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The impact of the euro on risk exposure of the world's major banking industries

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Abstract

In this paper, we examine if the introduction of the euro impacted the risk exposures, risk premiums and, hence, the cost of equity of the banking industry of 11 Eurozone countries, five non-Eurozone European countries, and three non-European countries. Using a multi-factor asset-pricing model that allows time variation in the risk exposures, we find a statistically significant and economically large decline in the cost of equity of the banking industry across the three groups of countries following the introduction of the euro. Though we find an increase in the market and currency exposures after the euro, consistent with increased competition among banks, the fall in the cost of equity arises from an economically large decline in the currency premium. As expected, the Eurozone banking industry experienced the largest decrease. Our results are inconsistent with the argument that increased banking competition arising from the legislative changes accompanying the introduction of the euro would result in an increase in the overall risk premium of the banking sector.

Keywords: Cost of capital; Banking industry; Currency risk premium; Euro

1. Introduction

It is arguably the case that since the dismantling of the Bretton Woods System, the most dramatic and important change to the world financial markets has occurred in the European Monetary Union (EMU) where 12 national currencies have been replaced with a single currency—the euro. This important structural change in the European financial markets has had both direct and indirect effects

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on the European financial system in terms of competition and consolidation within the banking industry and the portfolio strategies of individual banks.

Theoretical work by Diamond and Dybvig (1983) and Kalemli-Ozcan et al. (2001), among others, contends that financial markets and banks (the financial system) perform functions in an economy that are of critical importance to the growth and development of a country and/or region. This ability to promote growth and development comes about in primarily three ways. First, financial intermediaries are better qualified and have more resources dedicated to evaluate and select projects, thereby increasing the profitability of investment. Second, by providing liquid financial markets, a greater proportion of savings can be invested in projects of longer duration, thereby raising productivity within the economy. Third, by promoting diversification the financial system allows risk-averse savers to allocate a larger proportion of their savings to riskier projects. This typically promotes specialization and thus benefits the economy's division of labor and capital, therefore enhancing growth. Empirical work by Levine and Zervos (1998), Rajan and Zingales (1998), and La Porta et al. (1998) provides evidence consistent with these arguments.

Danthine et al. (2000) point out that banks are the most important players in the European financial markets. If the EMU is to be successful in achieving economic growth, then the way in which the banking sector is affected by the introduction of the euro will go a long way in determining the extent to which this objective is met.

Conventional wisdom is that the introduction of a single currency should lead to a decrease in the overall risk exposure within the banking industry. However, it is possible that market and interest rate exposures of banks could in fact increase. This is because the adoption of a single currency led to a tremendous decrease in bank revenues stemming from a decline in currency trading and a decline in arbitrage profits from trading bonds and other financial securities (Danthine et al., 2000).

Additionally, there has been an increase in the internationalization of the financial markets and consolidation of the banking industry (Rajan and Zingales, 2003), leading to an increase in competitive pressures within the banking industry on two fronts. First, their role as a major provider of financing for large corporations has diminished, as evidenced by the dramatic increase in the corporate bond market within the Eurozone. This has largely replaced the long-term corporate financing component of banks' business. Second, there has been an influx of banks and other financial institutions from non-Eurozone countries. The implication of these changes is that the revenue streams and profit margins of banks within the Eurozone have been eroded.

In this paper, we examine the impact of the introduction of the euro on the time-varying market, interest rate, and currency risk exposures and risk premiums and, as such, the cost of equity of the banking industry of the member countries of the EMU and other industrialized countries. Drawing on the literature (reviewed below) on the relationship between competition, regulation, and risk exposure of the banking sector we hypothesize that greater competition between banks within and across national borders for liabilities increases the difficulty of maintaining