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Diversification, Diversity and Systemic Risk in European Banking

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3.1 Introduction

The recent financial crisis has revealed the unexpected fragility of financial systems in the industrialized countries. The process of national deregulation that started in the 1980s led to an intense process of consolidation of financial institutions. Consequently, both in the United States and in Europe, the degree of concentration in banking systems increased significantly.

Corresponding to the growth in the size of banks was an increased opportunity to diversify the portfolio of activities. At the same time, however, the degree of interconnectedness between financial institutions markedly increased.

The greater degree of interconnectedness between banks on their liability side inevitably increased their exposure to forms of liquidity hoarding and to the attendant risk of contagion.

The consolidation process of banking systems favoured the emergence of another form of interconnectedness: deregulation, the removal of the divisions between the various activities of financial institutions, and increased competition contributed to the increasing homogenization of their asset portfolios. For this reason, the largest banks became progressively more exposed to the risk of common shocks.

The aim of this chapter is to clarify why this risk has become ever more important and to what extent this process has affected the big European banks.

The first section shows the limits of the current system of banking regulation, which are mainly based on the Basel Accords of 1988 and their subsequent revisions. This system has two drawbacks. First, it pursues the stability of the individual institutions while overlooking the fact that
spillover effects due to interdependence between financial institutions or between institutions and markets can invalidate the stability of the financial system as a whole. Secondly, the current system of regulation starts from the premise that there is no trade-off between the deregulation of the banking system and its stability, but rather that the two are highly complementary. According to this point of view, large institutions, by being able to exploit economies of scale and scope, are seen as more stable than smaller ones, and consequently a highly concentrated banking system is considered more stable than a more dispersed system.

The second section shows that recently systemic risk, as traditionally understood (that is, as a consequence of bank panics) has become less important thanks to the widespread use of deposit insurance. However, other sources of systemic risk have emerged. Crucial among these are forms of contagion caused by a lack of confidence in wholesale markets, in particular the interbank market, and common shocks (that is, shocks that simultaneously hit many institutions with a similar portfolio structure). The possibility that common shocks cause a systemic risk is inversely proportional to the asset diversity of banks’ portfolios. We demonstrate this by using a Monte Carlo simulation.

The third section provides an empirical analysis of the evolution and current importance for the European banking system of systemic risk resulting from common shocks. The correlation between the percentage changes of stock prices of big European banks and the dispersion of their ROE are deployed as measures of this risk. The section also offers an econometric estimates of the level and trend of systemic risk due to common shocks in relation to different dimensional categories of European banks. The Conclusions suggest some guidelines as to how to amend the current regulatory system in order to prevent the destabilizing effects of common shocks.

3.2 Limits of bank regulation based on taxation

The history of bank regulation shows how it has in some periods revolved around the principle of ‘prohibition’ and at others around the principle of ‘taxation’.

Economic theory shows that if private costs of mistaken regulation choices are high relative to the loss of social benefits it is better, in terms of social welfare, to resort to taxation. In the opposite case, it is better to regulate the banking industry by resorting to prohibition. The choice between these two kind of regulations is, therefore, an empirical question.