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Regulation of multinational banks: A theoretical inquiry ☆

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ABSTRACT

This paper examines national regulators' incentives to intervene in a multinational bank's activities and the extent to which these incentives differ with the bank's foreign representation choice (branch or subsidiary). Shared liability leads to higher incentives for intervention than legal separation. Cross-border deposit insurance, on the other hand, yields less intervention than when regulators compensate local depositors only. Based on these results, we derive implications for multinational banks' and regulators' preference on foreign expansion and representation.

1. Introduction

Multinational banking has expanded significantly as barriers to international capital flows have been progressively dismantled and entry to foreign markets has eased.[2] The rapid development of mul-

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[2] Total assets held by the overseas units of US banks doubled from 1992 to 1996. In the United States, foreign banks accounted for almost 10 percent of deposits (Buch and Golder, 2001), 20 percent of total bank assets and 26 percent of total business loans (Federal Reserve Board, 2002) in 2000. In Central Europe, bank assets controlled by foreign banks rose from 8 percent in 1994 to 59 percent in 1999 and today they reach as much as 80 per cent in some countries. Almost 50 percent of total bank assets in some Latin American countries are controlled by foreign banks (IMF, 2000). Retail activities of cross-border banks have been increasing steadily since 2000, particularly in the Single European Market. Local claims on foreign-owned banks in the EU27 as a percentage of GDP went from 10% in 2000 to 30% in 2007 (source: BIS). For more details, see Calzolari and Loranth (2003).

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tinational banks (MNBs hereafter) represents a source of new concerns for regulators. Regulation of an MNB in one country may well affect the behavior of the bank and of regulators in other countries, as shown, for example, in the rescue of Belgian–Dutch bank Fortis in 2008. This paper provides a simple framework for examining regulation of an MNB by independent national authorities and the extent to which foreign representation affects both regulatory actions and the bank's choice of foreign expansion.

Banks pursuing a full range of activities abroad can be represented in the foreign countries through branches or subsidiaries.[3] Representation affects both the liability structure between the home and foreign units, and the allocation of supervisory responsibilities between regulators of the home and host countries. One can think of branches as extensions of the home bank: the two institutions share joint liability for the failure of their assets and they call upon the same deposit insurance fund. Branch-represented MNBs are usually overseen by the regulator of the home bank. Subsidiary banks are the assets of the home bank: while the subsidiary and home bank share liability for the home bank's assets, the home bank has no liability in case of subsidiary failure. Reflecting the higher independence of subsidiaries relative to branches, national regulators have independent power over the locally incorporated units, and depositors are covered by the local deposit insurance fund in the event of bankruptcy.[4]

In this paper, we address two related questions. How does the liability structure between the home and foreign units and the allocation of supervisory responsibilities affect regulators' incentives to intervene in bank units? How does regulation influence a bank's decision regarding foreign expansion and its choice of foreign representation?

We consider a setup where an MNB operates in two countries. The bank is legally incorporated in the 'home country' (with a home unit) and operates an additional unit in the 'foreign country' (foreign unit). Each unit collects deposits and invests locally in risky and illiquid projects that are uncorrelated across countries. Bank regulators have two mandates: they (fully) insure depositors and exercise prudential intervention over the unit they are in charge of. We first consider a setup in which regulators exercise their mandates with the aim of minimizing costs stemming from their deposit insurance function.[5] Regulators thus face the following trade-off: early intervention results in a positive liquidation value for a unit's assets, but leads to certain deposit insurance costs; letting a unit continue might lead to no costs for the regulator if the unit's investment pays out, but might result in a higher deposit insurance cost if it does not.

We show that there is a material difference in the likelihood of regulatory intervention in a domestic bank and an MNB represented abroad by either a branch or a subsidiary. The differences can be attributed to two effects: (i) the extent to which the regulator of a given unit of an MNB can draw upon the (residual) assets of the other unit if the unit's assets fall short of liabilities; and (ii) the regulator's responsibility for insuring depositors located in the other country.

Where it occurs, shared liability among the MNB's units provides higher incentives for regulatory intervention than with a domestic bank or when units are legally separate. This is because residual assets from the other unit have a higher value to the regulator when it intervenes in the unit it is in charge of than when it does not. In the former case, residual assets available in the other unit lower the regulator's deposit insurance costs with certainty. With no intervention, however, those assets are valuable to the regulator only if the unit it is in charge of eventually fails (i.e., the residual assets are valued with a probability smaller than one). Hence, this effect, which we dub the *liability effect*, induces a regulator to intervene, a 'tough response'. On the other hand, insuring depositors in both countries, as with branch representation, makes a regulator internalize the full costs of its decision. In particular, the regulator takes into consideration that intervention in one unit leaves fewer or no as-

[3] Other forms (e.g. correspondent banks, representative offices and agencies) do not allow the full range of banking activities and are thus much less pertinent to our analysis.

[4] This description closely follows current EU regulations (see Dermine, 2002). In the United States, branches of foreign banks are treated as separate entities and supervised by US authorities, similarly to subsidiaries under the EU rules (for more details see Houpt, 1999 and Bain et al, 2003). Although the terminology differs between the States and the EU, what matters for our analysis is the liability structure and the allocation of regulatory powers.

[5] The FDIC in the United States was given this type of objective function by the FDICI Act of 1992, which mandated a least-cost resolution method and prompt resolution approach. The FSA in the UK shares a similar mission. In the academic literature, the regulators' role in insuring deposits has been emphasized by Mailath and Mester (1994) and Repullo (2000, 2001), among others. As an extension, we will also consider welfare-maximizing regulators.