

# **The Commission of Experts of the President of the UN General Assembly on Reforms of the International Monetary and Financial System**

## **Principles for a New Financial Architecture**

Joseph E. Stiglitz

### **I. General Principles Concerning Financial Markets and the Role of Government**

1. Financial markets are not an end in themselves, but a means: they are supposed to perform certain vital functions which enable the *real economy* to be more productive:
  - a. Mobilizing savings
  - b. Allocating capital;
  - c. Managing Risk, transferring it from those less able to bear it to those more able

It is hard to have a well-performing modern economy without a good financial system.

*In America, and some other countries, financial markets have not performed these functions well:*

- a. *The encouraged spendthrift patterns, which led to near-zero savings*
- b. *They misallocated capital*
- c. *The created risk, they did not manage it well, and they left huge risks with ordinary Americans, who are now bearing huge costs because of these failures*

*These problems have occurred repeatedly and are pervasive, evidence that the problems are systemic and systematic. And failures in financial markets have effects that spread out to the entire economy.*

2. While markets are at the center of every successful economy, markets only work well when private rewards are aligned with social returns. Incentives matter, but when incentives are distorted, we get distorted behavior.

*In spite of their failure to perform their key social functions, financial markets have garnered for themselves in the US and some other of the advanced industrial countries 30% or more of corporate profits—not to mention the huge compensation received by their executives.*

3. Well functioning markets require a balance between government and markets. Markets often fail, and financial markets have, on their own, failed in ways that have large systemic consequences. The deregulatory philosophy that has prevailed in many Western countries during the past quarter century has no grounding in economic theory or historical experience; quite the contrary, modern economic theory explains why the government must take an active role, especially in regulating financial markets.

Good regulation can increase confidence of investors in markets, and thus serve to attract capital to financial markets.

Government regulation is especially important because inevitably, when the problems are serious enough, there will be bail-outs; thus, government is, implicitly or explicitly, providing insurance. And all insurance companies need to make sure that either the premia they charge for the risks are commensurate with the risks, or that the insured do not take actions which increase the likelihood of the insured against event occurring.

*Key regulations, like the Glass Steagall Act, were repealed in the United States. In other cases, the regulatory structure did not keep up with changes in the financial structure. The international banking regulatory structures (Basle II) were based on the notion of self-regulation, an oxymoron.*

*Bail-outs have been a pervasive aspect of modern financial capitalism. Financial markets have repeatedly mismanaged risk, at great cost to taxpayers and society.*

*When, a hundred years ago, Upton Sinclair depicted graphically America's stockyards, and there was a revulsion against consuming meat, the industry turned to government for regulation, to assure consumers that meat was safe for consumption. Regulatory reform would help restore confidence in our financial markets.*

4. But passing regulations is not enough. They have to be enforced.

*The Fed had regulatory powers which it did not use. Those appointed to enforce the regulation succumbed to the same deregulatory philosophy that had led to the stripping away of regulation.*

5. Innovation is important, but not all innovations make a positive social contribution. Those that do should be encouraged, and government may need to take a catalytic role.

*Much of the innovation in recent years has been regulatory, accounting, and tax arbitrage, while financial markets failed to make innovations which would help individuals and our society manage risk better; in some instances, they have*

*actually opposed such innovation. Historically, the government has played an important role in promoting key innovations.*

6. The success of a market economy is based on competition. But firms strive to reduce competition. There is a need for strong competition laws with rigorous enforcement.

*When a firm is bailed out because it is too big to fail, it is evidence that competition laws have not been effectively enforced. Now financial institutions have become so big that they are almost too big to save. And in the process of addressing the current crisis, we are creating ever larger financial institutions, sowing the seeds for problems down the line. The high fees and other abusive practices of credit card companies is a result of anti-competitive behavior.*

7. The success of a market economy requires good information—transparency. But there are often incentives, especially in managerial capitalism (where there is a separation of ownership and control), for a lack of transparency.

*Problems of lack of transparency are pervasive in financial markets, and they have resisted improvements, such as more transparent disclosure of the costs of stock options. Stock options in return have provided incentives for accounting that increases reported profits—incentives for distorted and less transparent accounting. Financial institutions created products that were so complex and non-transparent that not even the firms that created them fully understood all of their implications. They put liabilities off-balance sheet, making it difficult to assess accurately their net worth.*

8. Problems of information asymmetries are pervasive in financial markets.

*Securitization and many of the other “innovations” have increased these asymmetries of information. The recognition of the importance of the limitations of information has played an important role in the current crisis.*

9. Financial markets have often exploited the uninformed and the poorly educated.

*This is part of the reason for the need for strong consumer and investor protection. It is not a surprise that the problems first occurred among the least educated and lower income individuals. There was extensive predatory lending, and financial markets resisted laws restricted these abusive practices.*

10. Ordinary individuals cannot be expected to monitor the financial position of banks. Such monitoring is a public good—a public responsibility. And the government should provide protection for the public against its failure to perform its function adequately. There needs to be comprehensive deposit insurance, fully funded by a tax on depositors.

*Without such deposit insurance there can be runs on the banking system. The argument that providing such deposit insurance gives rise to moral hazard is absurd. But if the government provides insurance, it must make sure that the insured against event does not occur—just as a fire insurance company typically requires commercial buildings that it insures to have sprinklers.*

11. Financial behavior is affected by many other parts of our tax and legal structures. Financial market reform cannot be fully separated from reform in these other laws.

*Tax laws encouraged leveraging. New bankruptcy laws that made it more difficult for poor to discharge their debts may have encouraged predatory lending practices.*

12. Those who impose costs on others (externalities) must be forced to pay those costs. This is not just a matter of equity; it is a matter of economic efficiency. More generally, costs of regulation and bailing out of financial systems are part of the costs of financial intermediation. There is a presumption that efficiency requires that these costs be borne within the sector.

*In environmental economics, there is a basic principle, called the polluter pay principle. Wall Street has polluted our economy with toxic mortgages. It should now pay for the cleanup.*

13. The role of the Fed is not just to maintain price stability, but to promote growth and high employment. A single minded focus on price stability may actually lead to greater economic instability. Economic stability requires a sound financial system.

*The Fed and central bankers around the world were focusing on second order inefficiencies associated with low inflation, as problems of financial market instability grew—with the resulting real loss of output and economic inefficiency that were so much larger.*

14. There are large distributional consequences of financial policies (both macro-economic and regulatory). They cannot be delegated to technocrats, but are an essential part of the political process.

*While the economy needs a well-functioning financial system, what is in the interests of financial markets may not be in the interests of workers or small businesses. There are trade-offs. The Fed's responsibility is not to maximize the well-being of financial markets; their mandate is broader. It is important that those broader interests be better reflected in institutional design.*

## II. The principles of a regulatory agenda

### A. Objectives

Regulations are required to

- (a) ensure the safety and soundness of individual financial institutions and the financial system as a whole
- (b) protect consumers
- (c) maintain competition
- (d) ensure access to finance for all
- (e) maintain overall economic stability

### B. Design

1. There are always going to be asymmetries between regulators and regulated—the regulated are likely to be better paid and there are important asymmetries of information. But that does not mean that there cannot be effective regulation. The pay and skills of those innovating new drugs may be different from those that test their safety and efficacy; yet no one would suggest that such testing is either infeasible or undesirable.

*But well designed regulatory structures take into account those asymmetries—some regulations are easier to implement and more difficult to circumvent.*

2. There is always going to be some circumvention of regulations. But that doesn't mean that one should abandon regulations.

*A leaky umbrella may still provide some protection on a rainy day. No one would suggest that because tax laws are often circumvented, we should abandon them. Yet, one of the arguments for the repeal of Glass-Steagall was that it was, in effect, being circumvented. The response should have been to focus on the reasons that the law was passed in the first place, and to see whether those objectives, if still valid, could be achieved in a more effective way.*

3. But it does mean that one has to be very sensitive in the design of regulations. Simple regulations may be more effective, and more enforceable, than more complicated regulations. Regulations that affect incentives may be more effective, and more enforceable, than regulations directed at the behaviors themselves.
4. And it also means that regulations have to constantly change, both to keep up with changes in the external environment, and to keep up with innovations in regulatory arbitrage.

5. There are important distinctions between financial institutions that are central to the functioning of the economy system, whose failure would jeopardize the functioning of the economy, and who are entrusted with the care of ordinary citizens' money, and those that provide investment services to the very wealthy. The former includes commercial banks and pension funds. These institutions must be heavily regulated, to protect our economic system and the individuals whose money they are supposed to be taking care of. Consenting adults should be allowed to do what they like, so long as they do not hurt others. *There needs to be a strong ring-fencing of these core financial institutions—they cannot lend money to or purchase products from this “risk” sector, unless such products have been individually approved by a Financial Products Safety Commission.* (In the subsequent discussion, we will refer to these financial institutions as highly regulated financial entities.)

The fact that two investment banks have converted themselves into bank holding companies should be a source of worry. They argued that this would provide them a more stable source of finance. But they should not be able to use insured deposits to finance their risky activities. Evidently, they thought they could. It means that either prudential regulation of commercial banks has been so weakened that there is little difference between the two; or that they believe that they can use depositor funds in their riskier activities. Neither interpretation is comforting.

6. There should be a presumption that financial markets work fairly well, and as a result there are no free lunches to be had. Financial innovations that are defended as reducing transactions costs, but lead to increased fees for financial institutions, should be suspect.

*Many new financial products (derivatives) were sold as lowering transactions costs and providing new risk arbitrage opportunities, but pricing was based on information provided by existing assets, and they succeeded in generating huge fees.*

7. Models used to provide risk assessment are only as good as the assumptions that are used in their implementation. In the past, there have been repeated failures in underestimating risks and correlations (e.g. among assets, between credit and interest rate risks) and of small probability events (once in a century events occur every ten years). Risk models used by highly regulated entities and those that regulate them must be alert to these problems, and to systemic risks.
8. Modern financial markets are complex, with complex interrelations among different institutions of different kinds, evidenced in the current crisis. *There is a need for a regulatory authority, a Financial Markets Stability Authority, to assess overall risks.* While the Financial Products Safety Commission looks at individual products, and judges their appropriateness for particular classes

of purchasers, the Financial Markets Stability Commission looks at the functioning of the entire financial system, and how it would respond to various kinds of shocks. Such a Commission should have identified, for instance, the risk posed by the breaking of the housing bubble. All of the regulatory authorities (those regulating securities, insurance, and banking) should report to the FMSC. We have seen how all financial institutions are interconnected, and how an insurance firm became a systemic player. Similar functions can be performed by different kinds of institutions. There needs to be oversight over the entire system to avoid regulatory arbitrage.

9. Part of the problem in the current crisis is inadequate enforcement of existing regulations. It is not surprising: if government appoints as regulators those who do not believe in regulation, one is not likely to get strong enforcement. This means that we have to design *robust* regulatory systems, where gaps in enforcement are transparent. Relatively simple regulatory systems (see point 3 above and specific examples below) may be easier to implement and more robust. There needs to be sensitivity to the risk of regulatory capture. It may also be optimal to have duplicative regulatory systems: the costs of a mistake overwhelm the extra costs of regulation. And one must guard against regulatory competition—allowing a choice of regulators, which can lead to a race to the bottom.
10. While guarding against the mistakes of the past in no insurance for avoiding problems in the future, what is remarkable about Western financial systems is that they seem so immune from learning. Similar problems arise repeatedly: the underestimation of small probability risks, the underestimation of correlations, the lack of attention to problems of liquidity and systemic risk, problems posed by failures of counterparty risk. Any regulatory system has to pay special attention to these seemingly persistent failures in markets' risk judgments. It also must be sensitive to other aspects of market failures, especially if effective remediation is not undertaken, such as the underestimation of certain risks by rating agencies.
11. Regulatory capture is not just a matter of “buying” regulators, or even of “revolving doors,” but also of the capture of ideas and mindsets. If those who are supposed to regulate the financial markets approach the problem from financial markets' perspectives, they will not provide an adequate check and balance. But much of the inadequacy of current regulations and regulatory structures is the result of financial markets' political influence, in many countries through campaign contributions. These deeper political reforms are an essential part of any successful regulatory reform.

### III. A New Regulatory Framework

#### 1. Improved transparency and disclosure, in a form that is understandable to most investors.

*But while transparency and disclosure has been at the center of those calling for better regulation, it does not suffice, and is more complicated than often seems the case.*

- a. America prided itself on having transparent financial markets, criticizing others (such as those in East Asia) for their failures. It has turned out that that is not the case.
- b. Even disclosing the terms of the financial products may not have helped; some are so complicated that not even their originators fully understood the risks entailed.
- c. ***Greater reliance on standardized products rather than tailor made products may increase transparency and the efficiency of the economy.*** It reduces the information burden on market participants, and it enhances competition (differentiating products is one of the ways that firms work to reduce the force of competition). There is a cost (presumably tailor made products can be designed to better fit the needs of the purchasers) but the costs are less than the benefits—especially since there is evidence that in many cases there was less tailoring than there should have been.
- d. Some years ago, there was resistance by those in the financial industry to the introduction of more transparent and better auctions as a way of selling Treasury bills.
- e. More recently, there was resistance to requirements for more transparent disclosure of the costs of stock options. Companies often do not report other aspects of executive compensation in a transparent way, and typically do not disclose the extent to which executive compensation is correlated with performance. (Too often, when stock performance is poor, stock options are replaced with other forms of compensation, so that there is in effect little real incentive pay.) Stock options provide incentives for corporate executives to provide distorted information. This may have played an important role in the current financial crisis. At the very least, ***there should be a requirement for more transparent disclosure of stock options.***
- f. Mark to market accounting was supposed to provide better information to investors about banks economic position. But now, there is a concern that this information may contribute to exacerbating the downturn. While financial markets used to boast about the importance of the “price discovery function” performed by markets, they now claim that market prices sometimes do not provide good information, and using transactional prices may provide a distorted picture of a



bank's economic position. The problem is only partially with mark to market accounting; it also has to do with the regulatory system, which requires the provision of more capital when the value of assets are written down. (See the discussion below) . Not using mark to market not only provides opportunities for gaming (selling assets that have increased in value, retaining those that have decreased, so that they are value at purchase price), it also provides incentives for excessive risk taking. Realizing that there is no perfect information system, it may be desirable to have both sets of information provided.

- g. There needs to be clear disclosure of conflicts of interest, and if possible, they should be restricted. (See below)
- h. No off balance sheet transactions should be allowed for highly regulated financial entities.

2. **Regulating incentives is essential.** The current system encourages excessive risk taking, a focus on the short term, and bad accounting practices.

- a. *A key reform is moving away from rewarding executives through stock options.* (See the discussion above.)
- b. Any incentive pay should long term—or least longer term than the current horizon. ***Bonuses should be based on performance over at least a five year period. If part of compensation is based on shorter term performance, there need to be strong clawback provisions.***
- c. Any incentive pay system should not induce excessive risk taking, so that ***there should be limited asymmetries in the treatment of gains and losses.***
- d. Any pay system that is claimed to be incentive based should be demonstrably so. Average compensation and compensation of individual managers should be shown to related to performance.
- e. Those originating mortgages or other financial products should bear some of the consequences for failed products. ***There should be a requirement that mortgage originators retain at least a 20% equity share.***
- f. It is clearly problematic for rating agencies to be paid by those that they rate, and to sell consulting services on how ratings can be improved. Yet it is not obvious how to design alternative arrangements, which is why in many sectors inspections are publicly provided (Food and Drug Administration.) Competition among rating agencies can have perverse incentives—a race to the bottom. ***At the very least, rating agencies need to be more highly regulated. A government rating agency should be established.***
- g. There is a clear conflict of interest when a mortgage originator also owns the company that appraises house values. ***This should be forbidden.***

3. Competition is essential to the functioning of a market economy.
  - a. Financial institutions have become too big to fail. They have grown so large that many are almost too big to save. In many communities, small businesses have but one or two lenders to whom they can turn. **There has been a failure of effective enforcement of competition policy.** *But in response to the current crisis, competition has been eroded even further, especially in investment banking, and banks have become even larger. When the crisis is passed, these banks must be broken up.*
  - b. Banks have earned fees that are well in excess of competitive levels on credit cards. There is clear evidence of anti-competitive behavior. **Competition needs to be created in credit cards. There needs to be more disclosure and transparency in fees charged to both consumers and merchants. Anti-competitive practices have to be restricted. Retailers that wish to allow discounts to those that pay cash should be allowed to do so.**
4. Exploitive and risky practices of the financial sector need to be curbed.
  - a. These include pay-day loans, predatory lending, and rent-a-furniture and similar scams.
  - b. *There needs to be a usury law (and this also applies to credit cards) limiting the effective rate of interest paid by users of the financial facility.*
  - c. *In the mortgage sector, variable rate mortgages in which payments can vary significantly (as opposed to variations in maturity) should be forbidden, at least for all individuals whose income is below a certain threshold. Practices which result in excessive transaction costs (entailing frequent refinancing of loans or mortgages) should be proscribed.*
  - d. *Speed limits should be imposed on the rate of expansion of assets.* As an alternative, increased capital requirements/increased provisioning requirements and/or increased premia on deposit insurance on banks that increase their lending (lending in any particular category) at an excessive rate can provide incentives to discourage such risky behavior.
  - e. *Derivatives and similar financial products should neither be purchased or produced by highly regulated financial entities, unless they have been approved for specific uses by a financial products safety commission (fpssc), and unless their use conforms to the guidelines for usage established by the fpssc.*
5. Commercial banks and similar institutions have to have adequate capital and provisioning of risks

- a. *Capital adequacy standards/provisions (reserves) have to be designed to be countercyclical.* Otherwise, there is a risk that they will contribute to cyclical fluctuations. As asset values decrease in a downturn, it can force cutbacks in lending, exacerbating the downturn; and in the boom, the asset price increases allow more lending. On both sides, cyclical fluctuations are amplified.
  - b. Capital adequacy standards alone do not suffice; indeed, increasing capital adequacy standards may lead to increased risk taking. Moreover, while government provision of capital may provide a buffer against bankruptcy, so long as management focuses on the returns to themselves and non-governmental shareholders, depending on the form of the provision of capital, risks of excessive risk taking may not be mitigated. ***Capital adequacy standards are not a substitute for close supervision of the lending and risk practices of banks. Banks will have an incentive to engage in regulatory and accounting arbitrage, and regulators must be alert to this possibility. They must have sufficient authority to proscribe such behavior. Bad lending practices may increase in cyclical downturns; this necessitates closer supervision at such times.*** Regulators have to be particularly sensitive to the risks of increasing leverage in booms.
  - c. Regulators need to be aware of the risks posed by various practices within the financial system which contribute to risk and cyclicity (cyclical movements in leverage, pricing, rating of rating agencies). These can be offset by countercyclical capital adequacy/provisioning requirements; cyclically adjusted limits on loan-to-value ratios and/or rules to adjust the values of collateral for cyclical price variations.
  - d. Better designed provision requirements may help stabilize the financial system. Banks should be required to make compulsory provisions for bond defaults, which would increase with asset prices. Banks should put up provisions (reserves) when loans are *disbursed* rather than when repayments (or, rather the lack of repayments) are *expected*.
6. The regulatory system has to be designed to facilitate effective enforcement and to resist capture.
    - a. Financial regulation needs to be comprehensive; otherwise funds will flow through the least regulated part. Transparency requirements on part of the system may help ensure that safety and soundness of that part of the system, but provide little information about systemic risks. This has become particularly important as different institutions have begun to perform similar functions. That is why there is a need for a financial markets stability commission, having overall oversight of the financial system, and providing integrating regulation of each of the parts of the system. Such a commission would also look carefully at the interrelations among the parts of the system—how exchange rate exposure of firms to whom banks lend may expose banks to foreign exchange risk. Especially in developing countries, bank regulations

may restrict uncovered foreign exchange positions. Both this and the 1997-1998 crisis exposed the importance of counterparty risk, and regulators will need to take this into account more than they have in the past. A Financial Markets Stability Commission should be particularly attentive to the systemic risk which arises when many banks use similar models, inducing similar actions at the same time.

- b. Those who are affected by the failure of regulation—workers who lose their jobs, retirees who see their pensions diminished, taxpayers who have to bear the costs of bail-outs—should have a large voice in any regulatory structure.