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Ideas for a New Financial Architecture[1]

In designing an architecture for the future of our global financial system, we will have to address the following crucial question: How will we be able to prevent the insolvency of systemically relevant financial institutions without creating an excessive burden for the taxpayers?

While the future financial architecture will of course have to address numerous other issues (such as financial regulation, supervision and many more), the question above is nevertheless of central importance for a simple reason.

A systemically relevant institution is too large and interconnected to fail, in the sense that its default would lead to a number and scale of further defaults that are unacceptable to policy makers. So policy makers have sought to prevent insolvency of systemically relevant financial institutions at virtually all costs. They have done so by injections of equity, financed by current taxes and mainly government debt. The government debt, in turn, is to be financed by future taxes. In effect, therefore, insolvency of systemically relevant financial institutions has been prevented by bailouts whose costs fall largely on future taxpayers. Policy makers have thus grappled with the simple tradeoff of greater default risk now versus higher taxes in the future.

There is a broad perception that the danger of systemic default risk has been avoided. Participants in financial markets no longer believe that the financial system will melt down. But this outcome has come at the expense of higher future taxes. All we have done, in effect, is spread the pain, making our children pay for our misdeeds. Voters are already angry about this and once they begin to feel the burden of higher taxes, they can be expected to get angrier.

Another question we need to address is this: How can we stimulate lending in a credit crunch without encouraging financial institutions from taking on excessive risk in the future?

This question is important, since the current bailouts reward excessive risk taking. After all, it is the excessive risk takers that require the bailout. The more reckless the past behavior, the larger the size of the bailout that is required. Thus the current bailouts may sow the seeds of the next financial crises.

Tackling Insolvency Risk

My plan is a proposal for a future financial architecture that aims to prevent these problems from arising again.

Currently policy makers are exploring two ways of overcoming the danger that systemically relevant financial institutions become insolvent, without requiring the taxpayer to foot most of the bill:

(i) Competition authorities could break up such institutions in such a way that they cease to be systemically relevant.

(ii) Changing the regulation and supervision of the financial sector so as to keep these institutions' insolvency risk minimal.

Both of these avenues are clearly worth pursuing, but it is most unlikely that such policymakers' efforts will solve the underlying problem. The reasons are straightforward.

Identifying institutions as systemically relevant is difficult – partly because the interconnections among the default rates of different enterprises are hard to assess, and partly because the

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strength of these interconnections itself varies over the business cycle – but it is not an impossible job and several measures of systemic relevance have already been proposed. What makes this solution unlikely to succeed, however, is politics: Breaking up large financial institutions is going to be very messy business, especially when these institutions have huge lobbying power, the boundaries between careers in politics and finance are blurry, and the definition of systemic relevance is still open to question. Moreover, in the face of ongoing financial innovation, fighting monopoly power will probably mean continually chasing after a moving target: while anti-trust policies overcome past sources of systemic risk, new sources will continually be created, requiring years of investigation and further years of litigation. Meanwhile the next financial crisis may be upon us.

Solving the problem through regulation and supervision of the financial sector also appears extremely unlikely. To avoid regulatory arbitrage (enabling financial transactions to be conducted where they are regulated least), it would be necessary for the appropriate regulation and supervision to be harmonized globally, or at least among the G-20 countries. The absence of progress on this matter – despite unanimous agreement that such harmonization is desirable and despite the length and depth of the current economic crisis – is symptomatic of a fundamental difficulty. Since the bailouts of financial institutions are all national, governments understandably insist that their regulation and supervision activities should be national as well. Otherwise regulatory rules designed in some countries could affect the size of the bailout required in other countries. Thus, while any steps in the direction of regulatory and supervisory harmonization are to be welcomed, it would be naïve for us to expect that this will be sufficient to solve the underlying problem.

There is, however, another way of overcoming insolvency risk at systemically relevant financial institutions, without requiring excessive taxpayer sacrifice. Government bailouts are meant to work by injecting tax-financed equity into these institutions; regulation and supervision are meant to work by preventing these institutions from accumulating excessive debt; breaking up the institutions to eliminate their systemic relevance makes it permissible for the government to let these institutions fold. But there is another promising way to tackle the problem, namely, to insist that the systemically relevant institutions carry debt that can be converted into equity should they become insolvent. This crisis has taught us that debt is a very dangerous way to finance rapid expansion at these institutions, since the debt is generally fixed in nominal terms whereas the value of the institutions' assets are variable and since these institutions usually have a maturity mismatch between their long-term assets and short-term liabilities. So when there is a loss of confidence and asset prices tumble, these institutions find themselves unable to pay their debts. The problem of default would disappear, however, if their debts had a special characteristic, namely that they were automatically convertible into equity in case of insolvency.

For this purpose, the regulator should require that all the debt (commercial paper and bonds) of the systemically relevant financial institutions be nondiscretionary convertible. This means that if such an institution becomes insolvent, the regulator has the right to convert this debt into equity. The size of the debt-for-equity swap is sufficient to return the institution to solvency and restore its capital adequacy ratio to the minimum required level. What debt is converted and the terms of the conversion would depend on the seniority of the tranches and the requirement that the equity of the old stockholders would be reduced to a small fraction of that of the convertible bondholders. Observe that whereas the standard convertible bonds can be converted into equity at the discretion of the shareholder, the conversion of the nondiscretionary convertible bonds depends on the institution's solvency.

How can we determine when a systemically relevant institution has become insolvent. We know from recent experience that in the presence of toxic assets, determining insolvency becomes difficult. After all, what makes assets toxic is that they cannot at present be reliably valued, and in the absence of such valuation, solvency can of course remain a matter of dispute. The appropriate policy response to this problem is to set up a Financial Vigilance Agency (FVA), with the purpose of assessing, detecting and preventing adverse economic effects of financial products. The originators of new financial products would be required to submit the relevant information about expected benefits and adverse side-effects, of new financial products and these products could be launched only with FVA approval. The FVA would collect information about these products, analyze the systemic risks that they may generate, and submit the systemically relevant institutions that offer these products to the relevant stress tests.

The aim of these activities would be to identify information about potential hazards generated by these products and to prevent the potential harm to the economy from exceeding the benefits. The onus of proof concerning the safety of a new financial product would lie with the originator. In these respects, the FVA would serve an analogous function to the American Food and Drug Administration and the European Medicines Agency working with the national competent medicines authorities.

In short, the activities of the FVA are meant to ensure that new financial products are not toxic and do not have perverse effects on the economy. With the benefit of this work, the solvency or insolvency of systemically relevant financial institutions should become straightforward to assess. This work would effectively replace that of the rating agencies. The latter would cease to have a quasi-regulatory function (such as that accorded to them in the Basel II Accord) and instead become information providers along the same lines as financial analysts and journalists.

Through the establishment of nondiscretionary convertible bonds and the Financial Vigilance Authority, the ongoing solvency of all systemically relevant financial institutions would be assured. These institutions, in short, would have a de facto solvency guarantee. Since policy makers have considered them too large and interconnected to fail, such a guarantee is appropriate. Unlike the current bailouts, however, this guarantee would not be financed by the taxpayers, but rather by the bond- and stockholders of these institutions.

An attractive feature of this policy is that it could initially be implemented at the national level, even in the absence of international harmonization of financial regulations. Once experiences from these policies have been gathered and evaluated at national levels, nondiscretionary convertible bonds and a Financial Vigilance Authority could be established at a transnational level, such as within the European Community. It could eventually become a component of a future Basel III Accord.

Making the debt non-discretionarily convertible would obviously raise the future financing costs of these institutions, since future bondholders would take account of the possible loss through future debt-for-equity swaps. At first glance, this might seem like a

disadvantage, due to the currently conventional view that lending can be stimulated only by reducing the debt burden of these institutions. This view is incorrect, however. One reason why the world has descended into the current financial crisis is that systemically relevant financial institutions did not have to pay for the systemic risk that they created. When deciding on how much leverage to accept, these institutions took account of the costs of their own idiosyncratic default risk (albeit on the basis of largely misguided models and misguided ratings), but they ignored the systemic risk that their leverage generated. The nondiscretionary convertible bonds would automatically make these institutions take the full costs of their risks – including the systemic costs – into account. The problem of deficient lending in a financial crisis needs to be addressed differently. This takes us to the second component of my plan.

Credit Subsidies

Faced with a massive credit crunch, governments around the world have opted to bail out the banks. The banks, in turn, have hungrily devoured the bailouts, but have remained stubbornly reluctant to lend. Instead, the bailout money is used to clear some bad debts and boost banks' reserves. Policy makers have not asked themselves whether bailouts are the most effective way of stimulating credit.

If they did, it would not take them long to realize that, no, bailouts are extravagantly ineffective and, for good measure, make the underlying problem worse. Under these curious circumstances, the time has come for us to relearn lessons that we have already learnt in other areas of policy-making.

For this purpose, let us return to the mid-1980s, when many European countries witnessed their unemployment rates ratcheting remorselessly upwards. To support the millions who had lost their jobs, some governments had granted more generous unemployment benefits and related welfare state entitlements. In response, unemployment rates rose even more. And then, in the late 1980s, several European governments made a discovery that seems obvious in retrospect: unemployment benefits actually magnify the unemployment problem, since they reward people for not working. A more effective way forward is to reward the activity we seek to promote, namely to subsidize people for accepting employment. The upshot of this insight was a proliferation of *active labor market policies*, designed to help people help themselves.

Now we face an analogous problem in financial markets: bailouts actually magnify the underlying credit problem. They reward the banks that have engaged in the most irresponsibly risky transactions, for these transactions have created the specter of default that calls for bailouts. What the bailouts will teach the banks is clear: creating systemic risks is good business over the long haul – winning bets lead to high salaries, while losing bets are covered by the taxpayer. So the recklessness that got us into this mess will be further encouraged in the years to come.

Once again, a more effective way forward is to reward banks for the activity we seek to promote, namely to subsidize credit. If governments gave banks credit subsidies – with the subsidy payment proportional on the amount of the repaid loan (in dollars, euros, etc.) – then banks would receive compensation only when (1) they actually provided credit and (2) the loan was actually repaid. The credit subsidies would induce banks to lend to borrowers who are unlikely to default. These borrowers are precisely the ones who deserve help in surviving the current crisis.

In short, the time has come for active credit market policies that reward banks only when they do what they are meant to do, namely, lend to responsible borrowers. Credit subsidies are nothing new. They are used to promote entrepreneurship in the U.S. (through the Small Business Administration) and the EU (for example, through the European Investment Bank). What is new here is that proposed subsidies are to be given, not to particular businesses (such as small- and medium-sized enterprises), but to banks, in support of loans to whomever the banks consider worthy. The underlying idea is that banks are likely to be a better judge of credit-worthiness than the government. Predicting the probability of repayment is, after all, the business of bankers, not government officials.

Although the credit subsidies will need to be financed through higher taxes, these extra tax receipts will need to pay only a fraction of what the banks will receive in subsidies. The reason is simple. In the absence of the subsidies, there would be less lending and thus less economic activity, so that less tax revenue would be generated. Conversely, granting the subsidies will generate extra tax revenue. Thus, part of the subsidies, presumably a large part, would be self-financing.

This sensible proposal, however, faces two potential pitfalls that need to be addressed in advance. First, the credit crunch has led to a recession in many countries and, as we know, people have little demand for credit during a recession. True, but even in a recession, the demand for credit still depends on the price of credit. The cheaper it is borrow money, the more firms with sound business prospects will do so and the more households will be able to afford their mortgages. The deeper the credit-induced recession, the greater the credit subsidy that is required. Thus, the size of the subsidy will have to depend positively on risk premia charged to business enterprises (such as those measured by yield spreads and indices of credit conditions).

Second, we clearly need a way of phasing the subsidy out once the recession is over. Since we do not want the subsidy to depend on future lobbying efforts, the subsidy must be phased out automatically. This can be achieved by making the size of the subsidy depend on the magnitude of the credit-induced recession. It is a way of minimizing what policy makers call *deadweight loss*, which means paying subsidies for credit that would have been granted even in the absence of the subsidies.

Expect lots of resistance to this proposal from the financial industry. Bankers would clearly prefer bailouts without strings attached. Who does not? Many unemployed people would also prefer benefits without strings to rewards conditional on employment. But just as governments have come to understand that it is harmful to encourage inactivity in labor markets, so they must now realize that it is not in the public interest to reward reckless risk-taking in financial markets. It is far better to reward banks for doing what they are meant to do.

Conclusion

In sum, my plan addresses two challenges in the design of a future financial architecture: (i) the solvency of systemically relevant financial institutions needs to be maintained without burdening the taxpayers and (ii) the flow of credit needs to be stimulated without inducing financial institutions to take on excessive risk. The first problem is addressed through nondiscretionary convertible bonds and the second through credit subsidies. Under this plan, the taxpayers would help finance a fraction of the credit subsidies, but not pay to keep the systemically relevant financial institutions solvent.

Once the investors in the financial market realized that the systemically relevant financial institutions cannot become insolvent, the terrible mistrust that hampered lending in the current crisis could not arise. Lending would not freeze up. If it dropped significantly, it would be stimulated through the credit subsidies. The risks of financial contagion would fade away. We would have taken a big step towards ensuring that this type of financial crisis does not recur.