Can Market Forces Discipline Government Borrowing?

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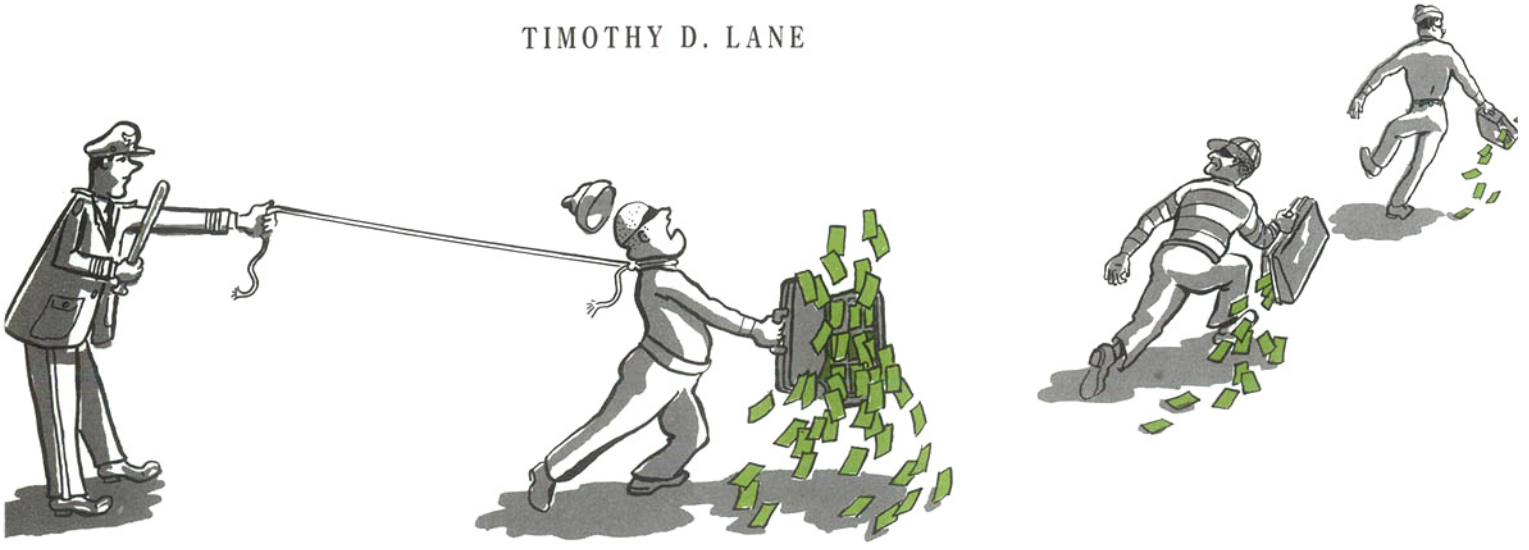

Market discipline means that financial markets can send signals that prevent a borrower from abusing the system—borrowing without means or intention of repaying. In practice, however, market discipline can be too weak, allowing borrowers to run up debts that will be increasingly difficult to service. One example is the large deficits incurred by some governments in the 1980s. Under what circumstances, therefore, can market forces prevent unsustainable borrowing?

Are there any forces that normally ensure that government deficits remain manageable? What would prevent a government from pursuing an unsustainable path—borrowing without the means or even the intention of repaying? There is a clear need for *financial discipline* to check such abuse of the financial system, while allowing governments to benefit from their continuing access to credit. Today, with high and mounting public debts in many countries—including not only developing countries but even some of the largest industrial countries—it is especially important to examine how financial discipline works, and how it might be strengthened.

Obviously, individuals and firms would like to run up unlimited debts and never repay them, if they could do so without penalty. There are mechanisms, both in the legal system and in the financial system itself, designed to ensure that most borrowers do ultimately pay their debts. Some of this discipline is market based, resulting from the behavior of the lenders themselves. As a borrower's debts mount to such high levels that they might not be serviced, lenders insist on a higher interest rate spread to compensate for the higher risk of default. Eventually, a point is reached at which no interest rate could compensate for the default risk, and at this point the borrower is excluded from any further credit.

While this market mechanism is certainly not flawless, it appears to work fairly well much of the time, in the context of private borrowing and lending in developed countries; if it did not, this borrowing and lending simply could not take place. Some notorious counterexamples, such as the savings and loan crisis in the United States, illustrate the enormous potential costs with which society is faced if financial discipline is undermined.

Why do governments accumulate large debts? Borrowing may help a government to smooth tax rates over time, enabling it to ride out transitory variations in spending needs or in the revenue base. For example, governments often meet shortfalls of revenues during recessions by running deficits. Such temporary borrowing gives little cause for concern. What is of concern, though, is a case in which a government incurs steadily mounting debts, constituting an increasing share of national income. Governments might be tempted to follow such a path because the tax burden created for future generations by deficit financing may count for little against the benefits enjoyed by the government's current constituents. Excessive borrowing may also ultimately be reflected in inflation or even default, which may penalize different economic groups than those that gain from government spending; large deficits may, therefore, reflect the relative political weight of these groups.

Under what circumstances can market discipline restrain government borrowing? This issue has arisen recently in the context of the

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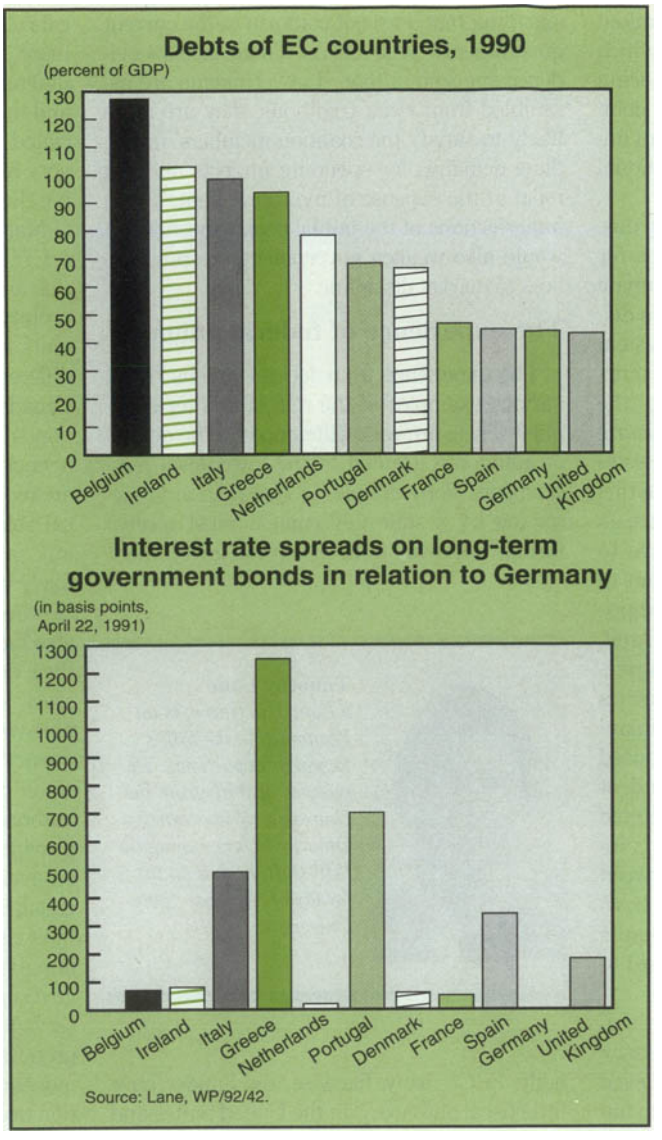
Maastricht agreement for European economic and monetary union (EMU). This agreement provides for direct coordination of member countries' fiscal policies, as well as binding fiscal limits. The concern is that, particularly in a currency union, market forces might not be adequate to keep some member countries from running persistent, unsustainable deficits.

The markets' response to government borrowing depends on the exchange rate regime. A national government with its own currency may experience market pressure on the exchange rate, and in this case, the interest rate spread largely reflects anticipated depreciation rather than pure default risk. If the anticipated depreciation does indeed take place, and is accompanied by inflation, this relaxes the financial discipline on the government by reducing the real burden of repayment. In a country that fixes its exchange rate, or belongs to an exchange rate arrangement such as the European Monetary System, higher interest rates may be associated with the anticipation of an impending devaluation. This may reflect the market's perceptions that the current exchange rate is not sustainable given the current path of borrowing. Skepticism about the sustainability of policy may give rise to a financial crisis, which may force a devaluation large enough to alleviate the pressure of the debt—essentially through resort to the inflation tax. Interest rate spreads in the European Community (EC) are influenced by debt levels, but the loose relationship shown in the charts suggests that some other considerations must also influence markets' perceptions.

In a common currency area, market discipline works the same way as for private borrowers. Excessive borrowing results first in a higher interest rate spread, and ultimately in exclusion from the market. In the EC, monetary union would eliminate the safety valve that realignments provide in the current system, implying a stricter market financial discipline. Whether this discipline would be sufficient to rein in massive budgetary imbalances, however, remains a subject of debate. It is important to consider what conditions would be needed for market discipline to be effective.



Conditions for market discipline

In order for market-based financial discipline to be effective in restraining borrowing—whether private or public—four key conditions must be met.

• Financial markets must be reasonably open, so that the borrower does not face a captive market. For market discipline to work, lenders must have the option of taking their money elsewhere if a particular borrower's creditworthiness comes into question. Market discipline of government borrowing may be thwarted by regulations requiring that financial institutions hold a certain proportion of their assets in the form of government debt; such regulations may be used to keep down a government's borrowing costs and ensure a continuous flow of lending, regardless of its creditworthiness. Similarly, capital controls may enable a government to increase its debt without driving up interest rates by limiting domestic residents' ability to seek alternative assets abroad.

• Information pertaining to the borrower's creditworthiness—such as total outstanding stock of debt—must be available to prospective lenders to enable them to discriminate among more and less creditworthy borrowers. In the absence of such information, borrowers may be able to incur debts that they cannot be expected to service; there is also the danger of contagion effects, where otherwise creditworthy borrowers are excluded from the market because they share some characteristics with other debtors that have defaulted.

In the case of governments, the difficulty of finding accurate information may be exacerbated by the widespread practice of incurring off-balance-sheet liabilities. Off-balance-sheet activity includes the establishment of special agencies or foundations whose borrowing is not included in the state budget but is nonetheless an implicit or explicit obligation of the government, or the use of government loan guarantees for particular activities in lieu of subsidies. In addition, borrowing can take place in forms that are not included in conventional measures of government debt. For instance, one of the circumstances leading up to the 1974 New York City default was the immense issue of so-called Tax Anticipation Notes and Revenue Anticipation Notes—issued on the strength, respectively, of taxes and of the proceeds from the sale of goods and services by the city government—designed to circumvent constitutional restrictions on borrowing, as well as conceal the overall volume of government borrowing from investors. These devices enabled the city to incur unsustainably large deficits that eventually resulted in its bankruptcy.

In the case of government borrowing, these considerations call for cooperation in gathering and releasing relevant data on borrowing—both on- and off-balance sheet—and on international capital movements.

• There must be no anticipation of a bailout in case the borrower cannot service its debts. Bailouts are the Achilles' heel of market discipline, as they free borrowers and lenders from the consequences of their actions. If the prodi-

gal borrower is a government, the bailout could come from the central bank, which could relieve the real burden of debt servicing by monetizing some of the public debt. Alternatively, assistance could come from another government, or from a supranational agency.

The problem of bailouts is a difficult one, since ex post there are often good reasons for a bailout—for example, to protect unfortunate bond-holders, or to prevent the enormous disruptive consequences for the financial system that might ensue from the bankruptcy of a national government. Ex ante, though, the promise of a bailout leads to a *moral hazard* problem; it reduces the incentive for lenders to monitor the borrower's behavior and take this behavior into account in lending decisions, as well as reducing the borrower's incentive to maintain solvency. A binding commitment to eschew bailouts might, therefore, be appropriate even if each individual bailout is, in itself, defensible. For example, the Maastricht agreement specifies that neither member countries nor the Community would bail out any financially troubled member country; the proposed European Central Bank would be independent of all national governments and prohibited from lending to them under any circumstances. Given the inconsistency between what is desirable ex ante and ex post, however, it is hard to convince market participants that such a commitment would be adhered to in the crunch.

• The borrower must respond to market signals. This condition is not strictly necessary for market discipline to be effective, since even if the borrower continued blithely along an unsustainable path, rational lenders would ultimately impose discipline by excluding it from further lending. However, this would be a very harsh form of discipline, associated with a financial crisis. Market discipline would work much more smoothly if the borrower responded sooner, by reining back excessive spending in response to the widening interest rate spread. In some instances, borrowers may even anticipate, rather than merely respond—that is, they rectify the fiscal imbalance *before* it undermines their credit rating.

Why might a borrowing government fail either to respond to market signals or to anticipate them? In particular, democratic governments may have very short time horizons, as they are primarily concerned with re-election, so they may have a bias toward excessive deficits that leave their successors with a large debt burden. There might even be a strategic element to this policy: a government might actually try to saddle its successor with a large public debt as a way of tying the successor's hand, limiting its ability to carry out spending that does not conform to the current government's preferences. There is also evidence suggesting that, if governments are assembled from weak coalitions, they are more likely to satisfy the coalition members' immediate demands for spending projects and tax relief at the expense of mounting debt. These imperfections of the public choice mechanism would also weaken governments' responsiveness to market discipline.

The experience of federal unions

The experience from federal unions offers various examples of the role of market discipline. There are wide differences in the degree of autonomy granted to the lower-level governments. For example, in Australia any borrowing by a state government must receive formal approval from a central government body. In Germany, likewise, the Länder have little fiscal autonomy. In the United States and Switzerland, there is no central restriction on the deficits and debt of the states or cantons, respectively, but there are other restrictions: all but 12 of the US state governments are subject to formal fiscal restraints, consisting of either a balanced budget requirement (of varying degrees of stringency), a debt limit, or both. In Canada, there are no formal legal limitations on borrowing by the provincial governments or their agencies.

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The international experience shows a diversity of successful arrangements, suggesting that there is no clear case for constitutional limits or central control of the deficits of lower-level governments. There is no apparent tendency for countries with stricter rules to have more appropriate fiscal policies. Indeed, in Australia, where state governments have perhaps had the least legal autonomy of any of those mentioned, there has been chronic concern over excessive borrowing by the two most populous states. By contrast, binding rules seem to have had little effect within the United States, where there is a diversity of different fiscal rules. A recent study found that states with more stringent fiscal rules had no significant differences in their levels of debt or borrowing, and that more stringent limits were often associated with one extreme or the other—that is, very high or very low levels of debt or borrowing (Jurgen von Hagen, March 1991).

Market-based discipline requires that interest rate spreads reflect differences in credit risk associated with different degrees of fiscal probity. In federal states where government units have some fiscal autonomy, markets do differentiate among them. For example, in Canada there are noticeable spreads among bonds issued by different provinces and their agencies. Some have argued that these spreads are too small to have a significant effect on fiscal policies. This may reflect a perception that any province on the verge of default would likely be bailed out by the federal government. However, the narrowness of the spreads may also indicate that governments do not wait for their deficits to lead to increased spreads, but react in advance to avoid facing increasing borrowing costs—as suggested by the frequency with which "preserving the province's credit rating" is given as a rationale for fiscal authority. The actual debt ratios of the provinces in Canada are, however, quite low on average, and differences may not be wide enough to lead to substantial differences in default risks. Interestingly, provincial budgetary imbalances are dwarfed by those of the federal government, perhaps consistent with some observers' view that "fiscal prudence is inversely proportional to the authorities' leverage over monetary policy, that is, the access to the inflation tax" (Bredenkamp and Deppler, 1990).

Some empirical studies of yield spreads on state and municipal government bonds in the United States found that deficits not only tended to increase the state's interest rate spread as predicted but that this effect also increased with the amount of borrowing. These and other similar results indicate that interest rates do incorporate information pertaining to the borrowing governments' behavior and the resulting credit risks.

Policy implications

The experience from federal unions suggests that there may be some role for market discipline of fiscal policy. The evidence suggests that, although market forces may have a restraining effect on government borrowing, this restraint is relatively weak in the case of national governments. National governments' access to credit (directly or indirectly) from the central bank may be especially important in this regard. Monetizing the debt is a way that an improvident government can be bailed out—not only at the expense of its own credi-

tors, but indeed of all other holders of debt denominated in the same currency.

Where the conditions for market discipline are not satisfied, there may be a case for direct control or supervision. Here, care must be taken, however, since some of the conditions that undermine market discipline may also thwart direct controls. For example, the kind of government that is likely to be unresponsive to market discipline, persistently incurring unsustainable deficits, is also likely to seek ways of avoiding surveillance and circumventing any direct legal limits on its deficits. It is important to recall, for example, that the New York City default of 1974 took place despite a constitutional balanced budget requirement.

Thus, when coordination, surveillance, and legal restrictions on deficits are needed to prevent unsustainable policies, they should be supplemented by doing what is possible to strengthen market forces. For example, capital market restrictions should, where possible, be removed in order to prevent a "captive market" and strengthen the market's role as a disciplining device. The relevant information bearing on a country's creditworthiness should be disseminated to market participants so that it can be incorporated into market prices. The costs and benefits of a bailout should be evaluated, and, where this is possible, the circumstances under which a bailout would occur, and the scope of such a bailout, should be determined in advance.

Although one probably cannot rely solely on market forces to prevent unsustainable behavior where governments are concerned, the financial markets have the potential to play an important disciplinary role. To the extent that institutions are designed to work with market forces, rather than attempting to suppress them, this is likely to increase their effectiveness, as well as enhance the efficiency and stability of the financial system. ■

Recommended further reading:

Robert J. Barro, "On the Determination of the Public Debt," *Journal of Political Economy*, October 1979.

Hugh Bredenkamp and Michael Deppler, "Fiscal Constraints of a Fixed Exchange Regime," in *Choosing an Exchange Rate Regime: The Challenge for Smaller Industrial Countries*, edited by Paul de Grauwe and Victor Argy, 1990.

Jacob Frenkel and Morris Goldstein, "Macroeconomic Policy Implications of Currency Zones," in *Policy Implications of Trade and Currency Zones*, symposium sponsored by Federal Reserve Bank of Kansas City, August 1991.

Morris Goldstein and Geoffrey Woglom, "Market-Based Fiscal Discipline in Monetary Unions: Evidence from the U.S. Municipal Bond Market," in *Establishing a Central Bank*, edited by Matthew Canzoneri *et al.*, 1992.

Jurgen von Hagen, "A Note on the Empirical Effectiveness of Formal Fiscal Restraints," *Journal of Public Economics*, March 1991.

Peter Kenen, *EMU After Maastricht*, 1992.