

# Governance and Financial Fragility

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**A**fter a period of financial turbulence during the last half of the 19th and the early 20th centuries, the world experienced relative stability. This was a period in which global financial markets were heavily regulated and controlled. As Allen and Gale (forthcoming) point out, reliance on such severe intervention came at the cost of economic efficiency. The subsequent period of financial deregulation, while contributing to efficiency gains, has also revealed weaknesses in many financial markets and has coincided with a period of financial instability around the globe. Authorities are consequently searching for the sources of financial fragility, in the hope of eliminating the costs associated with financial crisis without the burden of excessive regulation.<sup>1</sup>

This note examines the relationship between governance (the rules and institutions that govern economic activity) and financial fragility (a situation in which the willingness of creditors to finance investment opportunities is highly sensitive to shocks). Drawing upon evidence from the literature and new empirical research, the focus is on domestic financial markets. It is argued that governance can play an important role in improving the stability of financial systems by mitigating unnecessary fluctuations

in investment financing and reducing the likelihood of a systemic banking crisis.<sup>2</sup>

Note that the definition of governance used here is much broader than that of corporate governance alone. It is intended to capture the wider set of arrangements (i.e., rules and institutions) that support economic and financial activity.

## Governing Financial Relationships

Governance is increasingly cited as playing an important role in determining economic outcomes.<sup>3</sup> The reason is simple. In addition to relative prices, it is the system of governance that determines the set of incentives facing economic agents. While the price mechanism alone could be expected to guide agents to a good economic outcome if property rights were well defined and respected, these criteria may not be satisfied in many markets. This is especially true for financial markets where there are extreme asymmetric information problems between the borrower and creditor.

From a creditor's viewpoint, the lack of credible information about the behaviour of borrowers and their intentions to repay can lead to a situation in which a creditor may have no basis for believing that a borrower is committed to repaying. In such circumstances, creditors may be unwilling to supply credit to borrowers. To overcome problems like this, societies tend to develop rules and institutions that, among other things, act to align the incentives for

1. That financial crises can have enormous costs is well documented. For example, Honohan (1997) estimates that just the public sector costs of resolving banking crises in developing countries between 1980 and 1995 amounted to US\$250 billion. Other private economic costs include foregone investment and social costs.

\* This note draws on a recently published Bank of Canada working paper (Francis 2003).

2. This note is concerned with financial fragility. Although financial fragility is a widely used term, it is used here to describe the vulnerability of the banking system to a crisis (as in Mishkin 1997) and the magnitude of accelerator effects as described by Bernanke and Gertler (1989).

3. See, for example, IMF (2003).

borrowers so that they are committed to repaying creditors. Without a well-developed set of rules and institutions, financial development in an economy is likely to be poor.

Clearly, governance mechanisms, ranging from the absence of corruption through to specific laws such as those covering bankruptcy, can play an important role in fostering an environment where borrowers will commit themselves to repaying creditors (La Porta et al. 1998). However, governance mechanisms such as these have the complication of linking the provision of credit to the borrowers' commitment to repay rather than to the returns on investment.<sup>4</sup> Consequently, the value of a firm's assets and the quality of governance are important features of the financing decisions that firms take, and, thereby, are important for determining the aggregate level of credit provision and investment. Not surprisingly, one might also expect the quality of governance to affect the degree of financial stability.

## Financial Fragility

The view that governance is important for financial stability makes sense when it is acknowledged that if the quality of governance is poor, then the collateral value of assets determines the availability of financing for working capital and investment. In such a situation, because the value of a firm's assets may depend on the expected level of investment, a shock that reduces the willingness of lenders to extend credit can lead to a vicious circle in which the reduction in investment produces a fall in asset values resulting in a further reduction in the supply of credit and investment.<sup>5</sup> If the view that governance is an important factor in determining the magnitude of these "accelerator effects" is correct, then it follows that both financial systems and the level of investment are less stable in countries with

relatively weak governance than in those with relatively effective governance.

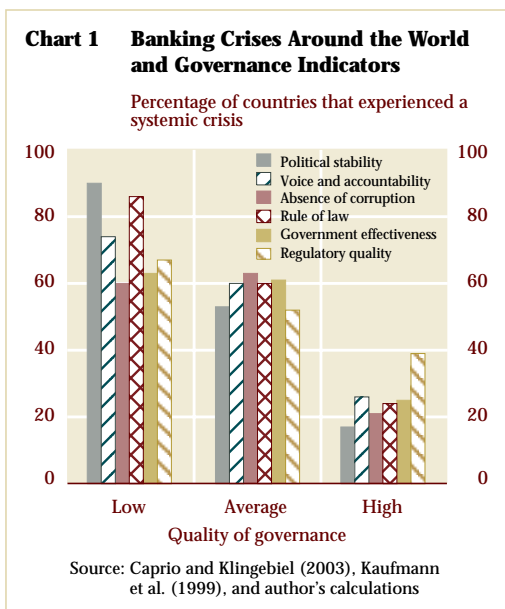
## Evidence

Financial fragility is difficult to quantify. At one level, it can be considered as the likelihood of a systemic failure in the financial system, while at a less dramatic level, it can be considered as the sensitivity of the financial system to relatively small shocks. With the first measure, the most obvious indicator of financial fragility is a systemic banking crisis. The most recent research on this topic suggests that pecuniary externalities (e.g., the collapse in market asset prices triggered by the failure of a borrower) are a fundamental part of the story behind systemic banking crises (Allen and Gale 2003). These externalities, and the associated accelerator effect, provide the mechanism through which a small shock involving one bank can lead to a sharp drop in asset values and, ultimately, to a systemic collapse. More generally, however, other measures, such as investment volatility, may also provide quantifiable measures of the size of these accelerator effects and therefore the extent of financial fragility. In either case, by reducing the magnitude of accelerator effects, good governance can be expected to mitigate financial fragility.

Chart 1 supports this view. The graph indicates that a significantly higher proportion of countries with poor governance experienced a banking crisis during the 1984–2001 period when compared with those countries having a higher quality of governance—a finding that holds across a wide range of governance indicators.<sup>6</sup> For example, 86 per cent of countries, where respect for the rule of law was ranked as low, experienced banking crises during the period, whereas only 24 per cent of countries experienced a crisis if respect for the rule of law was regarded as high. Interestingly, the relationship is true not only for those measures that are likely to be closely linked with protection of property rights, but also for other measures, ranging from the absence of corruption through to the quality of public service (government effectiveness) and the accountability of the government to the people.

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4. It should be noted that the credibility of the borrower's commitment to repay is conceptually different from the intrinsic risk associated with the investment project. The former is at the heart of the moral hazard problem and can be mitigated (at least partially) by appropriate governance, while governance can do nothing about the latter.
  5. For a theoretical development of accelerator effects in financial markets, see Bernanke and Gertler (1989) and Kiyotaki and Moore (1997) among others.

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6. The dataset consists of 90 developing and industrialized countries of which 47 experienced at least one crisis between 1984 and 2001.



Similarly, indicators of the quality of governance perform well in explaining the volatility of investment.<sup>7</sup> Using country-specific measures of investment volatility for a wide range of industrialized and developing countries over the period 1980 to 2000, one finds that countries with poor governance generally experience more volatility in investment than those with good governance. The results hold for a wide range of governance indicators and are consistent with the findings for the banking crises described above. These results suggest that, as discussed previously, governance has a role to play in reducing the size of accelerator effects.

## Conclusion

The findings presented here suggest that financial fragility can arise, in part, when there is a lack of appropriate governance to support a well-developed financial sector. While it is easy to understand that governance can affect economic outcomes, it is more difficult to determine which forms of governance promote financial stability. Nevertheless, the findings here, and those of the International Monetary Fund (2003), suggest the following criteria. First, institutions that protect property rights and promote law and order are important. Second, appropriate regulations, an effective bureaucracy, and a stable government are all associated with less fragility, suggesting that the quality of public service and good public sector management can play an important role in promoting economic stability. Third, to the extent that many of these institutions involve rules and constraints on individual behaviour (substituting authority for the market), it is not surprising that institutions that reduce corruption (the use of the market to circumvent authority) are also important for ensuring that financial markets are well functioning and stable. Fourth,

7. The volatility that this note is concerned with is not that which arises from adjustments to shocks, such as technological change, or from changes in relative prices. In a well-functioning economy, this type of volatility is a necessary and important element in the efficient allocation of resources. However, the accelerator effects described here are a source of volatility that arises because of market failures associated with problems such as asymmetric information in financial markets. Good governance can mitigate these problems and lead to a reduction in economic volatility and an improvement in economic efficiency.

it is perhaps not surprising that, given the important role that governments play in regulating and participating in financial markets, mechanisms that increase government accountability play an important role in creating a stable financial system.

From a policy perspective, the findings presented here suggest that financial stability around the world could be improved through continued attention to improving the institutional infrastructure within which domestic financial systems operate.

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