

GENERAL OVERVIEW OF THE MAGNITUDE OF THE CRISIS: A COMMENT

JÖRG GUIDO HÜLSMANN

The present contribution was initially planned as a comment on the main overview paper dealing with the magnitude of the current crisis of the global economy. Because this paper could not be delivered in time, and with the encouragement of The Most Rev. Prof. Sánchez Sorondo, on the following pages I have attempted an independent comment on the impact of the crisis on persons and institutions. This explains the unusual length of this 'comment'. Upon reading Prof. Raga's excellent assessment of the magnitude of the crisis, I am happy to find that our contributions are complementary and, despite some occasional overlap, should provide a fruitful starting point for discussion. Where possible, I have added material that Prof. Raga did not cover.

REMINDER OF THE CONTEXT

The present crisis of the global economy started with the publication of massive defaults of US subprime mortgage loans in July 2007. During the following twelve months, these initial defaults set in motion a wave of consolidation and contraction within the global financial industries. This wave has been followed by another wave of bankruptcies that swept over financial markets worldwide. The burgeoning financial tsunami has been slowed down, but not stopped, through massive interventions by the world's major central banks, which greatly expanded the money supply and eased credit conditions. In the summer and fall of 2008, it reached a climax when two of the five large US investment banks had gone bankrupt, and the three remaining banks abandoned their status and became commercial banks, in order to benefit from public bailout.

The defaults within the investment-bank sector were on the point of spilling over to a large US insurance company and to several public and semi-public banks. Within a few weeks or even days it would in all likelihood have entailed a complete meltdown of the financial markets. Few if any banks would have survived. Their failures would have set in motion a deflationary spiral. The debt-ridden global financial industries would have been wiped out. Any sort of credit – public or private – would have become unavailable. And this meltdown would have swept over the rest of the global economy: With bank credit unavailable or greatly reduced, most companies could not have financed their spending on wages, supplies, and investment. Unemployment would have soared to 30% and more. The evaporation of the value of financial titles would have drastically impaired household spending in general and consumption expenditure in particular. Retirement plans would have been in shambles.

It did not come to this point because the major governments and central banks intervened massively to bail out the threatened institutions.

A bankrupt company can be bailed out by and large only in two ways. Either one has to raise new capital to cover the losses. Or one has to create artificial markets for the products of the company. Both techniques have been applied on a massive scale starting in the fall of 2008. Central banks have been subsidising the banks through artificially low interest rates and by exchanging hundreds of billions of dollars of their relatively sound assets against the defaulting assets of the commercial banks, *at nominal values*. Governments have launched massive spending programmes designed (a) to invest public funds into commercial banks, thus partly nationalising them, (b) to provide credit guarantees for companies and households, and also (c) to stabilise respectively stimulate aggregate spending within the economy.

These policies were extended through 2009 and to the present day. Most notably, monetary policy is at present still being conducted on an acute crisis level (with interest rates close to zero, standard repo maturity of one year, and great lenience in regard to collateral).

Despite these massive interventions, the crisis of the global economy is not yet overcome, and according to most estimates is not expected to be overcome in 2010 or 2011. In several important respects, the world economy today is structurally in worse shape than before the crisis broke out. Most notably, the very measures that so far have been taken to confront the crisis have raised new problems, and aggravated some of the problems that led to the crisis.

IMPACT OF THE CRISIS ON PERSONS AND INSTITUTIONS

Labour Markets

In the *European Union*, the unemployment rate has reached almost 10% out of a labour force of 236 million persons in February 2010, which corresponds to some 23 million unemployed persons.¹ These figures need to be put into perspective in three regards. First, EU unemployment is some 3% (or 7 million persons) up from the level of the first quarter of 2008, when it had reached a boom-induced low point; but only 1% up from the pre-boom level of the years 2002-05. Similarly, the relative weight of temporary labour contracts in the EU has decreased.² Second, these figures do not convey the greater precariousness of employment conditions due to a marginally greater weight of part-time work and of youth unemployment. Third, these figures represent only an EU-wide average. The concrete local situations differ widely. In countries such as Spain, unemployment reaches almost 20%.

In the *United States*, too the unemployment rate reached almost 10% out of a labour force of 154 million persons in March 2010, which corresponds to some 15 million unemployed persons.³ These figures are up from a pre-crisis unemployment rate of some 5% or 7.5 million persons. Again, these numbers need to be put into perspective, by considering that they represent just a national average, while local conditions (for example, in the Detroit area) are often much worse. Moreover, in the US there is now relatively more long-term unemployment and more part-time work; and the numbers of those who are not counted in the unemployment statistics because, recently, they have not been looking for a job has increased and continues to increase.⁴

¹ See Eurostat, Communiqué de presse 46/2010.

² See Nicola Massarelli, *Labour Markets in EU-27 still in crisis* (Eurostat: Statistics in focus 12/2010), Table 8.

³ See Bureau of Labor Statistics, *The Employment Situation – March 2010* (News Release, April 2, 2010).

⁴ In the US, these persons are counted as ‘marginally attached to the labour force’ defined as persons who had been looking for a job at some point during the previous 12 months, but not during the 4 weeks preceding the unemployment count. Some 2.3 million persons fell into this category in March 2010. Out of these, some 1 million are counted as ‘discouraged workers’ – persons who are not currently looking for a job because they believe no jobs are available for them.

Similarly, in *Russia*, unemployment has increased to 8.9% out of a labour force of 76 million in 2009, which is up from 6.5% in 2008, respectively 6% in 2007. In other areas of the world, the crisis has not yet had the same impact on unemployment.⁵ In *China*, unemployment stood at 4.3% out of a labour force of 813 million in September 2009, which is a slight increase as compared to 4.2% in December 2008. China had a higher unemployment rate (around 9-10%) in 2004-06, which then dropped to the present level under the impact of the boom years. India and Brazil have experienced high unemployment throughout the past decade. In *India*, unemployment stood at 10.7% out of a labour force of 467 million in 2009, which is only slightly up from 10.4% in 2008, and had been around 9% during the previous years. Similarly, in *Brazil*, the unemployment rate was 7.4% out of a labour force of 95 million in 2009, which is actually somewhat down from 7.9% in 2008, and had stayed on that level, and even higher, ever since the currency crisis of 2004.

Real-Estate Markets

Real-estate markets had boomed from 2002 to 2006, especially in the Anglo-Saxon countries. They were the focal point of the unhealthy developments of the boom years. Naturally, therefore, they were first in line to be hit by the subsequent bust. In 2006, that is, at the height of the real-estate boom, the aggregate value of real estate owned by US households and non-profit organisations was 25,271 billion dollars, with outstanding mortgages of a total volume of 9,825 b\$. At the end of 2009, the aggregate value had shrunk to 18,207 b\$, while the outstanding mortgage debt stood at 10,262 b\$.⁶ In other words, households and non-profit organisations suffered a loss corresponding to about half of the current US GDP. Again, this fact needs to be put into perspective, emphasising in particular that these are only average figures. In many individual cases the value of the real estate owned has shrunk below the value of the mortgage (negative equity). The consequence is mortgage delinquencies and foreclosures – in other words, another round of financial defaults, which at present threatens mortgage banks and thus by implication all financial industries.

⁵ The following figures are taken from the CIA factbook.

⁶ See Federal Reserve, *Flow of Funds Accounts of the United States* (Fourth Quarter 2009), Table B.100.

Capital Markets

All over the world, stock markets collapsed in 2008, with market capitalisation declining by about 50% on average (see Table 1).

Table 1. STOCK MARKET CAPITALISATION (BILLIONS OF US DOLLARS)

End of	Americas	Asia-Pacific	Europe-Africa- Middle East	Total
2006	22 653	12 908	16 189	51 750
2007	24 320	19 792	18 615	62 727
2008	13 896	9 959	9 444	33 299

Source: World Federation of Exchanges; author's calculations.

As a consequence, pension funds, mutual funds, and other financial companies that were heavily invested in stocks, suffered a corresponding meltdown of their capital. A rally that took place on many stock markets during 2009 turned out to be short-lived.

This dramatic setback has entailed a massive redistribution of wealth, from the owners of capital stock to those who were invested in other asset classes (fixed income, cash, etc.). The meltdown of the stock markets also greatly impaired the possibility for companies to raise new capital on the stock markets (IPOs have plummeted and remained low), and for developing countries to attract foreign investments.

Private fixed-income securities in many cases lived through a similar setback, and several companies (such as GM) defaulted on their bonds. However, government bonds were a notable exception, especially the bonds of major governments. They actually experienced a mini boom within the crisis, because investors considered them to be a safe haven. As a consequence, interest rates on such bonds have been plummeting in the fall of 2008 and have remained low all through 2009, which has facilitated greater public debt and therefore greater public expenditure.

The great losers of the stock-market meltdown have been households. Firms and other market institutions to a very large extent have been spared thanks to government support.

Households

For most families in most countries, labour is the main source of income, and the bulk of savings are usually invested in the family residence. Additional savings are invested in the capital markets or held in savings accounts with banks. The meltdown of real-estate prices combined with the meltdown of stock markets has destroyed much of this wealth. In many cases, most notably in the US, the market value of the family residence has become inferior to the remaining debt to be paid.

From an *aggregate* point of view, the net worth (total assets minus total liabilities) of households and non-profit organisations, even in the countries that so far have been most affected by the crisis, is still largely positive.⁷

However, the picture is different if we turn from the aggregate to *the many individual cases of families* who lost both their capital and the income from labour. For them, the disastrous events have caused much frustration and often despair. Three circumstances have so far prevented even greater suffering among those who were concerned: one, the fact that the crisis had a rather moderate impact on employment; two, in the case of the US, the relative ease of personal bankruptcy; and three, government subsidies.

Families have adjusted to the crisis by cutting expenditure, getting out of debt, and building up savings.⁸ Much more than any other sector of the econ-

⁷ Before the crisis (year 2006), households and non-profit organizations in the US owned a total of 77,869 b\$ of assets, and had total liabilities (essentially home mortgage, but also consumer credit) of 13,405 b\$, thus a net worth of 64,464 b\$. At the end of 2009, their total assets had shrunk to 68,178 b\$, with total liabilities at 14,001 b\$, and thus a net worth of 54,176 b\$. See Federal Reserve, *Flow of Funds Accounts of the United States* (Fourth Quarter 2009), Table B.100.

⁸ In the case of the US, the figures are particularly striking. In 2006, US households had borrowed some 1,173 billion dollars, or roughly half of all borrowing in the US. In 2007 they decreased their borrowing to 858 b\$ or one third of the total. In the following year, they cut their borrowing to only 20b\$ or one ninetieth (!) of the total; and in 2009, for the first time in recent (or at least recorded) history, there actually was no more net borrowing, but a net payback of 237 billion dollars. Total household debt outstanding at the end of 2009 was 13,536 b\$. Similarly, in the same period, *business* borrowing decreased from 894 b\$ to -200 b\$ (i.e., also a net payback), to a total business debt outstanding of

omy, families had to solve, and did solve – and often chose in advance to solve – their financial problems the hard but virtuous way, usually under great financial and personal sacrifice. At present they still have to cope with forced sales of their property (financial titles, houses, and vehicles), with the struggle to find new employment, accepting new jobs at conditions much inferior to those that they previously enjoyed, often moving to new locations, leaving relatives and friends, remaking their lives. Those who are willing to make such efforts are often hampered by the loss of their residential property value, which in normal times would ease the move from one labour market to another.

Not all families survive shocks of such magnitude, especially not in a culture that is geared towards material success and in which uninterrupted material improvement is often taken for granted. Fragile families disintegrate under the humiliation of failure, under despair and its fruits: self-neglect and neglect of others, social isolation, violence, alcoholism, suicide, etc.

The reduction of household spending concerned in particular expenditure on education, charitable giving, and financial contributions to associations. As a consequence, Church revenues, private foreign aid, and associative life have experienced a setback. However, all in all, this setback has been moderate, so far, due to the special circumstances mentioned above.

Business

In market economies, business spending is usually the citizens' main source of revenue. It is also the source of government revenue, to the extent that government spending is financed by taxes and loans to the government, which in turn are obtained out of revenue earned in firms. The *total volume* of business spending is determined by savings (and also by money production), and the concrete investment projects that are realised are determined by *relative* household spending on the various consumers' goods. The crisis has unsettled both the volume of savings and relative consumer spending. As a consequence it has unsettled both the volume and the direction of investment.

10,999 b\$ at the end of 2009; and the domestic financial sectors even more drastically reduced their borrowing from 1,294 b\$ to -1,753 b\$, with a total debt outstanding of 15,651 b\$ at the end of 2009. Only the federal government increased its borrowing from 183 b\$ in 2005 to 1,444 b\$ in 2009, and then had a total debt outstanding of 7,805 b\$ at the end of 2009. See Federal Reserve, *Flow of Funds Accounts of the United States* (Fourth Quarter 2009), Tables D.2 and D.3.

Because of the combined meltdown of real estate and stock markets, households (a) spent less, (b) spent their money differently, and (c) had less money available for saving and investment. Because of the banking crisis, bank credit in general, and bank-money creation in particular, dried up.⁹ Because of the stock-market crisis, it was almost impossible to raise new capital. This in turn has shaken trust in the business community and impaired the availability of commercial credit, thus reinforcing the curtailment of bank credit.

As a consequence, many firms and investment projects that had been started in the boom years before the crisis were no longer viable, either because of lacking finance and/or because of shifting consumer preferences.¹⁰ In other words, the structure of production was no longer adjusted to the new crisis-induced circumstances. The financial crisis had entailed, respectively reinforced, a structural crisis. As a consequence, many firms went bankrupt, many production projects had to be discontinued, and employment in those firms and projects decreased (structural unemployment).

However, not all unviable firms and business projects were in fact discontinued. A great number of them – most notably in the banking, construction, and automobile sectors – benefitted from the increased public spending designed to combat the crisis. Unviable firms and projects *by definition* destroy more resources than they create. Their preservation therefore implies a sapping of the capital basis of the economy. In the medium and long run, this will entail a reduction of aggregate production (not necessarily in absolute terms, but relative to the level of aggregate production that would otherwise have been possible) and thus an impoverishing world population.

Another factor has encouraged the same nefarious tendency. In order to overcome a structural crisis, it is not sufficient to discontinue unviable business projects that have been started in the past. It is also necessary to give new directions to investment, directions which hopefully are more in tune with present and future conditions. At present, this has not yet been achieved. In virtually all countries, private investment expenditure has plummeted during the crisis and remains low. There is a widespread reluctance of businessmen to invest, especially in long-term projects (Table 2).

⁹ In the US, commercial and industrial loans decreased by 18.6% in 2009. See Federal Reserve, 'Assets and Liabilities of Commercial Banks in the United States – H.8'.

¹⁰ It is questionable whether all of them had been viable before, because consumption and saving-investment under boom conditions is, by definition, unbalanced.

This reluctance to commit to long-term investment projects is, to a large extent, the unintended consequence of the attempt of governments and central banks to manage the crisis. Indeed, this attempt has deteriorated the business environment, most notably by aggrandising the uncertainty concerning the future evolution of the economy in four respects.

Table 2. RECENT EVOLUTION OF PRIVATE INVESTMENT IN THE EU AND THE US

Year	European Union (27)		United States	
	Billions of Euros		Billions of dollars	
	GDP	Business Investment	GDP	Gross Private Domestic Investment
2005	11 062	1 958	12 638	2 172
2006	11 682	2 126	13 399	2 327
2007	12 364	2 312	14 078	2 289
2008	12 502	2 300	14 441	2 136
2009	11 806	1 924	14 256	1 629

Source: Eurostat; Bureau of Economic Analysis; author's calculations.

(1) The momentous surge of government expenditure has been financed through a corresponding increase of public debt. In most countries, public debt had been high already before the crisis. Deficit-spending in the attempt of managing the crisis has brought it to new record levels.¹¹

¹¹ At the end of 2008, public debt in the EU (27 countries) stood at 61.5% of GDP, and at 69.3% in the Eurozone (16 countries).

This threatens to unsettle government finance, and in several cases has already done so, bringing most notably the Greek government to the brink of default.

Government default can be prevented in three ways: (a) by cutting public expenditure, (b) by loans from other governments at lower interest rates than those practised on the market, and (c) by loans from the printing press of the central bank (monetisation of the public debt). Solution (b) can work only if some major governments have not yet accumulated a large public debt. At present, only the Chinese government is in this felicitous situation. In all other cases, the debt problem is merely shifted from one government to another. Only solutions (a) and (c) are therefore ultimate remedies against government default.¹² However, both solutions entail major macroeconomic disruptions, namely, deflationary spirals in the case of (a) and strong inflation or even hyperinflation in the case of (c).

Hence, one way or another, the excessive public debt of the major governments of our present day has the potential to create macroeconomic disturbances of a magnitude far in excess even of our current problems. It is true that such disaster is not yet imminent. However, if current deficit-spending goes on unchecked, and if historical experience provides any guidance, we might be only five or six years away from it.¹³ Meanwhile, this dire prospect slows down and often stops the execution of long-term business plans, as prudent investors, who take their mandate seriously, refuse to gamble with their own family's savings, and the life-time savings of their clients, in such an uncertain environment.

Additional uncertainty in business springs from three further factors:

(2) The sheer magnitude of the changes of additional public expenditure is likely to create great fortunes where they fall. For example, in the US, the budget of the federal government has been increased, both in 2009 and in 2010, by an amount corresponding to some 10% of GDP. However, these fortunes will be gained only by those who are well positioned to deliver the goods that are then in public demand, while it is not always clear which goods will be concerned and when.

¹² Only solution (a) is a *genuine* ultimate remedy against government default, because solution (c) amounts to covert default.

¹³ On the theory and history of hyperinflations, see Peter Bernholz, *Monetary Regimes and Inflation* (2003).

(3) This expenditure is for the moment essentially short-term, while it is not clear if and to which extent these public spending programmes will be extended.

(4) Various legislative processes, initiated by the heads of major states, have been announced to bring about sweeping changes to business regulation and sometimes even to the whole structure of the economy. In some cases a relatively concrete objective of these changes is announced ('green economy'), while their dimension remains unclear and the measures (public spending, business regulation, etc.) remain vague too. In other cases, even the objective is elusive ('ending capitalism', 'empowering the state') and as a consequence the political measures cannot yet be ascertained either.

Each of these four factors creates policy-induced or regime uncertainty, which impairs long-term investment.¹⁴ Taken together, they go a long way accounting for the current stifling of business investment, which, if it persists, threatens to undermine in the medium and long run the material welfare of the world population.¹⁵

Banking

Even more so than the stock markets, the banking sector has been the epicentre of the current crisis. Much less than the stock markets, banks have been penalised for their own excesses, which had, after all, contributed quite substantially to magnitude of the crisis. Out of the 7,401 US chartered commercial banks that were in operation in 2006, since the outbreak of the crisis in July 2007, more than 200 have so far been closed in an accelerating wave of bank failures. At present, this wave is still in full swing (Table 3). In the first few months of the present year, until April 23, no less than 57 banks have failed and been closed.

¹⁴ On the theoretical and historical significance of the concept of regime uncertainty, see Higgs (1997).

¹⁵ GDP component figures portray the production, consumption, and distribution of the monetary value of the annual consumer-good production. They include *additions* to the capital structure ('Gross Fixed Capital Formation'), but do not take into account the expenditures made to *preserve the current capital structure*. For example, when business expenditure plummets (with the near-term consequence of capital consumption), this does not have an immediate negative impact on *real* GDP, because in the short run the economy continues to churn out the consumers' goods that have been close to completion; and *nominal* GDP might actually increase, to the extent that some of the funds that would otherwise have been invested are now being used for consumption expenditure.

Table 3. NUMBER OF BANK FAILURES IN THE UNITED STATES

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 (April 23)
2	4	11	3	4	0	0	3	25	140	57

Source: Federal Deposit Insurance Corporation.

In the EU, the number of bank failures was much smaller, essentially because the European governments were much more determined to prevent bank failures with the help of open and hidden subsidies. This concerned in particular public and semi-public banks. In Germany, the Länder-owned *Landesbanken* had massively invested in mortgage-backed securities (MBS), which they had bought, as it turned out, at excessively high prices. Only public bailouts did prevent their bankruptcy. In the US, things were similar. Several government-sponsored enterprises (GSE) were at the forefront of those who had based their strategies and operational choices on excessively optimistic assessments of MBS values, which brought them to the brink of failure. The three big GSE in US finance are the National Mortgage Association (GNMA or Ginnie Mae), which issued the first mortgage security in 1970; the Federal Home Loan Mortgage Corporation (FHMLC or Freddie Mac); and Federal National Mortgage Association (FNMA or Fannie Mae). Freddie Mac and Fannie Mae control an aggregate balance sheet of some 5 trillion dollars. In the fall of 2008, they were bailed out.

Just as the private commercial banks and investment banks, public and semi-public banks engaged in business practices that have been fragilising the financial system as a whole, and which have decisively contributed to the magnitude of the current crisis. Three such business practices can be singled out:

1) Banks have operated with extremely low cash balances, which made them vulnerable to bank runs, which respectively made them dependent on permanent assistance from the central banks to prevent bank runs. They have done this to invest the money that would otherwise have been 'idle' in their cash balance, thus profiting from the return on this investment.

2) Banks have operated with extremely low equity ratios in an attempt to leverage a higher-than average return on equity capital. This technique of leveraging, and the implied under-capitalisation, is pervasive on the financial markets and their most serious structural problem. It accounts for

much of the magnitude of the current crisis. Banks typically operate with equity ratios of much less than 10%, and in the case of large GSE such as Fannie Mae and Freddie Mac, their equity ratio was in the order of a mere 1% (!). Consider the following example. Suppose an investment, entirely made in the form of equity capital of 50 m€, yields a net profit of 5 m€. This is equivalent to a return on equity (ROE) of 10%. Now, if the investment is no longer entirely financed by equity, but in a more or less large part by debt, then the net profit diminishes (because the investor has to pay interest on the debt), *but it increases relative to the equity capital that is still invested*. Thus, if 45 m€ out of the 50 m€ investment are financed through a credit at 5%, then the net profit is $5 \text{ m€} - 45 \text{ m€} \times 5\% = 2.75 \text{ m€}$. But this net profit of 2.75 m€ is now the remuneration of only 5 m€ equity capital. In other words, it represents a ROE of 55%. This technique can conceivably be applied ad infinitum, as long as the total return on investment is higher than the cost of credit. Thus, suppose the above investment is financed by 1 m€ equity capital and 49 m€ of debt. Then the net profit is $5 \text{ m€} - 49 \text{ m€} \times 5\% = 2.55 \text{ m€}$, representing now a ROE of 255% (!).

3) Banks have systematically invested too much money in relatively high-return (but also, therefore, high-risk) assets. Or, what amounts to the same, they have systematically underestimated the risks associated with these assets.

As we have stated, these practices have long been pervasive. It is obvious that they engender a higher profit respectively a higher return for the investor, at the cost of greater vulnerability. Interest-rate hikes, unexpected reductions of revenue, unexpected technical problems, etc. can easily upset the calculus of the ardent risk-taker, and then he quickly faces insolvency, especially if he has reduced his equity basis to an almost symbolic minimum. Now, if only one or a few banks are such excessive risk-takers, then they alone become vulnerable, while their behaviour represents no threat for the banking system and the financial system as a whole. But if more or less *all* banks choose to apply these financial techniques on a massive scale, then they all become vulnerable. And because the assets of one financial firm are more than often the liability of another, the failure of one of them, if sufficiently large, is likely to trigger a snowball of further failures. Such firms, which are big enough to trigger snowballing failures, are 'systemically relevant' in current economic jargon.

These problems, and in particular the pervasive problem of undercapitalised financial agents, have been known to public banking supervisors for many years. It is true that nobody was able to predict the exact timing and

the extent of the current crisis. However, many economists, some of them associated with government financial institutions such as the Bank for International Settlements and the St. Louis Fed, ever since the acceleration of the US real estate boom in 2002, had warned in scholarly articles, in the daily press, and in public speeches that it was but a question of time until these structural problems would usher into a new crisis. They have at times been heard, but governments have not listened to them. In short, there was no lack of intelligence, but there was a lack of political will to tackle the issues.

One of the factors that paralysed the determination of governments to solve these problems in time is their self-interest in preserving inflationary (that is, leveraged) finance, and in promoting rather than curtailing the banking industry's credit-creation powers. Now, it needs to be stressed right away that this is not a recent phenomenon, but a constant feature of mankind's financial and monetary history. Until the 17th century, governments have sought and obtained inflationary finance through the debasement of the coinage, which by the way was severely reprimanded by the Catholic Church. Then they discovered that the same end could be reached much more cheaply and much more safely and efficiently by banks that produced redeemable paper notes and demanded deposits on a fractional-reserve basis. They therefore started to create such banks on their own account, and encouraged similar initiatives from businessmen and financial promoters.

The central problem of bank-based inflationary finance is the virtual illiquidity of the banks. It is impossible for them to redeem all of their notes and deposits at once, even though they give a promise of immediate redemption to each bearer of their notes and to each owner of a deposit. If the banker correctly speculates on the volume asked for redemption, the virtual illiquidity remains just that – virtual. However, it turns into manifest illiquidity if the banker is a poor speculator. And such illiquidity very quickly turns into insolvency if, as is often the case, the banker has to force-sell his assets to replenish his cash balance. And the insolvency of one banker more than often snowballs into the insolvency of others, as everybody scrambles for cash and is forced to sell. In short, with the new banking industry there appeared the new phenomenon of the banking crisis.

While the banking industry was young, its crises were small too and did not have much impact on the rest of the economy. But when it grew into importance at the end of the 18th and through the middle of the 19th century, its crises became a nuisance for public finance. Thus governments sought to prevent bank runs and financial crises by the institution of central banks, starting with the Bank of England in 1844.

These new institutions centralised the country's reserves of base money, which at the time was usually a currency of silver or gold. Thus they could bail out the other banks in times of liquidity crises. However, this institutional solution was short-lived because it did not attack the problem of inflationary finance at the root; rather, it aggravated the basic illiquidity problem, which was soon 'reproduced on a larger scale' as the Marxists used to say. Central banks were supposed to preserve, not to curtail, the ability of commercial banks to inflate the money supply, and thus to inflate the supply of bank credit. They themselves were operating on a fractional-reserve basis, even though they were not quite as much leveraged as the other banks. Not surprisingly, the commercial banks did not diminish their issues, but on the contrary increased them. They did not increase their equity capital to have a greater buffer in bad times, but increased their leverage because they knew the central banks behind them. This behaviour was rational from their individual point of view, given the incentives that had been created through the centralisation of the reserves. The new institutional environment had made them less responsible for their actions. They no longer had to shoulder the full negative consequences of their choices, yet they still enjoyed all the benefits (current economic jargon calls this 'moral hazard'). They acted accordingly, and the system as a whole therefore became much more leveraged and fragile. In short, the centralisation of banking ultimately reinforced the problems of fractional-reserve banking, by making the industry as a whole more fragile. As a consequence, financial crises became even larger, threatening the entire banking system as well as government finance, and increasingly had international ramifications.

Again, governments stepped in to rescue the banking system, yet again, at least in part out of self-interest, without going to the root of the matter. The new solution consisted in (a) giving legal tender status to the money substitutes issued by central banks and (b) granting the central banks the right to suspend their payments. This implied that central-bank issues were no longer redeemable into some underlying natural base-money such as gold. Rather, these issues now were the base money of the country. This is the origin of the present system of immaterial fiat monies, which underlies the architecture of global finance.¹⁶

¹⁶ For a more detailed account of the evolution of western monetary systems, see Hülsmann (2008), part three.

To understand the economic consequences of immaterial fiat money, one has to realise that in such a monetary system there are no more technical or commercial limitations to the production of base money. Under a silver standard, or a gold standard, the production of base money is constrained by the costs of mining and minting. No such constraints exist in our present fiat money system. Central banks can produce money in unlimited amounts and with virtually no time constraint either. This implies most notably that a central bank cannot go bankrupt as long as its debts are denominated in its own currency. Similarly, no public or private organisation can go bankrupt as long as it enjoys the unmitigated solidarity of the central bank that produces the money that it has to pay back.

This institutional solution promotes moral hazard on an even greater scale than the system it had replaced. The very presence of central banks producing immaterial paper money, which moreover have the official mission to stabilise the banking sector and the financial markets, *encourages precisely those nefarious practices that we have singled out above*. Thus, commercial banks run down their cash balances because they can obtain cash in unlimited amounts and at a moment's notice at the trading desks of the central banks. Commercial banks run down their equity ratios as far as legally allowed, because there is no more need for them to take any precautions against adverse market tendencies. Indeed, (a) the monetary values of their assets are stabilised through the central banks and (b) they themselves are 'systemically relevant' and can therefore expect to be bailed out in the worst of all cases. Finally, for the same reason, commercial banks make riskier investments. Indeed these risks do not fully fall on them. A significant part of the risks is 'socialised' through public bailout money.

These practices cannot be fully prevented through the control mechanisms that are successfully applied in other areas. In particular, credit rating and bank audits are hapless in markets that are fundamentally biased by the presence of a pervasive moral hazard. Rating agencies and auditors rely on past and current market prices to assess the possible benefits and risks of a firm's operations. But those very prices are being negotiated by agents that are not fully responsible for their actions. The prices 'lie'.

Similarly, financial regulation is ultimately powerless in the presence of institutionalised moral hazard, as long as it leaves the banks any freedom of choice to innovate and develop new products and markets. The minimum capital ratios imposed on the banking system starting in the 1990s (under the Basel I agreements) have merely shifted the locus of excessive behaviour. Banks have developed a whole panoply of new financial tech-

niques, most notably securitisation, to get around those rules in all legality. Often this has been done with the connivance of public and semi-public partners. For example, under the Basel rules, private-sector claims have to be secured by a minimum equity ratio of 8%. But if a GSE such as Freddie Mac holds these claims and uses them as backing for some new asset-backed securities (ABS) that it sells on the market, then a commercial bank that buys one these ABS has to secure this purchase by a mere 1.6% of equity, even though the underlying asset (and thus the underlying risk) has not changed in the least.

In the past, financial and banking regulation has been 'captured' by the very firms, usually major firms, which were supposed to be regulated. These firms used the regulation process to fight competitors whom they could not successfully confront on the market. Financial and banking regulation has also been full of exceptions and exemptions designed to allow inflationary finance in the service of the state. For example, again under the Basel rules, any credit granted to a national government does not require any equity basis at all.

The institutional fragility of the global financial sector and of banking in particular is therefore quite essentially the result of rational individual adjustments to an ill-conceived institutional environment. Banks have not mindlessly followed a greedy appetite for greater profits and market shares, not caring for the downside this could have in store for them. They have not just mimicked other banks, or other investors, who applied hazardous strategies. Quite to the contrary, they have coolly and rationally pondered the pros and cons *for them*. And the turn of the events of the past two years demonstrates that the bankers have been right, at least as far as their own business is concerned. Unsound practices in finance and banking have, as a rule, *not* been penalised through bankruptcy. To the contrary, as a rule, they have been rewarded by bailouts in the form of expansionary monetary policy, credit guarantees, and direct subsidies (partial or full nationalisations). These bailouts have been justified with the 'systemic relevance' of those banks and financial firms. Their executives are therefore encouraged to count on similar bailouts in the future.

This amounts to no less than a destruction of the incentive system without which a market economy cannot operate. When profits are private, while losses are socialised, the beneficiaries are encouraged to behave in ways that are no longer conducive to the common good. Neither are they encouraged to behave and think in ways that is conducive to their own good as persons. The permanent public assistance distorts their character.

Pope John Paul II once observed:

By intervening directly and depriving society of its responsibility, the Social Assistance State leads to a loss of human energies and an inordinate increase of public agencies, which are dominated more by bureaucratic ways of thinking than by concern for serving their clients, and which are accompanied by an enormous increase in spending.¹⁷

This passage from *Centesimus Annus* is usually thought to apply to unemployed welfare receivers. But it applies just as well to 'welfare for bankers' even though the assistance from which they benefit is less open.

To sum up, long-standing political interventions into the monetary system were primarily designed to preserve inflationary finance in the service of the state (and of others). These interventions have entailed (a) an increase of the overall volume of the banking sector relative to the rest of the economy; (b) a concentration within the banking industry, which set in when regulations were set up which slowed down the creation of new banks; and (c) a greater overall fragility of the banking industry, as manifest in under-capitalisation.

The current crisis does *not* provide clear-cut demonstration that free and unfettered financial markets just cannot work, but rather need vigorous political control to be conducive to the common good. The evidence for this often-made assertion is weak, if not outright lacking. A much stronger case can be made for the exact opposite claim, namely, that current crisis delivers yet another demonstration that political interventionism just does not work, and that only the genuinely free (and responsible) actions of entrepreneurs and other market participants can make financial markets operate to the benefit of the common good.

Without even entering into any detailed argument, the basic and widely known institutional facts lend *prima facie* credence to this claim. As a starter, in historical perspective, financial markets and financial agents (especially banks) are, to a large extent, political creatures. The history of organised financial markets is very much the history of governments trying to make sure there are enough buyers of government bonds.¹⁸ The history of banking is very much the history of money creation in the service of the state.¹⁹ In our

¹⁷ John Paul II, *Centesimus Annus*, § 48.

¹⁸ On the early history see Ehrenberg (1896).

¹⁹ See for example Gouge (1833), Rothbard (2002).

own day, banks are often state-owned, and in all other cases they are licensed by public administrations according to rules fixed by legislation.²⁰ On the financial markets, governments feature a massive presence, not only as regulators, but also as financial agents, and especially as elephant consumers of financial services. The major governments of the world taken together absorb a good third of the world's savings. Financial markets are not free from political intervention, not by any stretch of the imagination and of common grammar.

Governments

Apart from the top echelon of banking, government – especially the governments of major countries, in economic terms – has been the only sector to benefit from the current crisis. Governments all over the world have assumed the mission to manage the crisis and thus to bring the world economy back on track. The essential means have been greater public spending and further regulations of the financial markets and other sectors of the economy. The bulk of these activities have taken place on a national level, but regional and communal governments have often mimicked the same approach. The result has been an across-the-board momentous surge of public spending. The order of magnitude has very often been in the double digits of GDP. Virtually all of this additional spending has been financed by an increase of public debt.

At the risk of belabouring the obvious, it should be noted that the momentous growth of government activity (including central banking) at the onset of a crisis is not an inescapable law of nature. Rather, it is a characteristic fruit of the culture of statism that has come into dominance in the 20th century and is today deeply entrenched in the political class and its organisations, as well as in public administrations, in education, in higher education, in religious organisations, and in the media (with the exception of the Internet). Statism can be defined as an exaggerated belief in the power of political interventions to create, respectively to restore, a beneficial social order.²¹ In its mildest form, it holds that such interventions, *if* used

²⁰ Overview in Barth *et al.* (2005).

²¹ Political interventions must not be confused with a mixed economy. In the latter, the government is one of several owners and it controls only its own property. By contrast, an interventionist government commands other property owners to use their resources in a different way than these owners themselves would have used them. See Mises (1977[1929]), chap. 1.

wisely and as a complement to the order-creating activities of civil society, may benefit social order. In a stronger form, it holds that political interventions are always a necessary element in creating social order, though they may be counter-productive if used without circumspection. In its most extreme form, it does not recognise any limitations to the power of the state in realising its objectives (fiction of government omnipotence). Statism is grounded on various factual claims. It is therefore open to be challenged by scientific enquiry and is, indeed, being challenged constantly.

Government management of the present crisis rests on three related claims, namely (1) that interventionism has not itself been a major cause of our present calamities; (2) that further interventionism is a suitable means – possibly the only means – to bring the world economy back on track, and (3) that interventionism has worked on similar occasions in the past, most notably in combating the Great Depression of the 1930s. All three claims are at the centre of current debate.²²

In any case, increased government activity (including central banking) in the name of economic problem-solving means an increased role of government within the economy and society. Individuals, families, firms, associations, and communal governments are learning to rely, both in addressing present concerns, and in their planning of future activities, on the very same political institutions: national governments and their supra-national institutions. In short, civil society and civil institutions become less self-reliant, while political power is being enhanced and centralised.

This tendency of turning governments and their institutions, including central banks, into ‘problem-solvers of last resort’, far from putting society on a more solid footing, makes the social fabric as a whole more fragile. On the one hand, the manifold prudential measures for economic self-protection, taken by individuals and civil institutions in the light of their different subjective assessments of present and future risks, are homogenised. On the other hand, the overall volume of economic self-protection is reduced because of the economies of scale implied in centralised all-risk economic insurance offered by the state. In short, the buffers and cushions of the social fabric, providing protection to each against the errors and abuses of others, dwindle

²² Out of the very rich literature criticising the notion that governments should manage economic crises, or have successfully managed such crises in the past, see for example Woods (2009), Salin (2010), Paul (2009), Huerta de Soto (2006), Rothbard (2005), Higgs (2006), Powell (2003), Shlaes (2007), Taylor (2010), and Altmiks (2010).

in orientation, number, and overall volume. The expansion and concentration of political action implies that any errors in government (and, *a fortiori*, abuses of government power) have a greater and immediate impact on all members and institutions of civil society. The reinforcement of political institutions entails increased overall institutional fragility. In the words of current economic jargon, it creates respectively increases systemic risks.

The evolution of western banking, which we have briefly reviewed above, stands as a warning illustration of this dangerous tendency.

From a political point of view, increased government activity (including central banking) forebodes ill for the preservation of free societies, even if the current expansion and centralisation of government power is meant to be temporary. Indeed, throughout the 20th century and into our day, temporary increases of government power to confront a military or economic crisis have never been fully scaled back after the crisis had been overcome.²³ All in all, there has been a secular tendency for government to grow at the expense of civil society, with only a few occasional and minor setbacks.

SUMMARY

Our overview of the main features of the current crisis of the global economy, up to the present point (April 2010), can be summarised in eleven points:

(1) The magnitude of the current crisis of the global economy results especially from the fragility of virtually the entire financial sector, which is too weak to reform itself and too weak to accommodate sudden and major adjustments in business.

(2) The fragility of the financial sector has been known for many years. Governments have neglected to address this problem, *inter alia*, because of their own material self-interest.

(3) The major manifestation of the crisis so far has been the dramatic meltdown of stock markets on a worldwide scale in the year 2008, and the implied massive redistribution of wealth, essentially to the detriment of households.

(4) The crisis did not entail an institutional meltdown because of immediate and massive action of public authorities (central banks and national

²³ This is known as the 'ratchet effect' of government expansion. See Higgs (1977).

governments). In particular, the momentous expansion of government and central-bank *spending* has prevented a great number of bankruptcies in the financial industries and in other sectors of the economy.

(5) Because of (4), unemployment has been kept at a relatively low level, as compared to major crises in the past, even though there are significant regional disparities.

(6) Because of (4), many unviable firms and business projects have been kept in existence, which sap the capital basis of the economy and thus undermine the future productivity of labour.

(7) Because of (4), the incentive system of the market has been further eroded, especially in the 'systemically relevant' banks and financial firms. The resulting waste of capital undermines the future productivity of labour.

(8) Because of (4), public debt has reached critical levels in several countries. If unchecked, it threatens to entail major macroeconomic disruptions.

(9) Because of (4), the network of social institutions is becoming more fragile, and systemic risks are building up.

(10) Because of (4), political freedom is being undermined.

(11) Because of (4), and also because of current legal activism motivated by the desire to 'use the crisis' to impose social change, have deteriorated the business environment and slowed down private investment.

All in all, therefore, the crisis of the global economy is far from over. Due to immediate and vigorous bail-out interventions on the part of the major central banks and governments, much human suffering has so far been prevented. However, this achievement has been essentially short term in nature, and it has been bought at a great price.

Fundamental structural problems of the world economy (both in business and in finance) have not been solved, and often reinforced through the bail out. Virtually all banks and financial firms are still seriously under-capitalised, a great number of industrial firms survive only thanks to overt and hidden subsidies, and private investment in general is slugging. The massive interventions of central banks and governments have also created respectively aggravated other problems, such as the institutional fragility of civil society (systemic risks), the erosion of political liberty, the undermining of public finance (potential of major macroeconomic disruptions in the near future), and the further erosion of entrepreneurial responsibility, one of the pillars of a genuine market economy.

BIBLIOGRAPHY

- Altmiks, Peter (ed.), *Im Schatten der Finanzkrise. Muss das staatliche Zentralbankwesen abgeschafft werden?* (Munich: Olzog, 2010).
- Barth, J. and G. Caprio and R. Levine, *Rethinking Bank Regulation: Till Angels Govern* (Cambridge University Press, 2005).
- Benedict XVI, *Caritas in Veritate* (2009).
- Bernholz, Peter, *Monetary Regimes and Inflation* (2003).
- Ehrenberg, Richard, *Das Zeitalter der Fugger. Geldkapital und Creditverkehr im 16. Jahrhundert* (Jena: Fischer, 1896).
- Gouge, William, *A Short History of Paper Money and Banking in the United States* (reprint, New York: Kelley, 1968 [1833]).
- Higgs, Robert, *Crisis and Leviathan* (1977).
- Higgs, Robert, 'Regime Uncertainty – Why the Great Depression Lasted So Long and Why Prosperity Resumed after the War', *Independent Review*, vol. I, no. 4 (1997), pp. 561-590.
- Higgs, Robert, *Depression, War, and Cold War. Challenging the Myths of Conflict and Prosperity* (New York, 2006).
- Huerta de Soto, Jesus, *Money, Bank Credit, and Economic Cycles* (2nd ed., Auburn, Ala.: Mises Institute, 2006).
- Hülsmann, Jörg Guido, *The Ethics of Money Production* (Auburn, Ala.: Mises Institute, 2008).
- John Paul II, *Centesimus Annus* (1991).
- Mises, Ludwig von, *Critique of Interventionism* (1977 [1929]).
- Murphy, Robert, *The Politically Incorrect Guide to the Great Depression* (Chicago: Regnery, 2009).
- Paul, Ron, *End the Fed* (New York: Grand Central Publ., 2009).
- Powell, Jim, *FDR's Folly: How Roosevelt and his New Deal prolonged the Great Depression* (New York, 2003).
- Rothbard, Murray N., *America's Great Depression* (5th ed., 2005).
- Rothbard, Murray N., *A History of Money and Banking in the United States: The Colonial Era to World War II* (Auburn, Ala.: Mises Institute, 2002).
- Salin, Pascal, *Revenir au capitalisme, pour éviter les crises* (Paris: Odile Jacob, 2010)
- Shlaes, Amity, *The Forgotten Man. A New History of the New Deal* (New York: Harper Perennial, 2008).
- Taylor, John D., *Getting Off Track. How Government Actions and Interventions Caused, prolonged and Worsened the Financial Crisis* (Stanford: Hoover Institution Press, 2009).
- Woods, Thomas, *Meltdown* (Chicago: Regnery, 2009).