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Drivers of structural change in cross-border banking since the global financial crisis

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ABSTRACT

The paper analyzes the effects of changes to regulatory policy and to monetary policy on cross-border bank lending since the global financial crisis. Cross-border bank lending has decreased, and the home bias in the credit portfolio of banks has risen sharply, especially among banks in the euro area. Our results suggest that expansionary monetary policy in the source countries – as measured by the change in reserves held at central banks – has encouraged cross-border lending, both in euro area and non-euro area countries. Regarding regulatory policy, increases in financial supervisory power or independencve of the supervisory authorities have encouraged credit outflows from source countries. The findings thus underline the importance of regulatory arbitrage as a driver of cross-border bank flows since the global financial crisis. However, in the euro area, arbitrage in capital stringency was linked to lower cross-border lending since the crisis.

1. Motivation

After a period of continuously rising cross-border financial claims, the 2007–08 global financial crisis (henceforth: GFC) led to a partial reversal of international capital flows. The retrenchment has

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been particularly pronounced for cross-border bank lending, as banks have withdrawn from foreign markets. Total cross-border bank claims have significantly decreased in response to the GFC and did not resume the pre-crisis upward trend since then.

Some of the retrenchment in cross-border banking might have been cyclical. However, part of the adjustment seems to be structural, given that growth in cross-border bank claims has not significantly picked up during the recovery – even though the liquidity provision by central banks has been abundant since the onset of the crisis. Loan markets haven gotten increasingly segmented, especially in the euro area, with banks focusing more on their national markets. As a consequence, home bias in banks' portfolios has increased. While the crisis may have functioned like a common shock, the effects have been different across sectors and regions. This may be explained by push factors (in source countries of banks), pull factors (in recipient countries) or both.

The purpose of this paper is twofold. We first analyze the role of changes in regulatory policy and in monetary policy outcomes in influencing cross-border bank flows. Recent data from the International Banking Statistics by the Bank for International Settlements (BIS) suggest that the development of cross-border bank claims has been quite heterogeneous. For example, it can be observed that credit to the euro area declined most, whereas claims against emerging market economies tended slightly upwards (Fig. 1). Given these heterogeneous developments, our goal is to analyze how different regions are affected by changes in regulation and monetary policy. A special focus is on the evolution of cross-border lending in the euro area, given the euro area financial crisis that has hit in early 2010. We study the determinants of the structural changes in cross-border banking in the aftermath of the GFC. In particular, we are interested in the importance of specific push and pull factors that have been recently discussed, namely adjustments in banking regulation and the role of monetary policy in advanced countries.

In a second step, we ask how the home bias in the credit portfolio of banking systems has been affected by changes in regulatory and monetary policy since the crisis. The analysis of the home bias is a complementary analysis as it takes a different perspective on the same question of the drivers of cross-border banking. Using the bilateral home bias between country pairs as the dependent variable allows us to take the portfolio decision of banks more directly into account. That is, it allows us to investigate how changes to regulatory policy and monetary policy have influenced the decision of banks to invest in a particular country compared to the home country and third countries.

As discussed in previous studies, differences in banking regulation may be important push or pull factors for cross-border bank claims (e.g. Houston et al., 2012), and hence for credit home bias. If regulatory conditions differ across countries, banks may be attracted by regions offering a less restrictive regulatory environment. A factor that could reduce cross-border lending are stricter regulatory requirements that make foreign lending more expensive. Using information on changes in different domains of banking regulation provided by Barth et al. (2013), we investigate the effects on bilateral bank lending and credit home bias.

In fora such as the G20, the role of the unconventional monetary policy in advanced economies and its effects on cross-border capital flows has been intensely debated. Given the extended period of expansionary monetary policy, banks operate in an environment of low interest rates with bond yields and credit margins at very low levels. Extensive policy support has lately eased financial market stress, such that risk appetite has resurged (Bernanke, 2013; BIS, 2013). Under these circumstances, banks may “search for yields” by leaning their foreign activities towards higher-yielding markets. We analyze the role of expansive monetary policy using different proxies for the monetary policy outcomes, such as reserves held by commercial banks at central banks, short-term interest rates, and long-term interest rates.

Understanding potential structural changes in banks' international lending activities is highly important for policy makers for several reasons. First, bank lending is particularly important for small and medium-sized firms. If external funding from abroad becomes scarce, the costs of borrowing for certain groups of borrowers may significantly increase in some countries. Second, the financing of cross-border trade may suffer from increasingly segmented loan markets – with adverse effects on international trade flows. Third, international banking sector integration has not only enhanced cross-border lending, but also other types of capital flows. If cross-border banking decreases, other international capital flows may be reduced as well. This may imply, for instance, less risk-sharing between