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The G-20 Conference, Central Banks, and Garbage Collection[1]

1. Partners in averting a catastrophe

Speaking to union members in Italy on 11 November 2008, President Lula of Brazil warned his audience that they should not expect major results from the meetings of Group of Twenty (G-20)[2] nations in Washington at the week's end. Lula admitted that the G-20 would not be able to make a perfect diagnosis of the causes of the global financial crisis, though he added that:

- This first meeting was at least a promising start, and
- The G-20 nations now appeared to be taking over from the G-8, as the main forum for tackling the crisis, a fact that was (in his opinion) to be welcomed.

Lula knew what he was talking about because a few days prior to that statement he had welcomed in Rio a preparatory meeting of G-20 finance ministers. (The Group of Twenty was created after the Asian and other emerging markets financial crisis of 1997/1998, mainly with the objective of looking after exchange rates and (less so) cross-border capital flows. Even restructured, it is by no measure the perfect forum for today's problems, some of its members like Argentina being chronically mismanaged. On the other hand it is true that the G-7 is too narrow and should be enlarged with Russia (which is in the G-8), China, India, and Brazil (the BRIC), plus South Africa and Saudi Arabia.)[3]

Other heads of government were much more enthusiastic and hopeful than Lula, speaking of the gathering as Bretton Woods II (BWII). The comparison is meaningless, however, because the problem is so different from what it was in 1944. Then, there were three victors, two of which, America and Britain, took upon themselves to decide on how the finances of the world should be organized and run when peace came – to avoid another Great Depression.

(The other nations that participated in Bretton Woods were for any practical purpose taken along as stage hands.) Moreover:

- Bretton Woods painted a picture (right or wrong) on white canvas, and this was done by known artists, namely John Maynard Keynes and Harry Dexter White.
- The artists had full backing from two political giants: Franklin D. Roosevelt and Winston Churchill, a species now extinct.[4]
- The conference itself was preceded by more than two years of grueling technical work, which laid the ground for (what was then) a new global financial structure,[5] and
- There was an underwriter with huge prestige and ample financial resources to lift the world economy and guarantee its solvency and liquidity. With all due respect, such an underwriter is not around today.

What is around is Snow White and the seven dwarfs. Or, more precisely twenty-one dwarfs who were present at the Washington conference – and who don't make a giant even if one steps on the shoulders of others like a famous act in the Chinese circus. Therefore, it is presumptuous to talk of BWII. The best that could be expected is a workable compromise and even that cannot be certain, as section 2 documents.

Critics say that the supposed BWII agenda is incomplete and superficial. Others consider it to be vague, repetitious, and sprawling, made to please political leaders sitting around the negotiators' table. Others still believe that nothing would come out of discussions which started with platitudes and are constrained by complexity as well as by self-interests connected to competitiveness and sovereignty. These were reasonably absent in the original Bretton Woods negotiations.

Nobody would really disagree on the general lines,[6] such as the need to limit the ongoing financial and economic crisis. *The devil is in the detail*. "We are witnessing a fundamental reassessment of the value of every asset everywhere in the world," said Kevin Warsh, a governor of the Federal Reserve.[7] Warsh is right. Can a committee of 20 or 30 do that? A committee has neither a soul to blame nor a body to kick.

Added to this shortcoming is the fact that each big bank today is (or at least was) richer and more powerful than the large majority of UN member states, and that all nation-states jealously guard the right to oversee their own banks. Different reasons lie in the background: prestige, suitability of bank regulations to local conditions, and taxpayers' money thrown at the problem by the fire brigade. When a financial crisis comes, who will foot the bailout bill?

The more serious critics of BWII are pointing out that what really bothers them about these G-20 talks is that the agenda itself is vast and half-baked (section 2). And above everything else, any effective solution will be primarily political and only then economic and financial. The original Bretton Woods did not come standalone. The political arm was the United Nations. But the United Nations today is another old coots' club. It cannot fulfill the same mission.

Besides, it should not be lost from sight that while big banks were motivated by lust and greed in their destruction of the global financial structure, in the background there have been the $60 trillion or more of world-wide debt – plenty of it at family level (Chapter 1). This debt hangover will continue increasing exponentially, as people want to live better (which is reasonable). The only way to bend the debt curve is to establish global birth control – as Mao did in China. Who is going to do that? The G-20?

Closely associated with this priority is the need for a major political choice. Is our generation, and those coming immediately after, opting for the State Supermarket (Chapter 1) as the social and economic model? *If yes*, who will pay for it, and what sort of banking system do we need to have in this case? *If no*, then how will social restructuring be done, and how should be defined the role of:

- A bank?
- An insurance company?
- A hedge fund?
- A private-equity fund?

Critics of the Washington event also lament the fact that the Bank for International Settlements (BIS) – evidently including the Basel Committee, insurance supervisors, and the Financial Stability Forum – was not given a prominent role on 15 November 2008. As far as banking regulation is concerned, the World Bank and the International Monetary Fund are irrelevant:

- They are bureaucracies of another age, and for a different purpose, and
- Bureaucracies cannot be effectively recast. Too many invested interests and too much stonewalling don't permit it.

True enough, the Basel Committee's Basel II has been no success, for reasons briefly discussed in Chapter 5 and further explained below in section 3. It is a flawed agreement because too many hands (precisely, the commercial banks' own hands) manipulated it – ironically to their own disfavor. Hence, while it is not yet in full force, it already needs major repair. This is particularly true of its two main failings:

- Reliance on independent rating agencies, and
- Allowing banks to develop and use their own models of the risks they are carrying, and the capital adequacy that these require.

To correct (up to a point) the failure identified by the first bullet, I propose the Delphi Method.[8] Its wide use will permit the replacement of one party's biased credit rating by community intelligence. In regard to the second bullet, a universal risk model should employ the best artifact available from the physical sciences, namely quantum electrodynamics (QED), on which I am currently working.

Its adoption and implementation should be a chiefs-of-state decision, precisely the kind of agreement the 15 November 2008 conference aimed to reach. But attention: the modeling solution based on QED must be holistic, applied *as is* (without deviations and incompatible versions[9]) by every bank – permitting all regulators to look at systemic risk in an integrative manner, not just one bank at a time, which has been the way done so far.

A universal model, its results unambiguous and understood by everyone, would allow the building of confidence; and business is built on confidence. In terms of methodology, QED should go to the core of the problem, rather than limiting its application to hitting the headlines. Attacking the core of the problems has been precisely the strategy followed in physics.

2. The 15 November 2008 conference in Washington, DC

There have been several positive effects from the 15 November 2008 G-20 meeting of heads of government in Washington DC: the recognition of the world's increasingly interconnected financial services, the fact that if left to its own devices the current crisis is likely to create major systemic risk, and the existence of responsibilities which go along with prudential supervision of the banking industry as well as with the management of the banks themselves.[10] In counterparty, there have been six negatives:

1. *The final communiqué is both unfocused and modest.* The mission given to finance ministers is so confusing that they should be excused if they deliver nothing by the 31 March 2009 deadline (more on this later). Rarely have so many words been put together to mean so much in headlines and so little in practical terms.
2. *The financial industry has been looked at from a very narrow and ill-defined perspective*. Which banks are precisely targeted? The big, the medium, the small? All of them at the same time? Retail, wholesale, investment? And why only banks? Insurance companies must be included, as well as hedge funds, mutual funds, endowments, and other entities dealing with large amounts of money. In short, non-bank banks.
3. *Not only have hard details not been touched upon, but also alternative choices that exist have not been identified.* It is up to the chiefs of state, and not to the ministers of finance and their underlings, to make these choices. *If* however the CEOs don't define precisely what they want regarding the study of alternatives, *then* the answers they will be getting are bound to be ineffectual if not outright meaningless.

4. *The practice of deviating from the main theme – which is the credit crunch, banking, and the economic crisis – by calling on the World Trade Organization for a successful conclusion to the Doha Development Agenda – is unprofessional.* Running after too many hares is the best possible prescription for catching none.[11] As the English recipe for cooking rabbits advises: "First catch your rabbit." Doha was not Washington's rabbit; banking and the economy were. "Instructing the trade ministers" to revive "Dead Cat Doha" is equal to providing everybody with the excuse to play dead cat.
5. *Most vital to the avoidance of future crises is strict control of national debt and household debt. This is utterly missing from the Washington conference's goals.* As Chapter 7 has documented, in several countries – particularly the US, Britain, Holland, and France – household debt is reaching for the stars. This cannot continue without severe consequences. National debt, too, is running out of control. A more stringent type of euroland's Growth and Stability Pact would help to put a limit to debt's unstoppable rise.
6. *As every manager worth his salt knows, the goals should be very few and very clear – so clear that every member in the team understands exactly what is expected of him or her, as well as what are the rewards and penalties.* Reading the 11 pages of the communiqué one gets the impression that it has been written by busybodies who probably want the whole effort to fail. Lobbyists, maybe. The text is unfocused, repetitious, with plenty of platitudes and a fair amount of contradictions. Pity any finance minister who might try to understand which way to go.

   There is as well the suspicion that the communiqué is overstuffed because some of the 21 nation leaders wrote in bits for electoral consumption at home. "At a G-20 meeting in Washington on November 15th, Mr Brown is expected to seek agreement from other leaders on the need for an international round of tax cuts," said an article in *The Economist*.[12]
7. *A large part of what is written in the joint communiqué is nothing more than "apple pie and motherhood"; it is not a plan of action with precise deliverables.* There exist as well some platitudes that are difficult to untangle. In a conference on the rapidly deteriorating global economy, statements such as "We remain committed to addressing . . . climate change" break all records of irrelevance. Is climate change taking precedence over the banking and economic crisis, or is it something to be kept in the background?

Such deviations are dangerous because they indicate that what the Washington conference has built may well be a castle in the air. Rather than on climate change and Doha, the heads of government who met mid November 2008 should have focused their attention on ways and means to:

- Bring under the wings of bank regulation *all* financial entities, their instruments and vehicles,

- Study in order to decide whether the current deflationary backdrop can morph into outright consumer price index (CPI) deflation in 2009, and whether this might become self-perpetuating.

The fact that deflationary forces may be in motion is no call for inflationary spending, which at the end of the day has always proved to be ineffectual and damaging to the economy. In addition, the fragile national economies simply cannot afford simultaneous garbage collection by central banks (sections 5 to 8) and big fiscal stimulus at the same time. However, some easing could be acceptable *if* it is:

- Focused,
- Rapid, and
- Temporary.

Heads of government, their finance ministers, and central bankers should try to keep an open mind on this topic, and the only effective way of doing so is by spelling out possible strategies, as well as the costs and deliverables of each of them.

Regarding the regulation of industry sectors, those that were the biggest beneficiaries of decreased regulation during the past two decades are likely candidates for greater regulation in the period ahead. Among them are financials, transport, communications, energy, and healthcare. Insurance companies are also likely to be targets in the wake of some of the recent problems in that industry, exemplified by AIG. The mission to the finance ministers should be to:

- Come up with a concrete proposal for regulation of all sectors of the financial industry, and
- Identify correlations, links and aftereffects of regulations between the aforementioned industries.

That's the short term. Regarding medium-term objectives, a fundamental question begging for a factual answer is: should our society put a limit on company size, so that companies can be better managed? Many people now suggest that companies must not be bigger than the state, and no CEO should be paid more than the country's president – even if he had a better year:

- The question of salaries was vaguely mentioned in the communiqué,
- But the more relevant issue of company size was nowhere to be seen.

As cross-border financial flows have expanded, big financial institutions have by far outgrown both their original purpose and their domestic markets. Their boom and doom has become more unsettling than the multinationals of the real economy because (as Chapters 6 and 8 explained) the virtual economy is wide open to layer upon layer of leverage. The G-20 conference failed to address the issue of whether these are the sort of companies we wish to have when we know that:

- Finance is inherently unstable, and
- Today the financial industry is the most globalized part of the world economy.

Other basic choices, too, have been left in a state of vagueness in the communiqué. The statement is made: "Regulation is first and foremost the responsibility of national regulators..." Hence the Washington conference accepts that the current fragmented regulatory system will persist. There will not be the "global sheriff" George Soros has asked for – yet he is right:

- In the global economy somebody has to regulate the regulators, and
- Short of that the supposed internationalization of "this" and "that" will be a half-baked solution.

Also making funny reading is the reference to the "strengthening of international standards, where necessary." Who is going to decide what *is* and *is not* necessary? This might very well have been a mission given to the ministers of finance for their study and 31 March 2009 report. Instead of asking for deliverables, the communiqué skids to the next issue: "to protect against adverse cross-border, regional and global developments."[13]

From the record there also transpires a disagreement about two views theoretically opposing each other: the American for "boosting oversight" and the European for "increased regulation." With the exception, of course, that because Bush has now left office, his words may not represent tomorrow's American position. In conclusion:

- Either the Washington economic conference has been a goodwill initiative and nothing will change,
- Or it is much more ambitious for what 21 semi-equals can achieve, but in this case they should know that the undertaking is full of risks.

In an article in the *Financial Times* Martin Wolf had good advice for Barack Obama and the G-20 meeting of 2 April 2009.[14] Here is his opening paragraph about what Obama should say to the other heads of state, according to Wolf: "My fellow leaders... Let me get a big point out of the way: yes, the US is messed up. We thought we knew about sophisticated modern finance. We were wrong. On behalf of my country I apologize... We must learn the lesson and look ahead, not backwards."[15]

An assembly which leaves sovereignty behind and strikes for a new order based on multilateral economic and financial cooperation has to contend with the fact that this calls for a vast plan. Its execution requires unity of command and the utmost in managerial skills. It is not at all sure that each of the 21 heads of government has decided to leave sovereignty behind on the doorstep before entering the temple.

The needed change will not come with calls for "due diligence" and "better risk management," as the G-20 communiqué suggests. These are empty words to impress the gallery. What is needed is two or three precise goals which *must* be achieved, expressed with great clarity and accompanied by a firm timetable. *Good timing* requires a detailed schedule of deliverables, which was missing from the communiqué.

3. Basel II[16] failed to account for modern risk's polyvalence

Basel I and Basel II have been introduced in Chapter 5. This section brings to the reader's attention the likely aftereffect of ongoing efforts aimed at restructuring the financial system and most particularly its supervision – of which the Basel capital accords are an integral part. This is important inasmuch as Basel II is based on three pillars and all of them would be affected *if* a global agreement could be found:

- Pillar 1 addresses capital adequacy.
- Pillar 2 provides for regulation, at the discretion of each jurisdiction.
- Pillar 3 targets market discipline.

Pillar 1 is aimed at aligning the bank's capital adequacy with the amount of risk they are taking. This contrasts with Basel I's goal, which was more limited – calling for a flat capital ratio of 8 percent for internationally active banks – without accounting for the riskiness of each bank's assets.

What has been the result of this more sophisticated approach? For several reasons (some of which are discussed in this section), the answer is not positive. Basel II tried at first to be sensitive in risk terms, rewarding banks that take fewer risks with lower capital requirements. Pretty soon, however, that proved to be wishful thinking because:

- Each bank has been permitted to develop its own capital models.
- Credit decisions, and credit rating, have been biased on the side of imprudence.
- Banks found plenty of ways to game the system, including model manipulation.
- By increasing their amount of leverage they simply send risk to a stratospheric level, higher than ever before.

Many of the big banks' strategies have backfired. Key among them have been too-lenient loans, disregard for liquidity (section 4), and the fact that longer-term commitments have been financed through short-term commercial paper. None of these was adequately controlled by Basel II rules.

Analysts reckon that in October 2008, 14 months after the credit crisis started, there is a $6 trillion overhang of committed lending facilities to be drawn down, most of it at more generous terms than borrowers could get at present. According to reports circulating in the banking industry, for evident reasons corporate customers are not interested in refinancing. Banks, however, run scared because default risk is now high.

Under the Bush Administration, the Treasury made commitments way beyond appropriations by Congress. During the 10 February 2009 Bernanke hearings by the House Banking Committee, representative Carolyn Maloney, a Committee member, said that by some calculations the US government has guaranteed $7 trillion. Other estimates put the gearing higher, to over $8 trillion. This is by no means the end. Rather, it looks like being the beginning.

Basel II had not foreseen these management failures on the banks' side; therefore it does not provide for appropriate guarantees in regard to capital adequacy. Neither was much thought given to the fact that banks will hide a great deal of their exposure through off-balance-sheet vehicles and instruments, reducing by so much their capital resources and their solvency established by Basel's regulatory capital requirements (Basel I, Basel II).[17]

Using lobbyists, political pressure and smart stratagems, big banks managed to hide a horde of risks they were assuming from supervisors' eyes, till hell broke lose. In addition, a very weak element of Basel II has been that it handed much of the responsibility for assessing counterparty risks to credit rating agencies and to the banks themselves. The subprimes meltdown demonstrated that both these parties' credentials as risk controllers are questionable.

As proof of some of Basel II's flaws, critics also point to the role played by universal banks in brokerage. A rule change in 2004 allowed Wall Street firms to use new risk calculations, but this rule change was so imprecise that financial reports continued to show these banks as being well capitalized, on a risk-adjusted basis, even as their exposure skyrocketed. European universal banks followed closely on that practice, and in the end such a twisted rule had fatal consequences.

Another criticism is that, Basel II or no Basel II, the meddling with massive amounts of money by central banks and governments with the way markets work has long-term consequences – such as making capital adequacy standards irrelevant. An interesting and unsettling result of all this intervention has been to make it hard to find out just how risky assets are now that:

- The state is underwriting the system, and
- The practice of marking-to-market assets and liabilities has partly been turned off.

The ill-advised government action in the second bullet comes at a very bad time because the markets ask for a higher not lower level of transparency. True enough, steps are being taken to strengthen risk charges for assets held in banks' trading books, and to improve banks' liquidity management. There are also discussions on how to dampen procyclical effects, and Swiss regulators are now requiring that their biggest banks introduce a leverage ratio. But, altogether, Basel II is out of step with current realities.

Moreover, while Pillar 2 of the new capital adequacy framework has been taken as evidence that the rules are flexible, allowing national supervisors to turn the screw on capital as necessary, this has proved to be a weakness. In some jurisdictions regulators have used that clause to favor their own banks at the expense of their foreign-based competitors. Rather than appeasing the financial markets, such nepotism has triggered a wave of uncertainty:

- The investor community has been saying: "Show me the money, or I won't believe you," and
- The only way to buy credibility is to raise capital and improve each bank's liquidity position, even if in the medium term this is dilutive for its shareholders.

For its part, Pillar 3 was supposed to provide for market discipline, but subprimes, CDOs, and CDSs have shown that that's a hope rather than a fact. In addition, the virtual cancellation of marking-to-market is the worst thing that could happen to market discipline. It is simply dishonest to say the market will exercise discipline when it is denied reliable fair-value information.

Another factor negatively affecting transparency and market confidence has been the postponement of integration of off-balance-sheet exposure – where a myriad of skeletons hides – into the banks' balance sheets. The reason for hiding bad news is that it is hard to see how the overhang of debt is going to be cleared. The amount of paper for sale is far outstripping the market's buying power. Every time one of the lists of assets for sale circulates, the market drops. Investors believe that:

- The price of warehoused loans and derivative instruments has lost touch with the levels of default; and
- This psychology sees to it that debt is trading at levels that assume corporate defaults will hit numbers last seen during the First Great Depression of 1929/1933.

Part of the reason for the strong linkage between risk aversion and debt is that credit markets are unwinding from excessive leverage. One of the shortcomings of Basel II is that it made no provision for the effect of high leverage on banks' capital adequacy, and it says practically nothing about how deleveraging affects the survival of a credit institution.

A basic characteristic of the continuing stress conditions in banking and the economy, which has been missed by government authorities, central bankers, and analysts, is that the rapid disappearance of leverage from the market is having as many perverse effects as its piling up. Something else that Basel II did not account for is that by its very nature the balance sheet is not a precise mathematical document. Much of what is written is invalid, the result of manipulation:

- Making it easy to hide leverage,
- But hiding deleverage has not yet been perfected in creative accounting terms.

Arbitragers, who in the go-go years would have been actively hunting mispriced assets, cannot get access to money. For bankers, too, liquidity that was ample across the globalized market has become nonexistent and regulators have to factor in the likelihood of markets being illiquid. In addition, as excess leverage is being unwound there are many forced sellers of bonds, precious metals, and other commodities, and this is creating huge dislocations in prices. None of these events is accounted for in calculating capital adequacy under Basel II.

4. Principles of liquidity risk management by the Basel Committee

Incorporating liquidity facilities into banks' internal liquidity risk management is an important requirement, indeed an indispensable one. In addition, the growing prevalence of new instruments like the originate-to-distribute business model, has led to the increased interdependence of the availability of financial resources with emphasis on:

- Funding liquidity, and
- Market liquidity.

Funding liquidity risk is the risk that an institution will not be able to meet efficiently both expected and unexpected current and future cash flow and collateral needs, without affecting its daily operations or its longer-term financial condition. By contrast, *market liquidity risk* is the risk that the entity cannot offset or eliminate a position at fair price, because of inadequacies in the debt market or an outright market disruption.

As the events of July/August 2007 and of subsequent months have shown, a large number of financial institutions had considered funding neither liquidity risk nor market liquidity risk, and therefore they were in difficulty in satisfying their obligations as they became due. Moreover, many of the most exposed banks did not have in place an adequate framework for sound liquidity risk management.

For their part, since their inception Basel I and Basel II lacked mandatory liquidity directives. In June 2008 the Basel Committee on Banking Supervision issued a draft for consultation *"Principles for Sound Liquidity Risk Management and Supervision,"* which outlines 17 principles, 13 of which are addressed to commercial banks and 4 describe the role of supervisors.

The Basel document names, as the fundamental or *first principles* for the management and supervision of liquidity risk, the bank's liquidity responsibilities. These include the establishment of a robust liquidity risk control framework, high-quality liquid assets, and strength to withstand a range of stress events. Liquidity is defined as the ability of a bank:

- To find increases in assets, and
- Meet obligations as they come due, without incurring unacceptable losses.

The Basel Committee makes the point that virtually every financial transaction or commitment has liquidity implications for the institution. Also brought into perspective is the fact that a liquidity shortfall in one entity can have aftereffects on other banks, leading to systemic repercussions.

These principles have been known but they were not applied. The Basel document underlines the need for identification and measurement of a full range of liquidity risks (including those contingent) and for stress test scenarios (more on them later) which could provide foresight on impending liquidity problems.

Basel's *second principle* on liquidity risk management is that a bank should clearly articulate a liquidity risk tolerance that is appropriate for:

- Its business strategy, and
- The role it plays in the global financial system.

Liquidity principles 3 to 7 state the reason why a financial institution's funding strategy must be characterized by effective diversification in the source and tenure of funding. It is senior management's responsibility to develop strategies, policies, and practices that allow effective management of liquidity risk. Also, to steadily review information on the bank's liquidity and to take effective measures to redress poor liquidity approaches.

Furthermore, a financial institution should incorporate in its product pricing, as well as in its new product approval, liquidity costs, benefits, and risks, comprehensively projecting cash flows arising from assets both on-balance-sheet and off-balance-sheet. It should also match exposures and funding needs within and across:

- Currencies,
- Business lines, and
- Legal entities under its control.

Liquidity management principles 8 to 12 state that the bank should actively manage its collateral positions and track liquidity exposure intraday, with the objective of meeting payment and settlement obligations on a timely basis. This should be done both under normal conditions and under stress. Therefore, a financial institution should regularly conduct stress tests for its own specific and market-oriented scenarios:

- Identifying sources of potential liquidity strain, and
- Adjusting its liquidity risk control practices.

Adjustments should integrate into a formal contingency funding plan that sets out policies for addressing liquidity shortfalls in emergency situations – including high-quality liquid assets to be held as insurance against a range of liquidity stress conditions. Principle 13 interfaces with market discipline in liquidity management, stating that a bank must publicly disclose information on its liquidity position and liquidity risk management framework.

The role of supervisors is described in principles 14 to 17, which specify the performance of ways and means for comprehensive assessment of a bank's liquidity risk management framework and liquidity position. Emphasis is placed on supplementing regular assessments by monitoring a combination of:

- Internal controls,
- Prudential reports, and
- Market information.

Additionally, Basel says, supervisors should intervene to require effective and timely remedial action when deficiencies in liquidity risk management are identified in a given financial institution. They should also communicate with other supervisors and central banks, within and across jurisdictions, to enable effective cooperation regarding the oversight of liquidity.

Without explicitly saying so, the concept underpinning the 2008 liquidity rules is that the banking, credit, and liquidity crisis which started in July/August 2007 has demonstrated that financial institutions had no clear understanding of contingent liquidity risk exposure arising from their contractual and non-contractual relationships at large and their commitments with special-purpose vehicles (SPVs) in particular.

In either case the bank should incorporate cash flows related to the issuance, repricing, exercise, or maturity of derivatives contracts in its liquidity risk analysis. This must include the potential of a demand for additional collateral in cases of a decline in the price of the underlying asset, a downgrading in credit rating, or other reasons affecting liquidity criteria and the institution itself. Examples of where a bank should consider liquidity risk on a consolidated basis are those of:

- Providing liquidity to a special-purpose vehicle (SPV) characterized by a maturity mismatch between short-term and long-term obligations, and
- Providing liquidity facilities to third-party SPVs like conduits, structured investment vehicles (SIVs), and asset-backed commercial paper (ABCP) transactions.

Regarding liquidity stress tests, the Basel Committee recommends that they must enable management to analyze the impact of extreme events on the bank's consolidated group-wide liquidity position, as well as on the liquidity position of controlled entities and business lines. Such tests should:

- Reflect accurate timeframes for settlement cycles of assets that might be liquidated, and
- Incorporate the time needed to transfer liquidity across jurisdictions.

Operational and settlement disruptions must also be considered. The same is true of a number of assumptions necessary for the effective execution of a stress test, like the likely and unlikely response of other market players to events of market stress, and the likelihood that such response might amplify value movements and exacerbate market strain – for example, creating runoffs of funding, eroding the value of liquid assets, leading to the unavailability of secured and unsecured wholesale funding sources, and creating additional margin calls and collateral requirements.

In addition, an integral part of stress-testing funding liquidity risk is that of liquidity drains associated with complex financial products and transactions, the likely impact of credit rating triggers, the operational difficulties the bank finds in monetizing assets, and the changes to the policies followed by central banks in terms of making available liquidity under stress conditions – the theme of the next four sections.

5. Repositories of last resort: the European Central Bank

The new regulations that section 4 brought to the reader's attention are still at the draft stage. Since July/August 2007, liquidity has been scarce, and liquidity risk has topped the list of central bankers' concerns for new regulation.

The best-managed commercial and investment banks have always considered liquidity one of their overriding concerns, the guiding principle being to lock in time deposits and borrow for the longer term. But poorly managed banks did the opposite:

- At the end of fiscal 2007, Bear Stearns, the fifth-largest US securities firm, had relied on repos for 26.7 percent of its borrowing.
- Lehman, the third largest, had the highest reliance on repo funding in the US investment industry, at 27.2 percent of liabilities.

When other market participants became skittish about Bear and Lehman finances, they became less willing to engage in repo transactions, depriving the New-York-based companies of a key source of funding. In 2008 both of them crashed; one in March and the other in September. So much for Greenspan's guiding principle that "free markets" are able to regulate themselves (Chapter 8). European banks have shown the same propensity to forget about sound government principles. Confronted with a nearly impossible situation in terms of market liquidity, on 9 August 2007, after an alarming leap in interbank interest rates, the European Central Bank signaled its readiness to provide the banking system with liquidity. During the following months, the Fed and other central banks followed the ECB in collecting as collateral all sorts of dubious financial paper, though a year on the credit crunch continues.

The pros say that the central banks' willingness to provide liquidity by bending the rules guiding the quality of collateral they accept has prevented financial markets from melting down completely. In the opinion of critics, this policy has overflowed with moral hazard. No doubt, in the years to come, this policy will be one of the hottest topics discussed and debated by economists:

- Was garbage collection necessary because the financial system was not as robust as most regulators thought, and major risks were hidden off-balance-sheet?[18]
- Or was the "no bank left behind" policy one which bends central banks' credibility, resting as it does on their ability to do two unpopular things: raise interest rates to control inflation, despite the economic pain; and let financial institutions fail.

It is not the objective of this text to take sides but rather to review the facts and let the reader decide (though a couple of comments have been unavoidable). The fact is that first the European Central Bank, and a couple of months later the Federal Reserve, added a new twist in their provision of liquidity to the market: that of acting as collateral depositors of last resort, for non-investment-grade paper presented to them by commercial banks as guarantee of the loans which they take.

Theoretically, the logic behind assuring a broader liquidity provision is simple. It is the means of breaking a vicious circle of market fear and forced selling, as the traditional system of credit provision becomes dysfunctional. In the aftermath of a major crisis generated by the banking industry itself, investors had plenty of reason for refusing to hold all but the safest government bonds.

The downside which made itself evident, a few months after this practice started, is that commercial banks exploited the central banks' goodwill by placing freshly created asset-backed securities (ABS) in the monetary institutions vaults. Eventually, this became a new sort of leveraging. An Australian bank, for example, used as collateral at the ECB securitized Australian receivables.[19]

Some banks even employed the same rocket scientists who projected the CDOs to design instruments specifically for warehousing at central banks; and there have been other abuses. In mid November 2008 Volkswagen confirmed that, via its banking subsidiary Volkswagen Bank, it would seek to tap the ECB facility for liquidity by tendering €2.8 billion in securities backed by car loans in Germany as collateral. The ECB has included asset-backed securities in the list of eligible assets that can be monetized. This transaction will make VW the first German manufacturer to get liquidity from the central bank; it is likely to be followed by BMW Bank and Mercedes-Benz Bank:

- VW claimed that it is considering using the plan to optimize its refinancing costs, given the attractive conditions offered under the scheme.
- Analysts said that while any funding the plan will reduce the technical pressure on VW to issue and help support new car sales, the adverse fundamental situation will continue to look bad.[20]

Let's make one thing clear at this point. Since its institution, the main aim of the European Central Bank has been to maintain stability. Even at the time of the European Monetary Union (EMU), which was first proposed in 1962 and instituted by the Maastricht Treaty, European finance ministers had agreed that:

- Monetary orthodoxy would prevail, and
- Monetary policy will be based on strict anti-inflation criteria.

At the heart of the problem is the fact that ECB and other western central banks have been accepting as collateral, in their refinancing operations, a wide range of assets including ABS, for which there is temporarily little or no trading. The only provision, in the ECB's case, is that the tranche is the most senior and graded A- or above by one rating agency, which means nothing at a time when even junk has got AAA credit rating. According to published reports, this has led a large number of banks to design ABS tranches purely for central bank consumption.

JPMorgan Chase has estimated that, as of mid June 2008, of €208 billion ($320 billion at the time) of "eligible securities" created for the above-mentioned purpose, less than €6 billion has been placed with investors. In December 2007, for example, Rabobank, Holland's huge agricultural bank, issued €30 billion ($44 billion) of mortgage-backed securities, 90 percent of which were designed exclusively for refinancing with the ECB.[21]

The central bank's readiness to help in terms of liquidity by accepting second-rate collateral has been treated with disrespect and impunity by commercial and investment banks. Therefore, it has come as no surprise that at end of August 2008 the ECB announced that it would tighten its rules for collateral to assure that what it offers to banks is strictly liquidity support. But the Volkswagen case put a question mark over the effectiveness of this change.

A particular worry is that in countries where housing bursts have made investors wary of mortgage-backed assets, like Spain and Ireland (both euroland members), banks continue creating securities for the express purpose of gaining central bank funding – and they use their government to exercise pressure for their acceptance. This:

- Exposes the ECB (and other central banks) to too much credit risk, and
- Stalls market recovery for mortgage-backed assets in a global sense.

For instance, the supply of central bank cash to Spanish and Irish banks more than doubled from August 2007 to August 2008, both in size and as a share of the euroland total, while creditworthiness has taken a dive. In May 2008 Fitch, the credit rating agency, said that standards for newly structured Spanish mortgage-backed securities had slipped since the credit crunch started in July/August 2007.

This issue of garbage collection for liquidity's sake is complex, because the ECB is essentially the central bank of euroland's central banks. Critics say that it should shield its constituent central banks from the risk of loss if one of the commercial and investment banks depositing toxic waste as collateral defaults, and also assure that commercial banks:

- Do not shift their credit risk onto the ECB vaults on favorable terms, and
- Benefit from an unwarranted subsidy, while they are at fault.

In the opinion of some economists, a good approach for avoiding moral risk is that the Fed, the Bank of England, and the ECB should ban the use of securities that seem to have been created to take advantage of central bank funding, starting with the rule that only a small fraction of any ABS of corporate-bond issue could be permissible. At the same time, central banks should require that collateral is backed by income streams in local currency, which would curb one of the ways banks use to game the system, using central bank money to finance doubtful loans they still make around the world.

6. Repositories of last resort: The Bank of England

Section 5 provided evidence that the European Central Bank and the Federal Reserve have too few tools and procedures to cope with the problem of commercial bank and market illiquidity, and at the same time there are too many questions posed about the wisdom of accepting all sorts of toxic waste as collateral in order to let banks off the hook. The Bank of England did something similar.

In April 2008, the British central bank set up a Special Liquidity Scheme (SLS), subject to some restrictions. Subsequently, it widened the range of collateral it accepts provided that the illiquid financial products were held in the commercial banks' balance sheets before the end of 2007. Essentially the Bank of England has followed in the footsteps of the Fed and the ECB in accepting bad money in exchange for good money. The first installment amounted to £50 billion ($90 billion at that time), the only requirement being that any beneficiary should:

- Recapitalize themselves, and
- Restructure their balance sheet.

Experts suggested that this £50 billion was no more than the beginning, and the experts were right. Midway through 2008 came the news was that British banks were preparing up to £90 billion of mortgage-backed bonds to send to the Bank of England, and that piece of news created a doomsday mood in the market.

Less than 2 months down the line, securitization analysts estimated that through the Special Liquidity Scheme banks could draw down more than £700 billion of liquid government bonds, in exchange for existing *and* newly created mortgage bonds. Some experts considered that number to be astronomical, while others stated that it showed the depth of the banking crisis in Britain.

Criticism mounted as news leaked out that all three central banks – the Fed, the ECB, and the Bank of England – were highly concerned about the quality of collateral they were holding in the aftermath of commercial and investment banks' excesses, while buyers of this type of toxic waste had all but vanished from the market. Like their counterparts in America, the British banks created a lot of fake double-A and triple-A products.

Faced with an impossible situation, the Bank of England provided a temporary relief for overleveraged and overexposed commercial and investment banks. Several economists warned however that this could not go on forever;

if it continued it risked engulfing the western central banks themselves in a downturn which would throw a huge amount of oil on the flames of inflation.

On 11 September 2008, Mervyn King stated that the Bank of England would offer short-term liquidity insurance to British banks but could not give commercial banks long-term help in funding.[22]

For this he referred them to Gordon Brown, the British prime minister. A week later, like the Fed and the ECB, the Bank of England sought to stem the fallout from Lehman Brothers's slide into bankruptcy:

- Many British banks were short of cash because they had lent Lehman money which was then tied up in bankruptcy proceedings.
- Not all of that money was necessarily lost, but the central bank has had to tide British banks over until it becomes clearer how much they will ultimately recover.

At the same time, while the Bank of England stated that it was closely monitoring market conditions and would take actions to ensure that the overnight rate is close to its bank rate, worries were raised about the effects of the steady injection of good money, which also risked toppling the British government's already frayed fiscal framework.

The experts' worries were increased by rumors that up to early November 2008 British banks may have tapped a low three-digit number of billions in Bank of England funds. The way such rumors had it, the central bank had found itself obliged to put on the table extra reserves to help stabilize conditions in the sterling money market.

When, following a torrid day on 7 October 2008, Alistair Darling and the Treasury set out their plan to recapitalize British banks that had propelled themselves to the edge of the abyss, they envisaged having to inject up to £50 billion of public money to bolster banks' capital. But already by mid October 2008 a big amount was needed to beef up the capital of just three banks: Royal Bank of Scotland (£20 billion), HBOS (£11.5 billion) and Lloyds TSB (£5.5 billion), assuming shareholders made no contribution. And whereas the initial plan had envisaged the state acquiring safer interest-bearing preference shares, £28 billion out of the £37 billion were in riskier ordinary shares.

Moreover, who else would be invited to join? And under which conditions? The first news was that Britain's biggest banks have all signed up to the new capital injection, while the government planned to help free up the market for short-term liquidity by lending to banks for up to three months. Then it was revealed that:

- RBS, HBOS, and Lloyds TSB would participate to the plan and share among themselves the £37 billion.
- To the contrary, Barclays chose not to participate, looking instead to raise £5.4 billion (later upped to £6.5 billion) from private investors through a shares offer.

Indeed Barclays issued a statement that its "proforma" Tier-1 capital was more than 11 percent. This left the market puzzled because proforma is a murky way to compute financials, being totally at the discretion of the company making the announcement. It was used in the dotcom boom and bust to report on EBITDA (earnings before interest, taxes, depreciation, and amortization), making upstarts of heavily indebted internet companies.

The British government said that the share it took in the country's big banks would not be permanent;[23] it would be diversified over time. But the effect on the economy could not be hidden. The first installment alone raised debt by 2.5 percent of GDP, as the Treasury had to borrow to finance its recapitalization of the three banks.

The increase in the British government's liabilities[24] was accompanied by the risk to taxpayers that loan losses would destroy some of the capital supplied to the three banks and the support provided for Northern Rock and other institutions. In 40 banking rescues studied by the International Monetary Fund (IMF) the taxpayer typically recouped some but not all of their cost.[25]

As with the Fed and the ECB, there has also been plenty of moral hazard in mitigating the banks' funding liquidity problems though rescue operations conducted by the Bank of England. The moral hazard is greater if liquidity injections are carried out at rates that are lower than prevailing market rates (elevated because of liquidity hoarding). An additional problem was that interbank trading activity might shrink further, with the risk that the financial system would become increasingly reliant on the funds provided by central banks.

7. Repositories of last resort: the Federal Reserve

Commercial banks that needed money in a hurry and could not buy it on the market classically used the Federal Reserve's discount window, which has lent daily. Banks however have long considered access to this facility to be a stigma, an indication that they are in financial trouble. This changed with the severe 2008/2009 credit crunch and banking crisis. Borrowing from the Fed's discount window suddenly became an everyday practice with both commercial and (more recently) investment banks queuing up for money.

The Federal Reserve has thrown open its emergency lending facilities to investment banks, and it is also accepting in its open market operations a much broader range of collateral than it used to (including complex credit derivatives). Besides that, all sorts of firms have been converting themselves into bank holding companies in order to take part in the central bank's liquidity drive.

In the week of 10 November 2008 the Federal Reserve gave American Express the go-ahead to turn itself into a bank holding outfit. The decision gives America's only remaining big independent credit card firm greater access to government funding. But is this sensible? A week earlier, General Electric became the first company to borrow from the Federal Reserve's new Commercial Paper Funding Facility. GE is also the world's largest issuer of commercial paper, and it is engaged in an effort to reduce *its* exposure to it. All this is characteristic of the fact that topmost in the minds of CFOs these days are the queries:

- Have we got enough cash to make it through the night?
- Will our counterparties grant us credit?
- What are the chances of us going bust?

These are the legitimate worries of chief financial officers, but it is not the central bank's mission to provide the answers, let alone to offer them the solution on a plate. But that is exactly what the State Supermarket does, with its policy of no one being allowed to fail (Chapter 1). Because nobody is allowed to fail, small policy errors are now becoming major ones.

The smaller policy errors started when central banks acted as repositories of last resort of the toxic waste developed, sold, bought, and warehoused by financial institutions.[26] This was done without the benefit of a global plan and without establishing in advance well-thought-out criteria and limits. Prior to being launched, the liquidity policies needed:

- Harmonizing,
- Refining, and
- Limiting to assure that moral hazard is being weeded out.

The time to do so was well before December 2007, when the Fed announced its Term Auction Facility (TAF) to supply one-month loans to deposit-taking banks. As cash loans backed up by bond collateral, the TAF deals are rather conventional, even if they are for a longer time and the eligible security is more liberal than is the case with the discount window.

Suddenly, without the benefit of a clear redefinition, in March 2008 the money available to the Term Auction Facility was expanded to $100 billion from the previously announced $60 billion. The Fed just said it would increase the amounts offered if conditions warranted, and TAF auctions would continue "for at least the next 6 months," unless evolving market conditions indicated clearly that such auctions were no longer necessary.

Also, in March 2008, the Fed announced that it would lend an additional $200 billion of Treasury securities to its primary dealers through a new Term Securities Lending Facility (TSLF). These loans were projected for a 28-day period, with looser collateral requirements. For TSLF loans the central bank decided to accept federal agency debt, federal agency residential-mortgage-backed securities (RMBS), and non-agency AAA/Aaa-rated private-label residential MBS.

TSLF, the Fed added in its announcement, has been intended to promote liquidity in the financing markets for Treasury and other collateral, and thus to foster the functioning of financial markets more generally. At the same time, the Fed expanded its currency swap agreement with the European Central Bank to $30 billion, and a similar agreement with the Swiss National Bank to $6 billion – the increases being $10 billion and $2 billion, respectively.

The cash-strapped banking industry looked at these as steps as positive and innovative, but not nearly large enough to make a big difference. Though in tens and hundreds of billions, the stated amounts must be compared with a total MBS market of $6 trillion, comprised of $4.1 trillion in agency MBS and $1.9 trillion in non-agency MBS. Some analysts said that the fact the Fed would be accepting only AAA was less constraining because plenty of this mortgage debt is now mis-rated as AAA anyway.[27]

It should be note referenced, however, that the TSLF is different from previous facilities for central bank liquidity injection because it is a bond-for-bond arrangement – albeit nearly worthless MBS for Treasuries – aimed explicitly at providing liquidity to markets beyond those where cash is traded. This process has the effect of:

- Deepening the pool of Treasuries, which are in strong demand during liquidity crises, and
- Easing markets that have few buyers, by providing a temporary home for illiquid bonds.

According to critics, however, the scale of the TSLF operation raised concerns that in its attempt to reduce liquidity risk the Fed was taking on too much credit risk. Swapping pristine government bonds for rather questionable assets lowered the quality of the Fed's balance sheet. In fact, on a totally different occasion on 31 October 2008 Ben Bernanke himself had said that the relative lack of capital by government-sponsored entities (GSEs, such as Fannie Mae and Freddie Mac) proved their downfall.

8. The $2 trillion gaping hole

The measures discussed in section 5 had no immediate effect, as spreads widened alarmingly in 2008; in terms of higher volatility the VIX hit an unprecedented value of 70, and different reasons underpinning market nervousness fed upon one another. The Fed tried to break that cycle by offering US Treasury bonds while holding unwanted securities deposited as collateral by wounded banks seeking liquidity:

- The pros said that by taking them as collateral for "temporary loans" at a discount, the Fed would lose money only if there is a bankruptcy among institutions borrowing Treasury bonds.

- Critics respond that the risk of losses can be significant and this carries major moral hazard, because it induces commercial and investment banks to behave in a more risky way.

The same critics added that it is a bad policy to administer the liquidity programs in reference without counterparty by the banks, in the sense of immediate tougher regulation, better-focused accounting rules, and more rigorous supervision. Banks were still left with a lot of wriggle room when it came to reporting the values of and profits from complex loans and securities, while their losses were not always based on hard numbers but rather on debatable judgment calls. Moreover, the market needed to develop mechanisms that would allow participants to:

- Distinguish between different types of counterparty creditworthiness, and
- Apply fair margins in transactions, making central-bank lending more expensive than in the interbank market.

"If banks are too big to fail," said Dr Henry Kaufman in a Bloomberg interview on 17 March 2008, "then they must also be managed well so that they don't get themselves in trouble." However, as the subprimes and credit crunch experience has demonstrated, banks are prone to get themselves into impossible situations.

Several economists have also been uneasy about the likelihood that the Fed might decide to lend taxpayers' money directly to non-banks via the Term Auction Facility, something the central bank last did in the 1930s. We cannot rule out the Fed being forced to revive this option, but the benefits of such action would need to be weighed against the headline shock of bringing back a Depression-era measure, said one of the experts – and he had a point, though at the time this statement was made nobody imagined how big the gaping hole might be.

Then, in the first week of November 2008 some disturbing news broke. The Federal Reserve refused to identify the recipients of an urgent salvage amounting to a cool of $2 trillion. An alternative version was that the assets of the Fed had more than doubled to $2 trillion, which meant a blown-up, highly leveraged balance sheet with unprecedented dollar overhang on the economy.

What really seems to have happened makes interesting reading. The Federal Reserve did indeed refuse to identify the recipients of almost $2 trillion of emergency loans financed with money taken from American taxpayers. This was in spite of the fact that two months earlier Bernanke and Paulson had said they would comply with congressional demands for transparency in a $700 billion bailout of the banking system (Chapter 10).

Bloomberg news requested details of the Fed lending under the US Freedom of Information Act, and on 4 November 2008 it filed a Federal lawsuit seeking to force disclosure.

> "The collateral is not being adequately disclosed, and that's a big problem," said Dan Fuss, vice chairman of Boston-based Loomis Sayles. "In a liquid market, this wouldn't matter, but we're not. The market is very nervous and very thin."
>
> "It's your money; it's not the Fed's money," added Ted Forstmann, of Forstmann Little. "Of course there should be transparency."[28]

In terms of statistical evidence, in the first week of November 2008, for the first time, total Fed lending topped $2 trillion – rising by $1.17 trillion, or 140 percent in the 7 weeks since Fed governors (in mid September) relaxed the collateral standards. The difference included an assumed:

- $788 billion increase in Fed loans to banks (!), and
- $474 billion in other lending, largely because of the central bank's purchase of Fannie Mae and Freddie Mac bonds.

Market rumor had it however that part of the money which created the $2 trillion hole had found its way into hedge funds, to provide them with badly needed capital. (I saw no documentation to support such rumors.) Hedge funds or not, the exponential growth in the Fed's lending is significant because the central bank did not have the authority to spend extravagant amounts of money. Moreover, it stepped into a rescue role:

- That was the purpose of the $700 billion Troubled Asset Relief Program, and
- It did so without the safeguards put into the TARP legislation by Congress.

According to market information, the beneficiaries included Citigroup, JPMorgan Chase, and Lehman Brothers – the last named is now bankrupt and that Federal money has been lost. Banks seem to oppose any release of information with their name on the line, because it might signal weakness, spur short-selling, or lead to a run by depositors. Their argument, which by all evidence the Fed has bought, is that one has to balance the need for transparency with protecting the public interest. But on the other hand, taxpayers have a right to know where their money is going.

It is quite likely that banks have been getting an unwarranted large-scale financial aid with both hands: one in full secrecy by the Fed and the other transparent to the public eye – precisely the $120 billion in capital from the TARP. From the latter source, those who benefited in a big way were Citigroup, Bank of America, JPMorgan Chase, Wells Fargo, Goldman Sachs, Morgan Stanley, Bank of New York Mellon, and a score of other financial institutions:

- None of them has been asked to present a believable plan for redressing its financial staying power, as should have been the case.

- Some of them fared very badly in the market *after* the Treasury's injection of $25 billion (Citigroup's stock fell to $4.71 on 20 November 2008).
- The Treasury seems to have failed in determining who to save and who to let go bankrupt, just like it has failed to put a limit on where to stop with bailout capital.

To these shortcomings the Federal Reserve has added the controversial issue of lack of transparency. "Taxpayers have the right to know what sweetheart deals Bernanke's been giving out," stated an internet posting.[29]

The Bloomberg lawsuit argues that the collateral lists are central to understanding and assessing the government's response to the most catastrophic financial crisis in America since the Great Depression, but politicians seem inclined to secrecy.

In an interview on 6 November 2008, Barney Frank, House Financial Services Committee chairman, said the risk the central bank is taking on is appropriate in the current economic climate. Frank added that the Fed should not reveal the assets it holds or how it values them because disclosure would give people clues to what the pricing is and what they might be able "to sell us." All this took place a week prior to the 15 November 2008 G-20 meeting in Washington, which called for transparency, transparency, and even more transparency. The court decision may cut the Gordian knot.

10
Trillions of Dollars, Euros, and Pounds Thrown at the Problem

1. Public money that has been thrown away

In September and October 2008 a lot of damage was done to market confidence. Bankers, traders, politicians, and government officials were telling everyone who would listen that the financial system was falling apart and the economy at large, at the edge of the precipice, could be saved only through massive injections of capital out of the public purse. But it was not difficult to perceive the lack of any precise plan on how to achieve a turnaround.

One of the similitudes between 1929 and 2008 has been that governments and politicians have steered clear of punishing those who wrecked the financial system, concentrating on asking the taxpayer to foot the bill and letting employees suffer loss of jobs, of savings, and of pensions. In an interview he gave on 13 October 2008 to CNBC, Julian Robertson, of Tiger Management fame, said: "We are going to have 10 to 15 years of poor economy," adding that "80 percent to 85 percent of Americans are broke" – largely because they had overleveraged themselves during the good years (Chapter 7):

- The so-called "American consumers' resilience," of which Alan Greenspan was so proud, had appeared as a monolith.
- But by later in 2008 it had become a house of cards.

Faced with the likelihood of losing their jobs, as unemployment started to increase rapidly, consumers wanted to save but they could not because they had to pay back their loans. In mid September 2008 Hewlett-Packard said it would cut almost 25,000 jobs as it pushed forward its integration with Electronic Data Systems, with around half that number in the United States. Two months later on 17 November Citigroup announced it would fire 50,000 people, after having already eliminated 28,000 in the previous months of 2008.

In Europe, things have been no better. In the wake of the banking and credit crisis, London banks planned to slash 62,000 jobs as the recession continued and deepened. In euroland, too, the trend towards lower unemployment was reversing, as one country after another fell into recession:

- Panicky governments have sent tens, hundreds, thousands of billions in good money running after bad money, and
- Not everybody is convinced this is the way to go. Many are now asking: "Have the governments gone too far?"

Banks have bankrupted themselves, and we need a banking system. But is throwing a great lot of money at the problem the solution? Or has this been done on the spur of the moment, without much thought given to the consequences? The first question is:

- Is recapitalizing and nationalizing the big banks the best course available?

Nobody would argue that as of February 2009 the world's financial markets are not in total disarray. There is a flight to cash and security, out of all risk assets, even bonds. Any way one looks at it, stocks have fallen to deeply discounted levels, and everything seems to depend on whether the authorities can take steps to stop the fear from spreading to every corner of the economy. But not everyone is convinced that recapitalizing the fat cats is the best way to bring back business confidence. The second question is:

- How are governments going to get out of these bank nationalizations, which have been heralded as "temporary"?

Government ownership creates inefficiencies without eradicating lust for power and greed among those in charge. Worst, nationalized banks are used by politicians as milk cows and to reward close friends with top jobs. If evidence is needed, look at the scandals which shook and sank Crédit Lyonnais in France in the François Mitterrand years. The third question is:

- How can reputation be enhanced, so that when someone of authority talks he is listened to?

A government and central bank's greater support comes not from the status book but from the reputation enjoyed in public opinion and among other central banks, enhanced by the competence of the men in charge. Judged by the way privatizations of nationalized banks have been handled in the past – for instance by the Balladur government in France – one is permitted to doubt the outcome. The joke has been: "When they swim in red ink we nationalize them, and when they are profitable we privatize them." The fourth question is:

- Why have governments rushed to throw big money at mammoth banks without asking them first to sign firm commitments about compliance, processes, and products?

On 15 October 2008, less than two days after a huge recapitalization of big American banks to the tune of $250 billion, the news was that they still weren't giving out loans and that Hank Paulson, the Treasury secretary, lacked the leverage to force them to put Federal money in the frontline for loans. Recapitalizing the banks with taxpayers' money and having them resume their role as intermediaries are two sides of the same coin.

Paulson did not foresee that both sides of the coin could be tarnished at once. This is surprising for a man who was CEO of Goldman Sachs for 8 years. The first thing to happen before a penny was dropped into the big banks' treasuries should have been that they sign a contract stipulating that all Federal money would be used for loans to companies and people. This would include Goldman Sachs and Morgan Stanley because to get taxpayers' money they had converted themselves into bank holding companies.

Moreover, such a contract should have been characterized by a longer-term perspective. Standard & Poor's, the rating agency, has said that although more people and companies would have to seek refinancing in 2008, the real peak would not occur until 2011 to 2014. By all likelihood, well before that time the Tamerlanic destruction of the Western financial landscape by *collateralized debt obligations* (CDOs) would be exceeded by an even greater eruption, that of *credit default swaps* (CDSs, Chapter 5):

- Lessons have therefore to be learned from the CDOs, and
- They should be proactively applied to the CDSs, as well as *interest rate swaps* (IRSs) whose overhang is a high multiple of CDSs.

Another prudent measure should have been placing limits on the amount and type of derivative financial instruments that the banks can gamble with – as well as the counterparties they can take in their games.

These are elementary precautions to avoid repetition of the same catastrophe, but nothing has been done about establishing a regime of strong bank supervision, *prior* to giving out public money.

2. Where has all the money gone?

If big banks in America, Britain, and continental Europe urgently needed recapitalization to avoid bankruptcy, then where have all the equity and reserves they had gone, as well as their depositors' money? Also, who has been responsible for the negligence in spoiling that capital and therefore for the pain and loss the taxpayer has subsequently had to suffer?

I have asked both questions to lots of cognizant people. The answer to the second question has been nearly unanimous: this is a case of unprecedented bad management, amplified by lack of supervision. Only a couple of answers have referred to fraud, and even if this was in no way generalized the result nonetheless has been disaster.

The majority of answers to the first question have been: "I don't know," followed, in terms of frequency, by: "To the subprimes, fat salaries, and huge unwarranted bonuses". That's likely but not certain. The fact that many bankers became super-rich is not enough to explain the disappearance of hundreds of billions – in fact, of trillions. Only two people gave me an answer which, while it does not exclude excesses, is out of the box. The missing money has gone to the *deficit living* of our society. The State Supermarket (Chapter 1) is living way beyond its means:

- The first two decades after World War II's end were dedicated to the reconstruction after a great war's ravages, providing work for nearly everyone and resulting in a 2 percent to 4 percent average annual increase in the standard of living.
- From the mid-1960s onward, however, that extra reconstruction work practically disappeared, but no government dared to say publicly that the increase in the standard of living – which had become a pillar of liberal democracy – was ending.

Young people, including recent college graduates, could not find a job? No problem. From the mid 1960s onwards the government would deficit-finance them to have a good time doing nothing. "This" or "that" industry wanted subsidies? The government would provide them also through deficit financing. And the same has been true of early retirement, good pensions, medical care for all – the State Supermarket could promise and provide everything .

Firm monetary and fiscal discipline causes pain, but this is preferable to an inflation and currency depreciation where nearly useless debt paper money is turned into even more leveraged useless financial paper. This accumulation of leverage and debt (Chapter 5) has been no concern of any western government. Let future generations pay for it as long as at present voters are nice enough to reconduct the incumbent party into the seat of power.[1]

The public was satisfied because it had never had it so good. Even the students who in May 1968 revolted in Paris against the consumer/producer society turned themselves into producers and subsidized consumers as they aged. They also found a way to improve their standard of living by getting deeper into debt, which banks were all too happy to finance.

This of course had to end one day and that day of reckoning came closer as social inequalities became increasingly visible, all sorts of irregularities increased, imbalances between supply and demand caused an inflationary overhang, and the middle class was crushed under direct and indirect taxes. In an effort to make the ends meet for as long as possible and keep social unrest under lock and key:

- Governments abandoned pledges they had made about financial stability,
- Companies adopted the Modigliani–Miller theory that debt is vastly preferable to equity, and
- Consumers continued loading themselves up with all sorts of loans.

"Stability is not everything, but without stability everything is nothing," said Karl Schiller, a German economist and Social Democratic minister (1966–72). Other socialists however bet on currency instability through budgetary deficits, and by throwing money at the problem they made these deficits worse than they might have been.

Whether by training or by experience, few people are in a position to appreciate that slowly but surely this leads straight into a bottomless pit. Governments, companies and households joined the chorus. Just as an example, the $2 billion injected into Washington Mutual in April 2008 by TPG, a private-equity fund, represents the largest one-shot loss ever by a firm of its kind. It will be surpassed by more than two orders of magnitude by the $700 billion of Treasury handouts (section 4).

Once it starts, the draining of money has the nasty habit of accelerating, and when this happens the economy trends to shrink. Once it entered into the Great Depression, between 1929 and 1933, America's economy shrank by more than a quarter. Many economists however don't appreciate that even worse was the post-WWI year of 1921, when the US economy contracted by a quarter in that single year alone.

We are not at that point, but an impaired banking system makes the slump longer and deeper and nobody is taking action against those responsible for gross negligence and for bringing the early twenty-first century economy to its knees. The crash of Savings & Loans in the late 1980s was a low-key affair compared with the current crisis. Yet it led to a number of convictions and prison terms.

Convictions are not going to right the economic balances, but along with the end of bonuses and redimensioning of huge salaries, they will give to common people the message that the justice system works. These have been the bankers who not only made highly risky trades but also in the years preceding the crash have been drumming up the slogans:

- "Where vision gets built"
- "The strength to be there"

- "You can count on us"
- "The short term has no future"
- "As the American dream grows, so do we"

and ended by killing the American dream along with the British, French, German, Spanish, Italian, and so on. It was the now dismembered and defunct Fortis Bank which asked: "Here today, where tomorrow?" The answer is in hell – precisely where all the money has gone.

The other side of the salvage plans, which we study in the following sections, is that God-size bank bailouts not only constitute moral hazard and unduly penalize the taxpayer but they also prevent the markets from acting in a responsible way. Nor do they allow the courts to look into the balance sheets of companies, to establish possible fraud and personal responsibilities. Sloppy in their conception, they are just giving the lopsided impression that everything can be corrected with a blank check:

- Without a thorough plan for restructuring and for supervision,
- Without detailed criteria for credit allocation and expected performance, and
- With the government-financed action buying only the bad part of portfolios, not the good parts which can have an upside.

Critics say moreover that the possibilities for further and greater amounts of fraud remain wide open with Ben Bernanke's statement that the $700 billion voted by US Congress would be used to buy junk assets "above fire sale prices," without explaining why in a market economy the taxpayer should pay "more" than the market price, how much more is "more" and at whose discretion this will be established. (Probably on these considerations the Treasury decided to switch to a program of loans whose details are equally imprecise.)

3. Can the economy afford huge bailouts?

For its part the Group of Seven (G-7) leading industrialized nations was set up in the 1970s[2] so that leaders of its member countries can contemplate economic development and resolve their differences. But it is more a discussion group than a war room that can make urgently needed monetary decisions in real time. Therefore, it came as no surprise when it was not convened during the acute crisis of the "historic weeks" of September/October 2008 on Wall Street.

By contrast, the 15 November 2008 international economic conference did take place at a peak of the crisis, but so far it can be seen solely as a public relations event, as none of the G-20 state leaders came along with concrete ideas, or even expressed a firm standing on bringing large-scale speculators to justice. Both are important if a deeper crisis is to be averted before it becomes a guillotine hitting the common citizen.

Nobody among the heads of government seems to have remembered the words of John Maynard Keynes, who wrote in his *General Theory*: "Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation."

Somebody will have to pay for this big-time speculation, and this somebody is the nation-states. But can they afford it? The majority of the industrial nations as well as most of the developing countries are in the red. Counting 2008 budget deficits as a percentage of GDP (the way they are at present projected), that of Italy is −2.5 percent, France −3 percent, Japan −3 percent, the United States −3.5 percent (probably much more with the $700 billion, without even counting the Fed's $2 trillion)[3], and Britain −5 percent.

Only Germany hopes to close the year with a timid +1 percent, but Germany also has a national debt equal to 64 percent of GDP. Among major nations only China features an enviable national debt, of 22 percent of GDP. As for 2009, deficits promise to be even more dismal.

Accumulated national debts and budgetary deficits count a great deal. Take as an example the US Treasury's $700 billion bailout of cash-strapped financial institutions[4] (sections 4 and 5). A majority of economists and financial analysts believe that it is likely to have severe fiscal consequences in the long run, particularly because the Fed had already swapped almost half of its safe US Treasury securities for private sector assets via:

- The TAF program,
- The discount window, and
- Direct loans to wounded banks.

While the billions of dollars in handouts are largely meant to offset the private sector credit contraction, they also put long-term inflationary forces in motion. US economists are estimating a $500 billion deficit for the fiscal year 2009, reaching 6.2 percent of GDP. On top of a large fiscal deficit, the US also runs a large trade deficit, and foreign capital inflows into the US are likely to play an important role in the aftereffects of the crises.

Another sore point, and a direct result of the lack of open public discussion on how the large amount of funds authorized by Congress should be used, is its allocation. In an interview he gave on Bloomberg on 16 October 2008 Dr Alan Blinder, a former vice chairman of the Federal Reserve, expressed the opinion that too much of the $700 billion is given to banks:

- Leaving too little to refinance mortgages,
- While at least half the $700 billion should have gone to solve the mortgage crisis through mortgage guarantees.

Nothing of what is written in the preceding paragraphs about current trends is good news for the US currency, and therefore for the American economy. Here are the thoughts of three German bankers had to say about the currency: "A stable currency is the condition for our daily bread," said Hans Luther, Reichsbank president in 1931. Hjalmar Schacht, another Reichsbank president, put it a little differently: "States and governments perish for two reasons: war and bad finances."[5] "There can be no hard currency without hard measures," added Karl Blessing, the Bundesbank president, in 1966.

Critics of the worsening state of the western economies say that there are other ills as well. By recapitalizing big banks, governments will be lavishing money on the very people who got American and western Europe into this mess – and while the bloated financial sector will continue shrinking, accountability will remain at its lowest. The fact that big, well-known banks got practically nationalized means that:

- These entities were in such a bad state that nobody wanted to buy them.
- Under these conditions, why should the taxpayer come up with the money in a deal he can hardly afford?

In addition, once the government got into the business of supporting banks or any other companies to avoid bankruptcies, it would not know where to stop. And in regard to toxic waste auctions, it would find it hard to stop sellers from rigging them, if only because no two lots of nearly worthless securities are exactly the same.

- Taxpayers would pay over the odds, and
- Banks would be rewarded for their gambling stupidity.

There is as well the overriding question of the final bill to the economy. The better way to answer the query regarding the total economic cost is to look for historical evidence about fixing a broken-down financial system. In the early 1980s loose rules and decision delays brought the bailout of Argentina's banking to:

- 55 percent of GDP.

The pros say that one reason why in emerging markets bailouts cost big money is inadequate safeguards against abuse. Critics of bailout practices answer that in developed countries, too, there may be indecision and inefficiency. The bailouts and restructuring of Japan's banking system (1991–2007) cost a staggering:

- 130 percent of GDP.

Decisive action by the government and the central bank can cut that by almost 98 percent. In the early 1990s the bill for fixing Sweden's and Norway's banking systems was (in each case) 3 percent of GDP. It should be note referenced, however, that both countries kept costs low by acting swiftly with *drastic* and *painful* measures – which has not been the case in the US, Britain, Belgium, and elsewhere where money was thrown at the problem.

For its part, a study by the IMF puts the average cost of resolving banking crises around the world at 16 percent of a country's GDP. Averages, most evidently, mean nothing because countries and their banking problems are so different from one another. Also, so much depends on the resolve of central banks and governments to get out of the credit crisis even if the pain is high, and eventually out of commercial bank ownership altogether.

4. Preparing for the $700 billion US bailout

On 23 September 2008, in the course of the US Senate hearing on the $700 billion authorization to spend taxpayer money to ease the pains big banks suffered from their self-inflicted wounds, one of the senators asked Paulson, Bernanke, and Cox: "Do you think Wall Street owes the American people an apology?" Ben Bernanke answered that there should be a commission to study what went wrong. It has been one of the golden rules of bureaucracy that if you don't want something to be done you delegate it to a committee or commission.

Paulson's opinion has been that the financial instruments traded by Wall Street were too complex to be properly understood; but he said so without explaining why in the 7 years he was president and CEO of Goldman Sachs (1999 to 2006) he authorized the development and trading of these instruments. Paulson added to his congressional testimony: "We will fix the problem, it will not happen again," knowing very well that these were big words.[6]

In answer to a question posed by another US senator, the Treasury secretary repeated his opinion that structured financial instruments and complex derivative products are awfully misunderstood by bankers. The next question was: "How do you calculate the price of a troubled asset?" The answer has been that confronted with asset complexity one should use a variety of tools – which of course means nothing.

On the other hand, the Federal Reserve faces some constraints. Like most central banks, it is generally prohibited from unsecured lending, but it more or less gets around this by lending to its own off-balance-sheet vehicle, which holds the unsecured commercial paper. If this limit is legal, another one is political: several politicians in the House of Representatives object to their central bank displacing private lenders – a reason why the $700 billion bailout was voted down the first time around.

Another constraint about which little has been said is of a financial nature. Throwing money at the wounded banks has risks, as we saw in section 2. The Treasury and the Fed could suffer equity and loan losses so great that the central bank would need recapitalization, as central banks in Chile, Hungary, and the Philippines have in the past. The Bank of Japan avoided this by purchasing much private-sector debt earlier in this century.

The US Congress imposed its own constraints and provisos when granting the $700 billion authorization through the Troubled Assets Relief Act (TARA) of October 2008. One of them, intended to sooth the electorate, has been the piggy-backing of another spending bill aimed to help homeowners and consumers. Other changes were specific to the Treasury's plan:

- The first authorization is $250 billion.
- The second of $100 billion will be almost automatic.
- But Congress has the right to reject the final $350 billion.

The Treasury is authorized to get equity in banks, but there must be limits to golden parachutes and executive pay in those institutions which benefit from the handouts. Other changes, however, have been counterproductive, like doing away with marking-to-market the toxic waste, which makes the quality of banks' assets more opaque and questionable rather than increasing transparency.

There have been uncertainties connected to the handouts. One of primary importance is the effectiveness and impartiality of the party or parties responsible for them. On 22 September 2008 Senator (and then presidential candidate) Hillary Clinton said in an interview on CNBC that a $700 billion plan cannot be run by the Treasury. It must be managed by an independent agency under proper supervision through an oversight committee reporting to Congress. But nothing has followed this statement, so the Treasury has been given *carte blanche* after all.

At par in terms of importance has been the issue of how that wholesome $700 billion should be used. The Treasury wanted to be free to buy equity in big banks, give them loans, and through auctions purchase their toxic waste. In the week of 10 November 2008 Henry Paulson, however, said that the government's rescue plan for the banking system:

- Would no longer involve purchasing *toxic mortgage* debt from banks, and
- Would instead focus on providing banks with capital by buying stock directly.

Acceptable candidacies have been extended from publicly quoted institutions to private banks, with a deadline set for 8 December 2008. Some 3,600 private banks could apply for a share of the $700 billion bailout; previously they had been unable to ask for funds because the program involved stock purchases. (As long as a bank's application to become a bank holding company or a savings and loan was with federal regulators by the deadline, it became eligible for the bailout program.)

Reference to such midway decisions and U-turns is revealing, inasmuch as it documents how little there was in terms of a plan for using the $700 billion to turn the economy around in the best possible way. Yet the cost is tremendous. Neither is this $700 billion the only big-spending scheme to extinguish the fires of the financial crisis. On 6 October 2008 the Fed doubled to $900 billion the planned size of the loans it auctions to banks. A day later it said it would, for the first time in decades:

- Make unsecured loans to companies, including banks, and
- Do so by buying commercial paper that they are unable to refinance.

Subsequent to this, the Federal Reserve joined other leading central banks in a concerted effort in cutting interest rates, lowering its target for the federal funds rate from 2 percent to 1.5 percent; in a fortnight the latter dropped to 1 percent. Some analysts suggested that another rate cut will follow bringing the funds rate below 1 percent. (A rate cut is a conventional response to the growing risk of a deep recession.)

And yet not everything that may need to be done has been factored in. Back on 29 September 2008 Professor Edmund Phelps of Columbia University said in an interview that the $700 billion plan did not address borderline insolvency, now faced by many banks – and it may even make it worse. Neither were the Treasury's and Fed's plans targeting unemployment.[7] Other critics have added that a big bank bailout of $700 billion will have perverse influence on:

- The US economy, and
- The way a free market works.

Since it is almost certain that the current authorization will be followed by others, a spike of over $1 trillion in public debt will shake the market's confidence in the US government, and it might crash the dollar. In addition, buying equity in wounded banks with murky balance sheets, as Paulson wanted to do (and did) in order to support banking stocks, may well be the seed of further troubles:

- It is a bailout of banks in disguise, and
- Eventually the government will be under pressure not to limit support to the banks.

Other industries like autos and airlines, as well as several states of the Union, would like to be part of the Federal government's generosity. In the

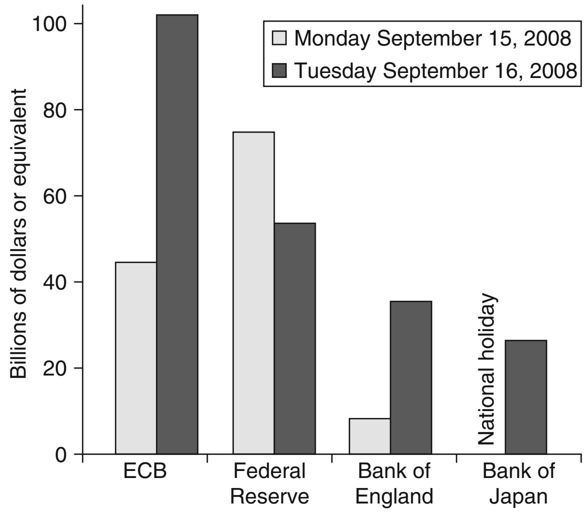

Figure 10.1 Liquidity injected into money markets by central banks over two consecutive days, in the wake of the Lehman Brothers collapse (mid September 2008).

opinion of several experts, these are gifts which have nothing really to do with financial problems; and they are gifts because nowhere has it been shown how the companies that benefit from direct cash injections will pay back the government.

As Figure 10.1 shows, in September 2008 the European Central Bank, the Federal Reserve, the Bank of England, and the Bank of Japan all made important liquidity injections into capital markets to calm down their fever from Lehman's bankruptcy. All that money, the billions and trillions, are on top of other handouts in disguise made to big commercial and industrial banks as central banks have turned themselves into philanthropic institutions ready to buy any sort of garbage from poorly managed financial companies.

5. A troubled "Troubled Assets Relief Program"

Right after America's House of Representatives approved the $700 billion bank rescue bill to create the Troubled Assets Relief Program (TARP), President Bush signed it into law. The reader should however notice that this law does not deal with the immediate economic threat, which is a collapse of confidence in the financial system. In the first 4 months of the lavish recapitalization program nothing has been done to help the American families at risk of losing their houses. In addition:

- Money-market funds and banks remain deeply suspicious about who they can entrust their money to, and

- This continues to stifle the supply of credit and cause more banks to fail in spite of such unprecedented handouts.

The homework has been skin-deep. Treasury Secretary Paulson first sold the proposal as a way to buy troubled bank securities via an auction, but it quickly became clear that the Treasury people had not thought about it in a fundamental sense. Without the benefit of a firm plan, the $700 billion morphed as a fund that could be deployed in different but uncertain ways to shore up the American financial system.

The failure to stress-test the results of financing is the worst possible policy in a panic. Neither is the talk that the Federal government might insure all bank deposits making much sense. Until recently the FDIC assured deposits only up to $100,000 per account; a limit which with the $700 billion authorization has been raised to $250,000. Ensuring all deposits would add another $1.9 trillion in taxpayer guarantees, which the American economy simply cannot afford.

Neither is the supposed similarity of the current crisis to that of the Savings & Loans, in the late 1980s, making much sense. Nor is the real difference the one often mentioned: that in the S&Ls case public authorities did not commit public money to the financial system until bank failures and insolvency became wider.[8] The first real difference lies in the fact that the Resolution Trust Corporation (RTC) is no blueprint for today's:

- Complex,
- Highly indebted, and
- Practically bankrupt financial world.

The second real difference, resulting partly from the first and partly from the aforementioned lack of homework, is the uncertainty surrounding the TARP. The Treasury first planned to buy huge amounts of distressed debt using a reverse auction process. The complexities of thousands of different mortgage-backed securities led to the conclusion that its results would be highly dubious, and that plan was dropped.

Then, direct bank recapitalization caught the Treasury's attention, and its managers said they will do that too. There is a clause in the TARP that allows it to buy almost anything in the interest of stability, including direct stakes in banks, as long as it notifies Congress. That is supposedly part of the "kit of all of the tools" at the Treasury's disposal – and it is highly dangerous, like the policy of shoring up capital-starved banks with large purchases of preferred stock which continues dropping in price:

- That practice surely enriches some people, mostly those already rich from looting the system.

- But it does little, if anything, to stop the worse from continuing to worsen.

Is the $700 billion only "chickenfeed," as Alan Greenspan told a US senator? If yes, then what are the limits, and what is the likely risk and return attached to each option? How much toxic waste is in the banks' vaults other than the famed subprimes and Alt-As based securitized junk? How much of that has been already transferred to the treasuries of central banks (Chapter 9)?

There is no evidence that these questions were ever resolved before the handouts started. Or that a careful plan has been laid on how and under which conditions the State Supermarket would get out of the commercial banking business – which is not its vocation in the first place. Good management practice required that banks:

- First are asked to come up with certified assets and liabilities under SOX legal clauses, and
- Then are asked to present for approval a plan on how the taxpayers' money will be used (a normal banking practice).

Nothing like that has happened, nor has there been an established channel for feedback. Everything is ad hoc, as documented by the fact that in a Senate hearing in the week of 10 November 2008 key lawmakers pressed bank executives on how they have been using government funding, adding that the banks ought to do more to directly help struggling homeowners. Senator Christopher Dodd, chairman of the Senate Banking Committee, said that banks were not using the government funds to ease credit for struggling home-owners.[9]

Plenty of evidence suggests that the only strategy the Bush Administration put forward was simply to throw money at the problem, with no questions asked. As was to be expected, the first beneficiaries have been the big banks – all *Fortune 500*. Injections of $25 billion were made to each of Citigroup, JP Morgan Chase, and Wells Fargo. Bank of America was granted $15 billion, while Goldman Sachs, Morgan Stanley, and Merrill Lynch were given $10 billion each.

Then on 17 November 2008 the Treasury said that it had dispersed $33.56 billion to 21 banks in a second round of payments as part of the $700 billion bailout program. The new (and unwarranted) distribution of public money brought the total of handouts to $158.56 so far. (The previously distributed $125 billion to nine banks was in the form of stock purchase.)

Banks that benefited in this second round of State Supermarket favors included PNC, which received $7.7 billion; U.S. Bancorp, $6.6 billion; Capital One Financial, $3.56 billion; Regions Financial Corp, $3.5 billion; SunTrust

Bank, $3.5 billion; Bank of New York Mellon, $3 billion; and more. A smaller amount went to Los-Angeles-based Broadway Financial, and the smallest, of $1 million, to Saigon National Bank.

For its part, Congress would have liked to use a chunk of the authorization for reasons other than filling the banks' coffers. In the 18 November 2008 congressional hearing the Treasury secretary clashed with lawmakers on the bailouts, stating that they were necessary but were no panacea. Paulson and Bernanke rejected the idea of using part of the authorized $700 billion for the salvage of the auto industry. (No doubt other industries too are queuing up.)

Demands for helping the US auto industry and those targeting the banks also share common ground. According to analysts at JPMorgan Chase, losses on securities tied to car loans could rise close to those on subprime mortgages. In addition, defaults on junk bonds and other commercial debt are soaring,[10] bringing nearer the day of reckoning with the $62 trillion of CDSs:

- Should these other domains of crisis be covered by the Troubled Asset Relief Program?
- Or is it better to limit it to the banking industry with its toxic securities, and let the other wounded entities stay at the street corner?

The fact that this question has come post-mortem provides further evidence that the Treasury's Troubled Assets Relief Program is itself in trouble. The proper homework would have seen to it that the major options were the first to be examined, before even asking for a given amount of money to face the crisis. Along with these major options a study should have been made of the policies, ways, and means to pay for the requested authorization – including the payback possibilities available to the government and their risk and return, namely:

- Raise taxes by a significant margin,
- Allow much higher inflation, of the sort characterizing banana republics,
- Engineer a Third World War in Asia, hoping that it reflates the economy, and/or
- Default on all debt by declaring the financial system bankrupt.

The reader should appreciate that these four options are facing all of the 21 chiefs of government who gathered in Washington for the international economic conference on 15 November 2008. Hence these lines are written also for them. It is always wise to clarify the alternative courses of action which are available at the twelfth hour. The more governments hide the truth from their citizens, the more painful will be the way out.

6. Timothy Geithner and the Stability and Recovery Program

In his first press conference as Treasury secretary, Timothy Geithner said on 10 February 2009 that the policy of the Obama Administration, in confronting the economic and financial crisis, would be comprehensive and forceful. The "Stability and Recovery Program" (SRP), which he presented, aims to replace the Treasury programs for restructuring the big banks inherited from the Bush Administration. The new framework will rest on three pillars:

- Clean up the banks' balance sheets,
- Bring in private capital, and
- Get bank lending going again.

In regard to the first bullet, banks will be required to make stress tests and to apply new metrics in measuring their exposure to toxic assets (more on this later). As with the TARP program, the capital will come from the taxpayers' purse with conditions which include the requirements to lend and to replace government money with private capital.

According to Geithner, SRP will aim to use private and government funds as well as the knowhow of private professionals to help in valuing the wounded assets. To this the Obama Administration plans to commit $1 trillion, which may be up to $2 trillion through leveraging appropriated funds. (It's a little curious to use leverage in order to clean up the mess left by previous leverage.)

Judging from the contents of the 10 February 2009 press conference, it would seem that the idea of a government-sponsored "bad bank" is in principle rejected, but not every aspect of it is off the table. What has been proposed is a government–private effort, whose specifics are still missing. (Some critics have said that the risk is that the government will end putting up the money and the private parties will reap the profits.) Geithner however cautioned that in conjunction to these general lines of a new framework there come up four major questions:

- Financing,
- Pricing,
- Trading, and
- Accounting.

The term *bad bank* is very popular these days, but it is not necessarily a rational concept. Bankrupt and nearly bankrupt financial institutions have found a way to unload on the taxpayer their deeply wounded assets, like CDOs and other useless paper, by passing them to a newly created bad bank supported by the state – while getting from the state good money for these rotten "assets." This trick would leave a financial institution which has been at edge of the precipice as a *good bank*.

George Soros knew what he was talking about when in an interview he gave at 2009 World Economic Forum at Davos, Switzerland, he said that he likes the concept of a good bank – not that of a bad bank. Most of the better known American-economists also spoke against the bad bank as "a solution", but both the American and British governments are uncertain about what they should do.

The leveraging of current appropriations left aside, the Obama Administration will need a great deal of money to get its plan rolling. More than half of the $700 billion appropriated by Congress, in October 2008, for TARP have been used or misused. The nearly $800 billion appropriated by Congress, in mid February 2009, for relaunching the economy are already earmarked and the lawmakers are not in the mood to allocate more funds.

An idea that has been floated since the Bush Administration is to continue leveraging the Federal Reserve's balance sheet; but this is already overblown, and moreover that's not the function of the central bank. Several economists now say there are major risks in asking the Fed to do too much by going way outside its remit, which is monetary policy.

At the same time, however, other economists question whether the plan outlined by Timothy Geithner goes far enough. In an article in the *New York Times* on 13 February 2009, Paul Krugman said that the stimulus bill looks helpful but inadequate, especially when combined with a disappointing plan for rescuing the banks. To his mind:

- The US is probably facing the worst slump since the Great Depression, and
- Over the next 3 years there will be a nearly $3 trillion gap between what the US economy could produce and what it will produce.

Two days prior to Krugman another respected economist, Martin Wolf of the *Financial Times*, published an article entitled "Why Obama's New TARP will fail to Rescue the Banks." Wolf encapsulated his opinion in a query in the opening short sentence: "Has Barack Obama's presidency already failed?"[11] (I hope not.)

Opinions diverge as well on whether the nationalization of bankrupt big banks is the right course, given that to the mind of American businessmen "nationalization" has been long regarded as a folly of European socialists and other leftists. This position may however be changing. While nationalization is still considered as a solution of last resort, it is now on the table.

Most likely, a great deal will depend on the results of the projected stress tests[12] – which are typically focusing on the long tail of the risk distribution. Though these have not yet been properly defined with regard to what the Treasury has in mind, a growing opinion is that the big banks will not be able to pass them, because they are known to test extreme values and their financial aftereffect.

"If you put most of our banks under a 'stress test', they're going to fail," Lindsay Graham, the Republican senator from North Carolina, told ABC News on 15 February 2009. "I would not take off [the table] the idea of nationalizing the banks."[13] (Neither would I.)

Indeed, a week after Geithner's press conference senior administration officials acknowledged that the SRP financial rescue plan could result in temporary nationalization. That's the cost of what Krugman called "the economic debacle of the past eight years" meaning the two tours of duty of the Bush Administration. One should also account for the damages created by the uninterrupted 16 years' reign by Alan "Double Bubble" Greenspan.[14]

Like it or not, the whole western economy has to bite the bullet. Adding together bank rescue plans, fiscal stimuluses, lost tax revenues from slumping output and falling asset prices, as well as higher unemployment benefits, many economists expect that the industrial countries' combined fiscal deficit will rise to 7 percent to 8 percent or more of GDP in 2009 – way up from 2008 figures.

A real worry regarding the rapidly growing US government debt is that the ultimate price tag of banking bailouts and stimulus will be much bigger than early 2009 figures have so far suggested. Even the trillions already committed may prove to be modest against the scale of the banking crisis, which continues unabated with huge write-downs unstoppable quarter after quarter.

Some analysts also draw a parallel between America's woes in 2007/2009 and Japan's in the early 1990s, including the meager returns compared with the huge costs. Officially at least, all proportions considered, by January 2009 the US government had committed less than half as much public money to the financial sector as Japan did in the 1990s. Is this too much or too little? Experts say that by all likelihood that's just the beginning:

- Goldman Sachs estimates that the total value of troubled assets in American banks' coffers is $5.7 trillion.[15]
- If so, it would mean many more trillion on the cost of restructuring and in long-term public debt – and official statistics may be lying because according to some estimates the US government has already committed $7 to $8 trillion.

Quite pessimistic as well is an IMF conclusion that western countries tend to recover only half their outlays for financial rescues. But there are exceptions. Sweden, whose banking rescue was well planned, tough and forceful, recovered 85 percent to 90 percent. America has no chance of getting near that because the whole operation, TARP included, started very poorly under Hank Paulson and Ben Bernanke.

These notions have, in a way, been confirmed in an interview the new Treasury secretary gave to CNBC on 10 February 2009 right after his press conference. In this Tim Geithner pointed out that a lesson learned from the crisis is that the government underestimated both the extent of the damage and the cost of the recovery. The interviewer did not miss the opportunity to remind him that most of the big banks need to be put in bankruptcy and recapitalized, to which Geithner answered:

- This is the core of our problem, and
- We don't know how much was lost and where.

The discussion then focused on the public/private ownership of the recovery entity, and most particularly on how to value the wounded assets. After stating that this is enormously complicated, the Treasury secretary added: "We will be open to suggestions, and we only take risks we can understand." Were the details of SRP work worked out? "No," he answered, "we are not going to put out details until we get it right." To the question about accountability for what has happened, Geithner's response has been that:

- The quality of decisions that led to this crisis is troubling, and
- There is an appalling lack of accountability at the top of the banking industry.

With all these facts in mind, Tim Geithner asserted that "this government needs to act and that is what we plan to do," but he also cautioned that the chosen strategy will cost money, involve risk, and take time to give results. What was not stated but should have been said is that no matter how much money is put on the table results will be trivial till there is a 180-degree change in today's prevailing bankrupt big bank culture.

7. Euroland tries to give birth to a common solution

Confronted, like everybody else, with a severe banking crisis and credit crunch, but lacking a central government, the 27 countries of the European Union have found it difficult to put their act together. This has also been visible in the smaller group of the 15-member euroland. By mid-October 2008, however, the chances of a common solution improved somewhat as the bigger economies unveiled plans to spend tens of billions of euros in state funds to prop up their banking institutions.

After some bickering, political leaders agreed on a menu of measures to cope with the growing financial crisis which knows no frontier. At a Paris summit on the weekend of 11/12 October 2008 leaders of the 15 countries that have adopted the common currency said they would partially nationalize their banks when necessary. Other measures to cope with the growing financial crisis included:

- State-guaranteed loans, and
- Loosening of marking-to-market rules, which (as note referenced in the US case) is irrational.

Hosting the meeting as EU president, Nicolas Sarkozy said France, Germany, and the rest of the EU would commit €1.5 trillion to bank rescues. "We must restore the capacity of our banks to lend money," he added in a news conference. France pledged €320 billion in state-guaranteed aid to banks, and €40 billion to recapitalize banks in trouble. Germany's rescue package included a state guarantee worth €400 billion to back bank loans to each other, plus €80 billion to top up capital. The principle has been:

- No system-relevant bank will be allowed to fail.
- No depositor will lose money.

Already on 6 October 2008 Germany had guaranteed all bank deposits – essentially every bank account in Germany – to a rumored amount of over €500 billion.[16] A collapse would have spread through the banking system, said Peer Steinbrück, the finance minister.

Not without reason, the German government had originally posed cross-border bank recapitalization because, as Europe's largest economy, Germany traditionally ends up paying the bills. But there had been an emergency. "Primarily it's about achieving market-based solutions where market participants should be first in line to drive recapitalization forward," said Axel Weber, president of the German central bank, in a Washington meeting.

As in the case of the United States and Britain, there can be no 100 solutions to the problem. One challenge has been that governments have lacked self-confidence. Another is that while each of euroland's countries has a central bank, these don't have the money, which is managed by the ECB, and a flood of money is needed which can only come out of the common monetary institution.

But actions by some euroland countries to get a handle on their financial problems have sometimes worsened woes elsewhere. The Irish government's broad guarantee of deposits prompted investors in other EU nations, particularly Britain, to shift their money to Ireland.[17] It has however been a positive sign that it did not take long to appreciate that to be worth its salt a solution must have a wider perspective. Nearsightedness does nothing to restore confidence.[18]

Critics also add that euroland's agreement on the salvage of credit institutions has included no clause to guarantee that Ireland's example of unilateral action would not be repeated. These are major commitments. The Irish guarantee covered around €400 billion ($575 billion) of liabilities, more than twice Ireland's gross domestic product, which the country simply could not afford.

The bad news for euroland has been that while the 11/12 October 2008 meeting put some meat and muscles on the skeleton of a common solution, nobody really had (or has) a slim idea about final cost:

> We confirm today our commitment to act together in a decisive and comprehensive way in order to restore confidence and proper functioning of the financial system, aiming at restoring appropriate and efficient financing conditions for the economy,

– that's all one could read in the statement which followed the mid-October Paris meeting.

The glue that held together this common agreement has been the hope (but only the hope) of avoiding a rerun of the Great Depression. Germany – which had already sunk €50 billion to shore up its Hypo Real Estate bank[19] – kept the door open to eventually inject equity capital worth "double-digit" billions into its banks and guarantees for debt issuance. France (together with Belgium) put up money to save Dexia from bankruptcy.[20] In the first days of October 2008, Dexia received a €6.4 billion ($9.2 billion) government cash injection.[21]

Another precedent in terms of cross-border government collaboration in financing the aftereffect of a failing bank has been the case of Fortis, the sprawling Belgian–Dutch conglomerate which had taken on billions to buy a big chunk of ABN Amro of the Netherlands in 2007 (together with RBS and Santander). With doubts rising, confidence in Fortis plunged, dragging down its share prices and making it even harder for it to attract funds.[22]

With its €160 billion deposit base, Fortis was seemingly on firm ground. But customers were voting with their feet, pulling roughly €5 billion out of the bank and taking them elsewhere. This was worrying Belgian and Dutch bank regulators. Eventually, the Dutch, Belgian, and Luxembourg governments were forced to inject €11.2 billion into the wounded big bank, which still was not enough to stem the tide:

- The Dutch ended up fully nationalizing Fortis's operations in the Netherlands (the former ABN Amro).
- On 5 October 2008 BNP Paribas snapped up the rest of the former flagship of Benelux banks.[23]

Postmortem, there has been evidence that the abyss in the Fortis treasury was so profound that the €11.2 billion it got from the Belgian, Luxembourg, and Dutch governments were a drop in the ocean (considering that the bank had €900 billion in "assets"). The cash injection represented just 1.24 percent of "assets" and it was clear that this was an interim solution designed to buy time till a more permanent one could be found. Fortis's fate was sealed.

As far as the Belgian taxpayer is concerned, Fortis and Dexia have not been the only banks hungry for cash. KBC, Belgium's second-largest credit institution, needed (and got) €3.5 billion. In Holland, the government injected €10 billion in the coffers of ING, the big banking and insurance group, against an 8.5 percent equity stake.[24]

ING's retail deposit base was thought to be large enough to prevent it from having to recapitalize. However, its share price sank after it said it expected to make its first-ever quarterly loss, forcing it to turn to the Dutch government. What came as a surprise is that the CEO and the CFO of the bankassurance did not say "Thank you, taxpayer."[25] Their somewhat headstrong attitude has been: "We are strong and now we are becoming stronger."[26]

Critics suggest, rather controversially, that the plan to salvage euroland's distressed banks is loosening some accounting rules: Under the current exceptional circumstances, financial and non-financial institutions should be allowed as necessary to value their assets consistently with risk of default assumptions rather than immediate market value which in illiquid markets may no longer be appropriate, runs a common agreement between euroland member states.

Excuses can always be found, but it should escape nobody's attention – least of all that of political leaders – that transparency is the only way for private capital to return to the market. It must also be kept in mind that money advanced by governments is hybrid and it contributes nothing to the real economy. Neither does it help the banks' profits, since they must pay interest. Essentially this money is another sort of leveraging, State Supermarket style.

8. Russia discovers oligarchic capitalism's aftereffects

Ten years after the August 1998 meltdown of Russian banks and finance, in mid 2008 many Russian companies held off raising debt in the hope that the cost of money would decrease. This led to a backlog debt by Russian banks and other firms which needed to be refinanced amid increasingly difficult conditions as western investors repriced the risk of doing business in Russia.

It was not difficult to write a follow-up scenario. The crisis was around the corner. On 18 September 2008 trading was suspended on Russia's stockmarkets[27] when shares went into free fall, and this fall was not halted even by the government's injection of capital into the country's three biggest banks. JPMorgan's emerging-markets bond index fell by more than 5 percent in the week to 16 September, giving up in a few days all the gains it had made in 2008.

Smaller highly leveraged banks and companies faced more severe problems refinancing debt. The Russian Standard Bank sought to raise $200 million in international loans, but its attempts were hampered because of its junk rating. Home Credit & Finance Bank, another non-investment-grade Russian bank, also faced severe difficulties in managing its debt.

Critics say the boys at Goldman Sachs had hand-fed Russia's debt addiction. With high leverage now put in question, the debt market was shut to second-tier borrowers, and the cost of borrowing money in Russia jumped even for blue-chip names. However, Sberbank and VTB Group, which are state-owned and have government reserves on which to fall back, were able to weather the storm. The Russian government:

- Poured money into their coffers, and
- Asked them in return to help the smaller Russian banks.

On 21 September 2008, Russia's Finance Ministry widened the provision of emergency budget funding to Russia's banking system. This was a sign that despite the rise to $130 billion of additional liquidity to the country's financial markets announced a week earlier, the banks were still under pressure. Subsequently the Finance Ministry said it would immediately provide another $24.21 billion in 3-month credit, at a minimum rate of 8.75 percent at an auction:

- In all, till mid November 2008 Russia spent $220 billion to shore up its financial services industry.
- For the same purpose Japan put up $275 billion, South Korea $100 billion, and 13 Asian nations planned to create a $80 billion fund to fight the global economic crisis.[28]

The announcement of the Russian government's multibillion package followed a meeting between Finance Minister Alexei Kudrin and the representatives of more than 20 Russian banks, who had been arguing for such a measure to be taken. Many bankers had been complaining that government credits provided to the country's top three institutions did not filter down to them, and the interbank lending market was not functioning to get liquidity into the overall banking system.

The oligarchs managed to keep their name in the news. On 28 September 2008 the *New York Times* had an article on one of them, Aleksandr Y. Lebedev, who reportedly lost $4.6 billion in the Russian stock market crash that same month after being highly leveraged and exposed to market gyrations. (He is not a beggar, as he was left with $3.1 billion in assets.) The wealthy men who run the country are headed into a period of flux, Lebedev said, predicting that if Moscow's sky-high property values deflate then 50 percent of the country's banks will fail.

Lebedev was not alone in losing a fortune in the stockmarket crash. At his side could be found the "Who's Who" of Russian oligarchs who had been gambling in the stockmarket's casino among themselves and had borrowed hundreds of millions in the hope of adding more billions to their already large fortunes: Roman Abramovich; Oleg Deripaska, of Basic Element, a conglomerate; Mikhail Fridman of Alfa-Bank; Vladimir Potanin, of Interos; and Mikhail Prokorov, of Norilsk Nickel.

As far as profits and losses are concerned, the die had been cast and the wrong number had come up. Therefore, both the personal business empires of the oligarchs and the huge loans they took out from (silly) western banks were in peril. By 17 October 2008 the value of shares pledged as collateral by ultra-rich Russians had fallen below the value of the loans. "The ground is shifting under them," said Rory MacFarquhar, an economist at Goldman Sachs in Moscow. "This could be a game changer for a lot of very, very large players."[29]

On 10 October 2008 Prime Minister Putin had said $16.7 billion would be set aside for buying shares and that the State Development Bank would place the orders. This was in line with a strategy that relied essentially on making the government's oil windfall profits available to banks, hoping they would in turn lend to companies or buy equity to maintain growth.

That same day the Russian Parliament had passed a law unlocking central bank lending to private banks in a $36 billion bailout that had been announced a short time earlier that week. Shares in Russian companies traded on foreign stock exchanges still plunged, however.

Government action was deemed necessary because early to mid October 2008 Russian shares had fallen by about 40 percent and trading was again suspended in Russia for 2 days. In a way similar to what happened in the American and western European markets, stocks were heading south because of fears that the worst was still to come, plus the fear that the government might take advantage of the crisis to buy up prime assets from cash-strapped oligarchs on the cheap. If anything, both of the Moscow-based:

- Rouble-denominated MICEX index, and
- Dollar-denominated RTS index

had dived. In spite of the government's measures to restore confidence, compared with late October (in a mere 5 months) both indices shed about two-thirds of their value. And, somewhat as in New York, London, Paris, Berlin, and other capitals, the end of the tunnel was not in sight.

Either the market did not believe what the government was saying, or there were a lot of forced sellers. The money promised for stocks uses a respectable

10 percent of the free-float on the Russian market and it should have sent stocks up; but there was more selling. In addition, while by mid to late October 2008 tightening credit had not yet as wide an effect in Russia as in western Europe, softening commodity prices were beginning to hit some industries. But the stockmarket's response to government measures was very similar.

It is however interesting to note that unlike the strategy in the United States, where bailout funds are being gathered by borrowing (which will increase the national deficit), in Russia they are being drawn from the national savings account from the period of high oil prices. Under the latest plan approved by lawmakers the central bank will dip into the national gold and hard currency reserves for loans to private Russian banks.

9. Iceland's banks have reminded everybody that given enough rope anyone can hang himself[30]

When in late September 2008 the news broke that Iceland's three bigger banks were ready to jump off the cliff and take the whole country down with them, some experts were quick to comment that Iceland is a special case because there is no domestic activity to absorb the leveraging. That may be true, but at the same time there are many countries where the banks' leveraging outpaces by far:

- Their domestic activities, and
- The ability of the national economy to support the banks' superleveraging and toxic waste.

During the last few years, in a way not dissimilar to that of the global banking industry, the country's three largest credit institutions expanded headlong abroad, particularly since two of them were privatized in 2003, amassing assets of about €125 billion ($180 billion) by the end of 2007. This compared badly with the island state's economy of just €14.5 billion – small fry.

Worse yet, many of these "assets" were funded by lenders in wholesale markets. Statistics suggest that in early 2006 less than 30 cents in every loan issued by Iceland's banks was backed by deposits, while in parallel to this Iceland's households accumulated debts amounting to 213 percent of disposable income. General bankruptcy was an accident waiting to happen; as it did. Compared with these statistics:

- Overleveraged American households owed 140 percent of GDP;
- The debt of British households was higher at 169 percent, but still well below Iceland's; and
- Rising rapidly, that of French households had just crossed the 100 percent mark (Chapter 7).