Providing the solution to the debt and deficit problems of developed economies is too big a task. I doubt it is possible to offer general recipes that can apply to all industrial countries, despite the surprisingly common origins of the deficit problems documented by the Mussa and Masson paper in this conference. For example, while in most countries accumulated social security liabilities represent perhaps the biggest source of concern on the evolution of public finances, social security systems differ significantly and recipes that are both efficient and politically viable in one country are unlikely to be applicable in other countries. In sum, budget retrenchment is a job of micromanagement: economists are at a loss when trying to come up with sweeping formulas that politicians could use well in the public debate.

Thus, rather than looking for the solution that can be adopted by all industrial countries, I want to discuss the role of financial markets in the adjustment of public finance imbalances. Serious consideration of the role of financial markets is in order for two very important reasons. First, the past decade has witnessed a tremendous growth of financial markets, prompted by the progressive elimination of capital controls and the adoption of pro-market policies by the majority of countries. This has fundamentally altered the relation between markets and authorities, and has made government policies more vulnerable to international capital markets. Second, the success of a financial stabilization policy for a country that
accumulated a large stock of debt depends crucially on the ability of that country to minimize the cost of government debt.

The main conclusion of this paper is that in a situation of free financial markets like the current one, the alternatives available to governments in their adjustment efforts are reduced; the only orderly adjustment path is a long and slow one. Under this scenario, ensuring the stability and efficiency of financial markets will represent a major priority for all industrial countries.

This paper is organized as follows. The first section reviews the role of financial markets in the development of the industrial countries’ debt problems. The second section discusses the options for adjustment that governments currently face, and how adjustment options are affected under free capital mobility. The third section addresses some problems of intergovernment relations which have been raised by recent events in international financial markets.

The buildup of government debt in industrial countries

As the paper of Michael Mussa and Paul Masson in this collection illustrates, the pattern of deficit buildup is surprisingly uniform among industrial countries: government spending started to accelerate in the early 1970s, while the debt-to-GDP ratio increased significantly in the 1980s.

One well-known relation in the arithmetic of public finances shows that the rate of growth of the ratio of government debt to GDP is determined by the difference between the cost of government debt and the nominal rate of growth of GDP (real growth plus inflation) and by net-of-interest government deficits as a fraction of GDP. The 1970s witnessed a fast increase in government spending without a correspondingly fast increase in debt. The reason is that, during that decade, the cost of government debt in many countries fell short of the rate of inflation augmented by the rate of growth of the economy.

In the 1980s this situation changed dramatically, in response to a turnaround in monetary policies. Most industrial countries embarked on inflation stabilization through different means. In Europe,
inflation stabilization was driven by the re-establishment of fixed exchange rates. In addition, restrictive monetary policy was accompanied, at least in the first half of the 1980s, by expansionary fiscal policy. The stabilization of inflation caused high real interest rates which accumulated on the effects of primary deficits: the debt-to-GDP ratio of industrial countries accelerated.

In most industrial countries, fiscal retrenchment got under way in the mid-1980s. The contrast here is between the small countries like Denmark, Belgium, and Ireland and the large countries. Smaller countries pursued much more aggressive adjustment programs than large countries. This contrast raises the question of whether smaller countries have structural incentives or advantages in pursuing fiscal adjustment. On the incentives side, it is arguable that a smaller economy is by definition less diversified and more vulnerable to external circumstances. Because of this, a smaller country might find it difficult to maintain an unbalanced fiscal position for a long time. On the advantages side, the political process of fiscal adjustment might be simpler in smaller countries. Large countries might be populated by a larger number of organized constituencies and pressure groups, which make the process of consensus building that underlies democratic budget formation a much more drawn out one.

The experience of the 1970s and 1980s, which witnessed the buildup and growth of the deficits and debt problems of industrial countries, leads to two main observations.

**Observation one**

The monetary stabilizations of the early 1980s exacerbated the fiscal problems’ implications for monetary policy, especially in the fixed exchange rate countries. In Europe, French authorities were the first to experience—in a rather harsh way—the costs of an inconsistent fiscal-monetary policy mix with the 1983 foreign exchange crisis. In response to that, they put in place the well-known fiscal retrenchment package, which was publicly justified as required by the franc’s participation in the Exchange-Rate Mechanism (ERM) of the European Monetary System.
Italy fits this pattern too. In that country government spending, largely in the form of entitlements (health, pension reform, schools) increased dramatically in 1972-73. However, during the whole decade of the 1970s, the debt-to-GDP ratio increased only marginally because the jump in primary deficits was accompanied by negative real interest rates, which offset the impact on government debt.

In Italy, entry into the ERM was debated at length: the central bank allegedly opposed it, most likely in the awareness that Italian fiscal dynamics were unsustainable in a disinflation and that successful exchange-rate-based stabilizations have to be supported by stable public finances. After the entry into the ERM, expansionary fiscal policies continued until the mid-1980s, when the primary deficit started to shrink gradually. However, the rate of improvement in public accounts as well as the rate of convergence of inflation became too slow for the exchange-rate parity to be sustainable, and the lira was forced out of the ERM in September 1992.

**Observation two**

Financial markets played a key role in the development’s budgetary problems. In the 1970s the phenomenon that prevented a boom in debt-to-GDP ratio was the nonadjustment of nominal interest rates to inflation. That phenomenon had two causes. On one hand, inflation caught markets by surprise: nominal interest rates reflected expectations of lower rates of inflation. On the other hand, in several countries nominal interest rates did not sufficiently adjust to expected inflation because they were prevented from it. The incomplete adjustment of nominal interest rates to expected inflation was due to capital controls and financial repression, a phenomenon well-studied among developing countries: when regulations prevent the adjustment of nominal interest rates, an acceleration of inflation induces artificially low or negative real interest rates.

As inflation rates came down, the question was raised whether capital controls still maintained low real interest rates domestically. In Italy, authorities believed that free and competitive financial markets could have helped lower the cost of government debt. The
theory was that financial repression helps with high inflation but becomes a hindrance at low inflation rates.

Thus capital controls were removed, in Italy and in most industrial countries which had them in place in the 1970s, mainly for the purpose of achieving more efficient domestic financial markets. Some countries saw that objective as one that would maintain and foster the competitiveness of financial centers located in their territory; others saw it as a necessary element of the process of liberalization that was being achieved through the creation of the single market.

Liberalization, however, made debt financing a much more difficult affair. Before the liberalization, the financing of budget deficits was essentially a credit allocation decision: governments could simply decide who would hold debt and at what rate of interest. After the liberalization, financial markets became an even more important constraint in the financial activities of governments. In general, but especially in the case of highly indebted countries, the marginal cost of government liabilities became highly sensitive to economic and political conditions in the issuing countries.

**Adjustment options**

The discussion in the previous section on the role of financial markets in the development of the deficits and debt problems of industrial countries helps to discuss the available ways out. The ratio of government debt to GDP currently reached by industrial countries has no precedent in the second postwar. Only in the immediate aftermath of World War II were industrial countries indebted to an extent that is comparable to now. What was the solution to the debt problem after the war? It was a combination of inflation and high growth.

Would inflation be an efficient way out of the debt problems of industrial countries now? The first argument against the use of inflation to solve debt problems is the observation that, in the absence of financial repression, inflation is unlikely to decrease the
cost of government debt by large amounts. Inflation will not work as well because, since efficient financial markets will adapt fast in order to minimize inflation surprises, a change in regime—from low inflation to high inflation—will likely cause very large swings in real interest rates and major disruption in long-term bond markets.

The risk of these swings should be enough of a deterrent for countries with very high stocks of debt. Increased instability not only would cause the transmission of high interest rates into the cost of government debt, but also would make it very difficult to roll over debt in the marketplace. In the presence of high uncertainty government debt auctions can go unsold, causing potentially serious cash shortages in government finances.

These observations lead me to put forward the following proposition: With free financial markets, high government debt is a deterrent to inflation. In other words, highly indebted governments are strongly averse to inflation because they know that the potential of inflationary surprises induces excessive fluctuations in financial markets, with extremely adverse effects on the cost and financing patterns of government debt. In other words, free international capital markets hinder inflationary finance, thus reversing the standard prescription on fiscal stabilizations inspired by the experience of many countries after the accumulation of war debts.

A very good illustration of the proposition above is the experience of Belgium. That country has been successful in minimizing the cost of its debt by being adamant on its policy of pegging its currency to the deutsche mark. Such a policy seems to be driven by the view that any wavering on monetary policy can only cause costly increases of interest rates, but is unlikely to produce discounts on the cost of government debt. Thus, inflation is not a solution to the deficit problems of industrial countries or, better stated, inflation is certainly not a good solution.

The second solution that has been adopted in the past to absorb large government debts is default or, as the paper of Ball and Mankiw in this conference label it, hard landing. The argument in
favor of default on government debt is, prima facie, very appealing: immediately after default a country with a primary surplus is a very good credit. In addition, demagogues might ask why countries with high primary surpluses should pay high market rates of interest on government debt given that, if the markets made them pay less, they would instantly become great credits.

The arguments against hard landing, however, appear to be overwhelming. The full range of effects of default by industrial countries’ governments are difficult to assess, but it is likely to include widespread reorganizations in the financial intermediation industry. The experience of the debt crisis in Latin America has shown that the collapse of international financial intermediation alone can have major negative impacts on investment and economic activity. Since a debt crisis of industrial countries has to involve domestic markets by necessity, the impact there would be even more destructive. In addition, the experience of the interwar period has shown that debt repudiations or capital levies cause long-lasting distortions in the financial system, originating from the fear of expropriation by savers. So default is not a solution to the deficit problems of industrial countries or, certainly, not a good solution.

If inflation and default are not to be pursued, what is left is fiscal retrenchment. Given the high initial stocks of debt, fiscal retrenchment will necessarily be producing its effects over a long period of time, during which governments will have to ensure sizable net-of-interest surpluses.

In this conference, a number of areas have been discussed where governments should consider saving resources. These areas include social security and other entitlements, and the financial relations between localities and the central government, as well as the administration of taxes. In the introduction, I have argued that solutions are likely to be different from country to country. Thus, without attempting to come up with generalizations, I want to offer some lessons drawn from Italy’s efforts to improve public finances through social security reform and reform of local public finance.
In Italy the reform pursued by the Dini government aims at reaching a steady state where pension benefits are linked to contributions. In the debate that led to the current reform it was often suggested to introduce a capitalization system overnight by implementing a reform similar to Chile’s. This sweeping change, however, is hard to implement because it requires governments to come up with the capital needed to service future pension liabilities, essentially uncovering all of the pension debt.

In addition, pension reform is further complicated by the existence of the so-called “acquired rights.” An effective reform would have to change/reduce benefits accumulated by those who are currently receiving them, or are currently in the labor force and are contributing to the social security system in the expectation of receiving them when they retire. In some countries modifying these entitlements amounts to a form of default by the government, and can be challenged by bodies like the constitutional court.

Finally, reform that does not affect the benefits of the currently retired as well as the future benefits of the currently employed becomes fully effective only far in the future. While this type of reform may make a pay-as-you-go system viable in the steady state, it can weaken public finances very significantly in the transition.

Another area where, in many countries, there are ideas for reform regards the financial relations between localities and the state. In Italy, the main problem that reformers are trying to tackle is one of soft budget constraints in the periphery. In many cases, local authorities are required to manage expenditure programs for the central government without having to come up with the resources. Two classic examples in Italy are the verification of the requisites to obtain disability pensions and to obtain special discounts on health services. Municipalities perform this service, and often they have been found to do so with little regard for the shadow value of government funds. The main priority of attempts to reform the financial relations between the central government and localities in Italy is the hardening of the localities’ budget constraints.
These few observations on the problems that are being tackled in Italy illustrate the tremendous need to manage government activities more efficiently, because an efficient public administration would bring about very large savings. It is, however, also apparent that a reorganization of the public expenditure function—as well as a reorganization of the taxation function—is likely to be very different from country to country and have very different impacts on different countries’ public accounts.

**Efficient international financial regimes**

The previous section’s preliminary conclusion is that, with free financial markets, the only available option of fiscal adjustment for heavily indebted industrial countries’ governments is cutting spending and, if possible, increasing tax revenue. Inflation and more direct debt default are either impractical or too costly. Given very high ratios of debt to income, fiscal retrenchment implies that industrial countries will have to live for many years with very high government debts. As a result, their financial condition will remain quite vulnerable to fluctuations in interest rates.

It is thus imperative that, if industrial countries are willing to maintain well-working and integrated financial markets, structural conditions be put in place to minimize the risk of financial crises. One key area is the relations among governments when crises occur.

In this area, it is possible to identify dramatically different approaches. Consider first article 104b of the Maastricht Treaty:

“...A Member State shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law or public undertakings of another Member State, without prejudice to mutual financial guarantees for the joint execution of specific projects.”

Contrast this with the U.S.-led program to support financial stabilization in Mexico. The structure of that program as described in
the release from the U.S. Treasury Department recites that the resources marshaled from the Exchange Stabilization Fund and the Federal Reserve System will take the form of “swap facilities and securities guarantees,” which will be used “to help stabilize the exchange market and to facilitate the restructuring of Mexico’s short-term debt into longer maturities to help resolve liquidity problems.”

Without attempting a detailed analysis of the Mexican package from the viewpoint of the Maastricht Treaty, I believe it is quite obvious that the Mexican “program” appears to be illegal under the Maastricht Treaty.

What does this mean? That if any government of a country member of the European Union had set up a bailout program similar to the one coordinated by the government of the United States for Mexico—even if such a program were set up for the purpose of avoiding systemic spillovers in international financial markets—it could have been challenged by the constitutional court of that country, which could have rendered that government’s act ineffective.

The fact that the Mexican program was illegal under the Maastricht Treaty highlights, on one side, the importance of the U.S. initiative in the case of Mexico and, on the other side, the importance of the issues related to intergovernmental relations in open international financial markets and the concerns of some governments on the pressures that financial markets can impose on governments.

The Maastricht Treaty and the Mexican package reflect two models of government interaction with international financial markets. One model says that in order to avoid financial crises governments have to make it costly to renege on their commitments. For example, a government that wants to make its commitment to a certain exchange-rate target more credible may consider making it costly to renege on it, for instance, by denominating its own liabilities in foreign currency. This model is predicated on the key assumption that the public actually perceives that the costs of reneging on commitments are indeed too high.
The article from the Maastricht Treaty cited above is another example of such commitment technologies: in that case the commitment could be one of fiscal responsibility which is enforced through a sort of international hardening of budget constraints.

A second model of interaction between markets and governments is the model of systemic risk. The basic idea behind it is that international financial markets can suffer from illiquidity crises which could give rise to massive withdrawals of funds from certain investments. The risk of such crises requires that the private sector be aware that governments can act in a discretionary fashion were such crises to occur.

A well-known criticism to international bailout schemes, inspired by the credibility model, is that awareness of informal bailout schemes makes free-rider-type behavior more likely and could, as a consequence, increase financial fragility rather than decrease it. A less common, but equally intriguing argument against the credibility model, claims that governments that relinquish many of their prerogatives in order to make their commitments more credible may actually lose credibility by losing access to escape clauses and therefore becoming too vulnerable: too many poison pills can be bad for a government’s strength.

These few observations lead me to conclude that, once again, there is no general formula to safeguard international markets from the potential of government-induced crises. New institutions will have to provide a balanced set of incentives to decisionmakers and, at the same time, enough transparency to ensure smooth working of financial markets.

**Concluding remarks**

The main point of this is that, despite the dire predictions of many, inflation and debt default are no more available as a solution to the very large stocks of government debt accumulated by industrial countries. This leaves only one avenue for adjustment: fiscal retrenchment, which will bring down government debts only over
a prolonged period of time. During this time, if industrial countries want to preserve integrated and well-working financial markets, they will have to work to improve their functioning, and to strengthen their safeguards in the event of crises.