show some outlines.

## GLOBAL ECONOMY IMPACTS

According to *Soros György* [George Soros], the present crisis marks the end of the era fed by loan expansion that had been based on the U.S. dollar as a reserve currency. The manoeuvring room of the U.S. monetary policy is narrowed by signals indicating the rest of the world's unwillingness to accumulate dollar reserves any more. In addition to the Fed having to tackle inflation speed-ups stemming from rising prices of food, energy, and commodities, the U.S. dollar will be under pressure (and the yields of long-term bonds will rise) when the prime rate is dropped below a certain level. George Soros says this turning point cannot be defined, but when it is reached the Fed is no longer able to stimulate the U.S. economy.<sup>18</sup> Because of a low benchmark rate and low market rates, the U.S. dollar is susceptible to becoming a carry trade currency (if it has not already; and considering futures interest rates it has assumed such a function), which projects additional easing.

Soros says that due to the developments in the USA, the developed world more or less cannot avoid a downslide. China, India, and some oil producing countries are in a very powerful opposite trend. Consequently, *the current financial crisis will cause not so much a worldwide recession than a radical rearrangement of global economy* to the benefit China and other developing countries and at the cost of the United States. The danger in this scenario is that political tensions inherent in this rearrangement – including the USA's protectionist approach – may cause turbulence in world economy that have the potential of pushing it into recession.

At the time when these pages are being written, February 2008, the slowdown in the US economy is evident, its recession is not even though signals are mushrooming. In this respect, *one of the questions is if the U.S economy falls into recession, how long will it last?* Some reference point is provided by the fact that the average duration of post-WWII recession cycles in the USA lasted 10 months. In those 18 earlier crises, output dropped by an average 2 percentage points, and it took economic growth two years to return to normal. In the five most severe crises, output dynamism plunged 5 percentage points in comparison to the preceding peaks, and an upswing did not emerge until three years later.<sup>19</sup> According to the International Monetary Fund, crises stemming from the collapse of real estate markets have been less frequent after WWII, but lasted twice as long (2.5 years on average) than equity market crises, and caused output loss amounting to 8 per cent of GDP. Updated in January 2008, the IMF's global economy projection expects the U.S. GDP growth to drop to 1.5 per cent from 2.5 per cent in 2007.<sup>20</sup> The forecast published in April 2008 already counts with 0.5 per cent in 2008. Considering the fact that recessions are hard to forecast, international organisations and economic research institutions predict down-pointing risks of growth, however the IMF has recently indicated the possible recession of the US economy.

■ As for the course of the crisis, there are three most likely scenarios. According to the *optimistic scenario*, the recession will not last long and the GDP will drop at a small extent only. The *second-best* case indicates a short recession with a larger drop in output. The *pessimistic scenario* forecasts a longer recession (the last longer recession started in November 1973 and lasted until March 1975). Should U.S. subprime mortgage debtors go bankrupt and only half of the USD 1,300 billion is recovered, this USD 650 billion loss would represent 5 per

cent of GDP. This correlates to the smallest of the five great recessions.<sup>21</sup> The hazard of a longer recession is linked to tensions in the CDS market; insolvency of corporate bond issuers may cause liquidity problems and financial crisis in the otherwise unregulated market, also affecting real economy negatively.<sup>22</sup> At the same time, problems have cascaded from the mortgage market into other segments. Declining real estate prices affect the solvency of many mortgage holders, and other spill-over effects are to be expected.

Signs suggest that the majority of experts are bracing for a recession in the USA that promises to be deeper and longer than earlier crises. The reason: *Two bubbles burst, one in the real estate market, and the other, in the lending market, and it's not a liquidity but solvency crisis.* The accumulated imbalance is also more severe than in 2000 when the bubble in the market of tech shares burst.

■ The other issue is *how the rest of global economy is affected by slowing growth or recession in the United States.* There are two conflicting views present in the media and in specialised literature. One says converging countries profit from globalisation, the other, recession in the world's largest economy has no or little impact on them. Earlier, equity and financial market have priced in the second view, but it is changing at present. For instance, the Baltic Dry index, and index covering dry bulk shipping rates, dropped by 40 per cent early 2008 in comparison to last year's peak, underpinning the fact that global economy cannot avoid the effects of disruptions in the U.S. economy.

International impacts of U.S. trends differ for financial markets and real economy. In the wake of the general, worldwide intensification of risk aversion, individual countries or groups of countries cannot decouple from the turmoil and reshuffling in U.S. equity and financial markets. If U.S. investors are fleeing from risky financial

instruments (stocks, foreign exchange, commodities indices), why should it be assumed that market players act differently in equity and financial markets where globalisation has reached the highest level?

According to calculations made by the International Monetary Fund, the ratio of the USA in the world's equity market capitalisation had increased to 44 per cent by the first half of the 2000s from 33 per cent in the second leg of 1990s. The ratio of U.S. assets held by the residents of the Economic and Monetary Union in the U.S. GDP had increased to 14.1 per cent by 2004 from 3.1 per cent in 1997. In respect of Japan, these ratios were 15 per cent and 7.8 per cent, respectively, and 21 per cent and 11.9 per cent in the other industrialised countries.<sup>23</sup> Also according to calculations published by the IMF, in terms of the averages measured in the periods from 1995 to 2000 and from 2000 to 2005, the median correlation coefficient, calculated on the basis of 21 country pairs of the USA and the G-7<sup>24</sup> increased to 0.69 from 0.55 in terms of stocks, and to 0.8 from 0.54 in respect of bonds. These coefficients aren't stable at all. As a common feature, they increase when financial markets decline. *The asymmetry of interaction between U.S. and European financial markets is also worthy of mention.* Twenty-five per cent of the movements on European markets are attributable to the U.S. markets (and stock account for 50 per cent of that), whereas vice versa (European markets influencing U.S. markets) this ratio is 8 per cent only.<sup>25</sup>

Banks' lending propensity is weakened in Western Europe as well, undoubtedly attributable to the European banking system's exposure to the U.S. subprime mortgages, the re-accounting of off-balance-sheet items in the ledgers; the losses incurred on securities deals, etc. There is, however, a significant difference: With the exception of the United Kingdom, the banking system's prominence in economic growth is lower in the European Union than in the United

States. Funding costs, however, have undoubtedly increased around the world because of higher global risks. In real economy, business confidence indices in the European Union are moving hand in hand at an increasing rate with those in the United States. Consequently, *deteriorating business confidence in the United States makes its mark in the EU, too.*

■ *The USA's weight in global imports and world GDP* (the latter at purchasing power parity, or, in other words, purged from distortion effects of exchange rates and price regimes) is around 20 per cent in either scope. Theoretically, economic growth in the rest of the world could offset the decline of U.S. demand in case of a recession. According to IMF data, the GDPs of the USA and developed industrialised countries are not correlated closely, recording a coefficient of 0.25. According to a Citibank analysis, none of the U.S. recessions since the 1970s has caused any plunge in the growth rate of global economy, just smaller or bigger slowdowns.<sup>26</sup> An IMF forecast indicates world economy growth rate to drop to 4.1 per cent, or more recently to 3.7 per cent in 2008 from 4.9 per cent recorded in 2007.<sup>27</sup> However, the adverse effects of U.S. recessions have traditionally been larger on foreign corporate profits and share prices.

There are no subprime mortgage debtors in the European Union, nor there are substantial gaps in current accounts or bubbles in real estate markets; the real estate markets of Spain, Ireland, France, and Italy are cooling off. However, the Economic and Monetary Union has been hit by external shocks related to the U.S. mortgage crisis, such as a strong euro, or rising energy and food prices in global markets. The balance of payments of the Economic and Monetary Union is balanced, whereas the USA runs a steady and large deficit. This is explained by Germany's surplus corresponding to 6 per cent of its GDP – and reflecting corporate savings mostly – which offsets other EMU

economies' gap. In the other EMU countries, corporations finance their investments on loans at an outstanding rate, as a result of which investments are sensitive to lending market conditions. Excluding Germany, the finance gap of the corporate sector (the difference between sales and expenses) was nearly 6 per cent of GDP in 2007. Corporations' dependence on loans is remarkable because banks play a more prominent role in corporate funding than in the United States.<sup>28</sup>

Barring financial shocks, GDP in the European Union would grow by 3 per cent in 2008, supported by demand on the back of consumption generated by an upswing in exports and business investments. Due to external shocks, however, the expansion rate is expected at 1.5 per cent only, with additional strong risks pointing downwards.<sup>29</sup> (The IMF also projects a 1.5-percent growth rate). The Economic and Monetary Union is able to recover rapidly from such shocks. Many European corporations have outstanding profitability, large orders; and the governments of many European countries have reduced their public finance deficit at a large extent.

Among converging Asian economies, the USA-oriented exports of Singapore, Hong Kong, and Malaysia account for 20 per cent of their respective GDPs, whereas those of China and India are just 8 per cent and 2 per cent, respectively. The exposure of the other Asian economies to the U.S. boom spreads between these two extremes. With the exception of China, banks in Asian countries are not exposed to the American mortgage crisis. The decline in U.S. demand for imports is partially compensated by domestic demand, and partially by exports directed to other Asian countries. Corporate balance sheets are healthy, there will be no need to reduce investments, forex reserves are large, public finance balances have surplus. In case China's export momentum declines, a lot of investments will make losses, and there's no

guarantee for a smooth switch from the export-driven growth path to one based on domestic consumption. A growth deceleration or recession would affect global growth adversely by all means, especially other converging economies. Overall, the U.S. crisis could reduce the GDP growth of converging Asian economies by 1 to 1.5 per cent, which, however, could still be 6 to 6.5 per cent in 2008.<sup>30</sup>

■ *Central and Eastern Europe is affected adversely by the worldwide re-assessment of risks.* The yield premium of Credit Default Swap<sup>31</sup> between June 2007 and January 2008 increased by 26 basis points in the Czech Republic, 44 bps in Poland, 68 bps in Hungary, 86 bps in Russia, 111 bps in Romania, 151 bps in Serbia and Ukraine, and 220 bps in Kazakhstan. The increase of CDS yield premiums was highest in countries with high inflation (Ukraine, Russia, Kazakhstan) and/or large current account gap (Serbia, Romania).<sup>32</sup> This indicates an increase in external funding costs, primarily in countries that run high external and internal imbalance. According to an IMF forecast, GDP growth of Central and eastern European economies will drop to 4.6 per cent in 2008 from 5.5 per cent in 2007.

### Crisis impacts in Hungary

*To date, the credit crisis has hardly affected Hungary, because Hungarian financial institutions and their foreign parents have had no or just a few U.S. mortgage securities. Also, sub-prime mortgages similar to those in the United States are nonexistent in Hungary. Hungarian credit institutions with mortgage activities have conducted prudent lending activities. While in the case of mortgages without income verification the loan value runs at 90 to 100 per cent of the appraised value of the real estate in the USA, the corresponding ratio is 60 to 70 per cent in Hungary. This is partially attributa-*

ble to the fact that rapid collection of accounts receivable is not supported by the current Hungarian legislation, holding back banks from higher loan-to-value ratios. In the Hungarian real estate market, price increases have not detached from fundamentals, as prices have not been driven by speculation. Real estate prices have matched inflation in the past two to three years.

*Rising debt ratio of retail customers represents the main problem.* Loan demand of households has decreased a slower pace than their income. Also, they raise their loans in foreign currencies exposed to interest rate and foreign exchange rate risks. This increases repayment risks. Hungarian credit institutions are under pressure by their foreign parent banks to grow, which may lead to loan quality deterioration in certain cases.

However, *neither is the Hungarian economy able to evade indirect effects of the crisis.* Such indirect effects included a significant capital extraction by foreign investors from the Budapest Stock Exchange, and also the forint's easing against the euro. A positive sign, however, foreign investors have not extracted capital from the Hungarian market of government securities; on the contrary, the portfolio of government securities held by them increased during the crisis.

As a consequence of the credit crunch, worldwide liquidity is expected to decrease, as a result of which the Hungarian scope of financial intermediaries, and through them, Hungarian enterprises, will have to pay more for foreign funds. Becoming increasingly common, risk aversion raises the yields of forint-denominated financial instruments, which has already been evident in the forint's depreciation against the euro and in the increase in the yields of long-maturity government securities.

Based on economic and financial indicators (decreasing public finance overspending and current account deficit, namely) *Hungary's*

*external vulnerability is rated medium.* Hungary is threatened by financial crisis phenomena not directly but as part of global processes as investors' confidence gets undermined in certain converging countries (the Baltic states, Bulgaria, Romania, Turkey, former Soviet republics), and substantial amount of capital is extracted. Due to investors' block approach, the effects could be felt in Hungary, as well. The question of how big a protection the European Union will provide in such a critical situation has yet to be seen.

*The Hungarian real economy is affected by the U.S. credit crisis predominantly by a slowdown in the economic growth of its main markets,* namely the European Union and the Economic and Monetary Union, and therefore the growth pace of their demand for imports slackens, which makes it harder for Hungary from the aspect of external conditions to fuel economic growth which has fallen on the back of correction measures implemented in 2006 and 2007.

## SUMMARY, CONCLUSIONS

Processes leading to a financial crisis are mostly side-effects of the progress and development of real economy; predominantly of psychological origin. Without greed to earn more and feat of losses, however, risks would be avoided at a greater extent, which, in turn, would slow economic growth and reduce the efficiency of resources allocation. According to former Fed governor *Alan Greenspan*, speculation bubbles are important fuel for economic development, which monetary regulators cannot and would not rein. Empirical analyses have shown that countries with liberalised financial markets develop more in the long run. Consequently, reducing the level of integration into the global financial market would cause growth losses.

That said, the extent does matter. The short term losses (unemployment, income loss)

caused by financial crises and economic turmoil stemming from them put considerable burdens on households. In Europe, stability is valued, and governments and economic policy-makers strive to spare market players from boom swings seen in the United States even at the price of allowing economic growth and technological and structural progress fall behind those of the United States.

Securitisation (transferring debts into securities) as well as the resulting scores of risk management and speculative financial instrument with capital gearing (called financial innovation) played an eminent role in the development of the subprime mortgage meltdown. These securities and sometimes the related derivatives were sold to a large number of domestic and international investors in order to diversify risks, often without identifying actual risks. Securitisation reduced individual banking risks related to lending, but did not make them disappear, and – due to lack of transparency and regulation – even increased the entire financial system's exposure to global shocks. The financial system was split into a regulated and traditional section and a dynamically growing, non-transparent and unregulated segment. The reduction or elimination of this asymmetry in regulation would also make it necessary to reconsider the operation of credit reference entities. Regulatory authorities should be more stringent in forcing financial intermediaries to modify their sales-at-all-costs system and to explain the risks of instruments to customers in higher detail than ever.

When managing the U.S. credit crisis, it wasn't only recession hazards the Fed had to face but also an intensifying inflation pressure related to internal and external shocks (rising crude and heating oil prices on global market, the U.S. dollar's depreciation against major currencies, slowing output, etc.). Tackling this twin challenge requires two conflicting measures. In this target conflict, the Fed opted for recession pre-

vention, believing recession was the smaller danger. It is to be noted that the European Central Bank has no room for such deliberation; ensuring price stability is its responsibility.

In order to relieve monetary policy and eliminate negative side-effects of the crisis, fiscal policy has been appreciated, which can even be considered as the renaissance of Keynesian economics in an altered form. Fiscal stimulus has to have good timing, temporary impact, and accurate aim. The fiscal stimulus plan the USA launched did not meet these requirements. Deploying fiscal policy as a means of crisis management assumes long-term fiscal discipline, where public debt and public finance deficit shall be kept at a low ratio in terms of GDP (or a slight surplus in public finance at times of economic boom).

Accumulated in economies with current account surplus (oil producers and industrial goods exporters), state-run (sovereign) asset funds specialised in FX investments have played a significant role in managing the U.S. financial crisis. Acquiring stakes in financial intermediaries with liquidity problems or already on the verge of bankruptcy, these funds made a short-term contribution to prevent the financial crisis from spreading and to reduce the pressure peak. The targets of these funds – precisely because of being under state ownership – cannot be arranged around economic efficiency alone, and their operation is unregulated. Therefore, they might increase unsteadiness in the operation of the global finance system in the long run. This in turn draws the attention to the necessity of implementing regulations in respect of their operation.

The financial and economic effects of the subprime mortgage crisis are hard to quantify. On the hand, even the magnitude of the problem is unidentified; there have been no accurate figures of the impacted portfolio of financial instruments in the United States and the rest of the world. On the other hand, it is hard to esti-

mate the implications of the financial crisis on the U.S. economy. Thirdly, recession forecasts – the most unstable field of economic predictions – rarely hits bull's eye, requiring a generous amount of luck. On these bases, all international organisations could predict was just a deceleration in the U.S. economic growth with powerful negative risks.

Against the backdrop of globalisation, the rest of the world cannot decouple from the impacts of the U.S. credit crunch. Financial and equity markets have to brace for the most powerful spill-over effects, presenting themselves in the form of stock market movements (higher volatility, dropping share prices), increasing risk premiums, tighter lending conditions, and deterioration of business confidence. In the wake of the financial crisis, the economic growth of most countries has dropped. The

economic expansion of Asian converging countries have been hit lightest by the crisis. In Europe, economies with large public finance gap and current account deficit and/or high inflation are exposed most. Hungary's exposure is regarded medium-rate, a financial crisis will not affect her directly, only indirectly via a wider wave of capital extraction from converging or Central and Eastern European countries as a result of a panic in equity and capital markets. The protective umbrella offered by the European Union membership could mitigate implications. Driven by the U.S. credit crisis, the slowdown in the economic growth in the European Union, and the Economic and Monetary Union, hinders efforts to put Hungary's economy, which has decelerated as a result of economic policy adjustments, on a faster growth path.

## NOTES

<sup>1</sup> Martin Wolf: In a world of overconfidence, fear makes a welcome return, *The Financial Times*, page 9; 15 August 2007

<sup>2</sup> Robert J. Schiller: Can the bubble be stopped from bloating? *Világgazdaság*, page 20; 26 September 2007

<sup>3</sup> Robert J. Schiller: Can the bubble be stopped from bloating? *Világgazdaság*, page 20; 26 September 2007

<sup>4</sup> These are also called ninja loans as an acronym for 'no income, no job or asset'

<sup>5</sup> Martin Feldstein: Housing, Housing Finance and Monetary Policy, September 1, 2007, <http://www.ft.com/cms/s/0/269a5668-6209-11dc-bdf6-0000779fd2ac,s01=1.html>

<sup>6</sup> Joseph Stiglitz: House of cards collapses in U.S. property market, *Világgazdaság*, page 24; 6 November 2007

<sup>7</sup> Paul McCulley, CEO of PIMCO bond fund, is quoted by Robert J. Schiller: Can the bubble be stopped from bloating? *Világgazdaság*, page 20; 26 September 2007

<sup>8</sup> Joseph Stiglitz: Alpine Schadenfreude at the Davos World Economic Forum, *Világgazdaság*, page 20; 6 February 2008

<sup>9</sup> Robert J. Schiller: Can the bubble be stopped from bloating? *Világgazdaság*, page 20; 26 September 2007

<sup>10</sup> Martin Wolf: Why the financial turmoil is an elephant in a dark room, *The Financial Times*, page 9; 23 January 2008

<sup>11</sup> In this regard, I agree with opinions that say there is interaction between the sources of global imbalance. Accordingly, the decrease in the U.S. current account deficit stemming from the decline in household consumption can only reduce global imbalance if at the same time economies with C/A surplus are reducing their surpluses by stimulating domestic demand.

<sup>12</sup> Asset-backed insecurity, *The Economist*, pp 63, 64; 19 January 2008

<sup>13</sup> Address by Frederic S. Mishkin on 11 January 2008: Monetary Policy Flexibility, Risk Management, and Financial Disruptions, <http://www.federalreserve.gov/newsevents/speech/mishkin20080111a.htm>

- <sup>14</sup> George Magnus: More is needed to unblock the arteries of credit, *The Financial Times*, page 9; 24 January 2008
- <sup>15</sup> Wolfgang Münchau: America's recession will be hard to shift, *The Financial Times*, page 9; 21 January 2008
- <sup>16</sup> Martin Wolf: Bernanke's big gamble on reflation may work too well, *The Financial Times*, page 9; 30 January 2008
- <sup>17</sup> Lawrence Summers: Why America must have a fiscal stimulus, *The Financial Times*, page 9; 7 January 2008
- <sup>18</sup> George Soros: The worst market crisis in 60 years, *The Financial Times*, page 9; 23 January 2008
- <sup>19</sup> Same as it ever was. What do banking crises reveal about America's travails today? *The Economist*, page 66; 12 January 2008
- <sup>20</sup> IMF World Economic Outlook Update, 29 January 2008, <http://www.imf.org/external/pubs/ft/weo/2008/update/01/index.htm>
- <sup>21</sup> Same as it ever was. What do banking crises reveal about America's travails today? *The Economist*, page 6; 12 January 2008
- <sup>22</sup> Wolfgang Münchau: This is not merely a subprime crisis, *The Financial Times*, page 9; 14 January 2008
- <sup>23</sup> Philippe d'Arvisenet: From the subprime segment to the real economy, *Conjoncture*, pp 14, 15, Issue 10; October 2007
- <sup>24</sup> USA, Japan, Germany, United Kingdom, France, Canada, Italy
- <sup>25</sup> Philippe d'Arvisenet: From the subprime segment to the real economy, *Conjoncture*, page 14, Issue 10; October 2007
- <sup>26</sup> Tony Jackson: Different this time? Investors no longer seem to think so, *The Financial Times*, page 24; 11 February 2008
- <sup>27</sup> IMF World Economic Outlook Update, 29 January 2008, <http://www.imf.org/external/pubs/ft/weo/2008/update/01/index.htm>
- <sup>28</sup> The euro area. Déjà vu, *The Economist*, pp 59, 60; 5 January 2008
- <sup>29</sup> Holger Schmieding: Europe will be able to bounce back from the shocks, *The Financial Times*, page 9; 23 January 2008
- <sup>30</sup> An independent streak. Decoupling 1: Emerging Asia, *The Economist*, page 70; 26 January 2008
- <sup>31</sup> CDS represents the annual interest rate at which someone pledges to indemnify the bond holder in case the bond issuer goes bankrupt by buying the bond at face value or paying the difference between the market price, as calculated on the basis of the CDS of the moment, and the face value.
- <sup>32</sup> Hírbe hozták Közép-Európát [Central Europe bad-mouthed], *Világgazdaság*, pages 1, 12; Stefan Wagstyl: Credit crunch spreads eastwards, *The Financial Times*, page 2; 29 January 2008