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Financial crises and the composition of cross-border lending

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ABSTRACT

We examine the composition and drivers of cross-border bank lending between 1995 and 2012, distinguishing between syndicated and non-syndicated loans. We show that on-balance sheet syndicated loan exposures, which account for almost one third of total cross-border loan exposures, increased during the global financial crisis due to large drawdowns on credit lines extended before the crisis. Our empirical analysis of the drivers of cross-border loan exposures in a large bilateral dataset leads to three main results. First, banks with lower levels of capital favor syndicated over other kinds of cross-border loans. Second, borrower country characteristics such as level of development, economic size, and capital account openness, are less important in driving syndicated than non-syndicated loan activity, suggesting a diversification motive for syndication. Third, information asymmetries between lender and borrower countries became more binding for both types of cross-border lending activity during the recent crisis.

1. Introduction

The past two decades have witnessed a remarkable increase in cross-border bank lending activity. Between 1995 and 2012, total cross-border loan claims almost tripled to reach 20 trillion U.S. dollars. Some of this activity is conducted in the form of syndicated loans, in which a group of financial

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institutions (a syndicate) supplies funds to an individual borrower (a firm or a sovereign) under a single loan agreement. Loan syndications help lenders overcome balance sheet constraints and reduce the concentration of risks by limiting exposures to individual borrowers. Smaller lenders benefit from the informational advantages of larger banks to diversify risks across countries and borrowers to which they would otherwise not have access. How important the syndicated loan market is relative to total cross-border bank lending operations and what drives it are still open questions. In this paper, we describe the composition of cross-border bank lending during 1995–2012, focusing on syndicated loans, and examine its evolution and drivers.

We begin by documenting stylized facts about the share of syndicated lending in cross-border bank loan exposures. We find that syndicated loan exposures ('SLEs') represent between 20 percent of total loan claims early in the sample to over 30 percent in later years. On average the share of SLEs in total loan claims is higher for advanced economy (AE) borrowers (30 percent) compared to emerging market economy (EME) borrowers (18 percent). Non-syndicated loan exposures ('non-SLEs'), which include bilateral (single-lender loans) and intragroup lending (loans among entities of the same banking group) account for the remainder.[1]

Next, we analyze the effects of the global financial crisis (2008–2012) on the composition of cross-border loan exposures. We find an increase in SLEs outstanding (stocks) during the crisis despite a collapse in syndicated loan origination (new deals).[2] This was driven by an increase in drawdowns on existing syndicated loan commitments (credit lines). Our estimates suggest that credit line usage rate increased from approximately 25 percent before the global financial crisis to 52 percent by 2012. Effects related to the longer maturity of the syndicated loans extended in the pre-crisis boom may also have played a role.

We next identify the key drivers of loan syndication activity compared to other types of cross-border lending, and provide evidence for several motives behind the choice of syndication. For the empirical analysis, we construct a bilateral (country-pair) panel of 26 lender countries and 76 borrower countries between 1995 and 2012 and estimate gravity-type empirical model. We find that greater informational asymmetries, measured as less economic integration and greater geographical distance between lender and borrower countries, are associated with lower total cross-border loan activity. This finding is in line with studies of the determinants of capital flows. Banks with lower levels of capital in lender countries favor syndicated loans over other kinds of cross-border loans. Borrower country characteristics such as level of development, economic size, and capital account openness, play a lesser role for SLEs compared to non-SLEs, suggesting a diversification motive for syndications. During the global financial crisis, both SLEs and non-SLEs were higher for country pairs with lower information asymmetries.

We use two main sources to construct our data. Information on syndicated loans is available at the transaction level from Dealogic Loan Analytics. The data are highly granular as, for each loan deal, the identity of all the contracting parties and the terms of the deal are known. Availability of this data has spurred a large literature in international finance.[3] We complement this with data on cross-border bank activities from the Bank for International Settlements (BIS) international banking statistics (IBS). The BIS statistics report cross-border assets and liabilities of creditor banking systems vis-à-vis borrower countries.[4] The two data sources enable us to compare, for the first time in the literature,

[1] Due to data limitations, we are unable to further break down non-SLEs into their single-lender and intragroup activity components. See Section IV.B for details.

[2] Total deal volume fell in 2009 by more than 50 percent from its 2007 peak of 4.5 trillion U.S. dollars, on account of the 2007–2008 liquidity shocks and strained balance sheets of financial intermediaries (Brunnermeier, 2009) and a fall in credit demand (Kahle and Stulz, 2013).

[3] To give a few examples, syndicated loan data has been used to study the international transmission of financial shocks (De Haas and Van Horen, 2013) and portfolio rebalancing (Giannetti and Laeven, 2012), emerging market access to foreign capital (Hale, 2007), and the evolution of the global banking network (Hale et al., 2014; Hale, 2012). An important corporate finance literature on lender incentives in the process of syndication uses the same data or subsets of the data from other providers (see, e.g., Gopalan et al., 2011; Berndt and Gupta, 2009; Sufi, 2007).

[4] The BIS IBS have been used to study international bank flows through banking centers, financial networks, globalization, and contagion. Recent contributions include Cerutti (forthcoming), Cerutti and Claessens (2013), Kalemli-Ozcan et al. (2013), Minoiu and Reyes (2013), Cetorelli and Goldberg (2011), and Degryse et al. (2010).