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SUPERVISION

Supranational supervision of multinational banks: A moving target

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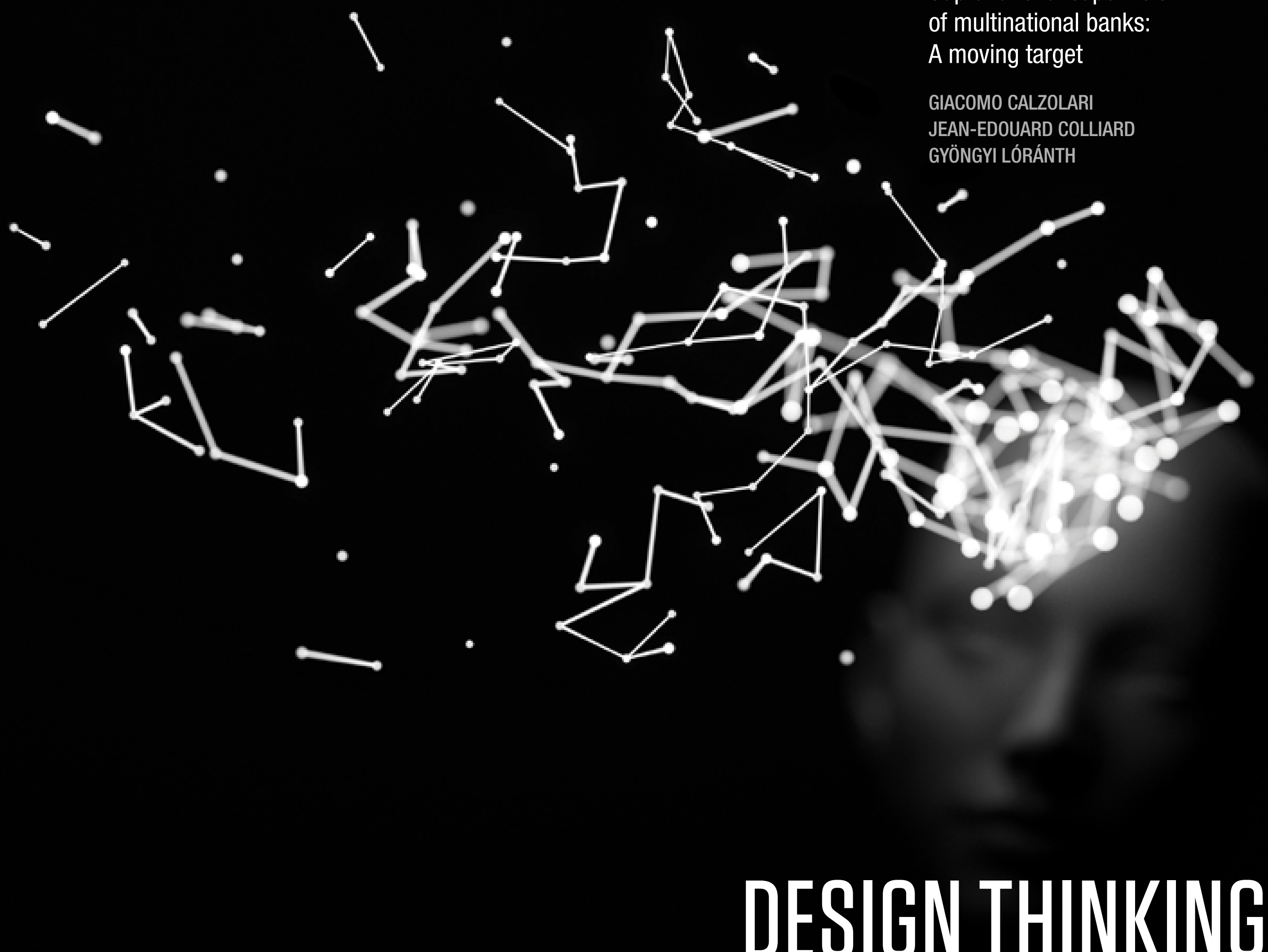

DESIGN THINKING

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DEAR READER,

Design thinking, a collaborative, human-focused approach to problem-solving, is no longer just for the creative industries. It has become an important management trend across many industries and has been embraced by many organizations. Its results are hard to ignore. Indeed, design-driven companies regularly outperform the S&P 500 by over 200 percent.[1]

To date, the financial services industry has not led in adopting this approach. However, leaders are recognizing that important challenges, such as engaging with millennial customers, can be best addressed by using design thinking, through the methodology's exploratory approach, human focus, and bias towards action. This edition of the Journal examines the value of design thinking in financial services.

Design thinking introduces a fundamental cultural shift that places people at the heart of problem-solving, which is critical in a technology-driven environment. If the customer's real problems are not fully understood, technological solutions may fail to deliver the desired impact. In this context, design thinking offers a faster and more effective approach to innovation and strategic transformation.

The case studies and success stores in this edition showcase the true value of design thinking in the real world, and how this approach is an essential competitive tool for firms looking to outperform their peers in an increasingly innovation-driven and customer-centric future. At Mastercard, design thinking has become a part of almost all organizational initiatives, from product development, research and employee engagement to solving challenges with customers and partners. Meanwhile, at DBS Bank in Singapore, a data-informed design model has been firmly embedded into the bank's culture, enabling them to successfully move from being ranked last among peers for customer service in 2009, to being named the Best Bank in the World by Global Finance in 2018.

I hope that you enjoy the quality of the expertise and points of view on offer in this edition, and I wish you every success for the remainder of the year.

Lance Levy, **Capco CEO**

1 http://fortune.com/2017/08/31/the-design-value-index-shows-what-design-thinking-is-worth/

SUPRANATIONAL SUPERVISION OF MULTINATIONAL BANKS: A MOVING TARGET

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ABSTRACT

Multinational banks (MNB), while potentially contributing to the efficiency of the banking sector, represent a challenge from a regulatory and supervision perspective, predominantly due to coordination failures among national supervisors. The institutional response, spurred by the recent global financial crisis, has been broad and profound, with very ambitious and substantial developments, such as the Single Supervisory Mechanism of the European Banking Union. These developments represent major changes in the organization of cross-border banking supervision and will have profound implications for the industry, worldwide. In this paper, we investigate whether and how the banking system itself will strategically adapt to such a drastic overhaul of the supervisory architecture. We illustrate cases in which this endogenous reaction of the industry may lead to unintended and probably unexpected consequences, such as higher costs for deposit insurance funds and negative impact on welfare. Although addressing coordination failures is necessary in cross-border banking supervision, we claim that policy reforms should anticipate and track MNBs' reactions, a moving target.

Multinational banks (MNB) have grown in number, importance, and complexity over the past two decades and the 2007-08 financial crisis has only temporarily slowed this process.[1] The associated rapid increase in cross-border banking claims had been seen as one dimension of the desirable integration of international banking markets. However, while banks became more international in life, they remained national in death, as the crisis has shown, with consequences that could not be contained within national borders. The financial crisis has vividly shown that MNBs active in several countries and with complex networks of foreign affiliates pose particular challenges for bank supervisors that are confined to national borders. For example, national authorities of Belgium, France, Luxembourg, and the Netherlands supervised the Belgian bank Dexia whose catastrophic failure resulted in a €6 bn bail-out in 2011. In addition, differences in institutional arrangements across countries showed up dramatically during the crisis. For example, the Icelandic bank Landsbanki operated in the U.K. with branches, whilst the competitor Kaupthing operated with a subsidiary. When the Landsbanki failed during the crisis, U.K. depositors lost some of their savings because the Icelandic Deposit Guarantee Scheme quickly became unable to reimburse all insured depositors in the country and in foreign branches of Icelandic banks. Kaupthing depositors, on the other hand, were insured by the U.K.'s

[1] See, for example, The European Economy, "Single supervisor and cross border banking," 2015 Issue n.3, https://bit.ly/2NDRicB

Deposit Insurance Scheme and were fully repaid.

The financial crisis of 2007-08 made clear that there was an urgent need to design a more comprehensive and coordinated regulatory framework in general, and for the supervision of multinational banks in particular. The institutional response has been broad and profound. For example, the Financial Stability Board (FSB) issued in 2011 an in-depth document on "Global adherence to regulatory and supervisory standards on international cooperation and information exchange." In December 2012, the Federal Deposit Insurance Corporation (FDIC) and the Bank of England issued a joint paper on international coordination of MNBs regulation and supervision. But probably the most substantial development has been the launch of the Single Supervisory Mechanism (SSM) of the European Banking Union (EBU). The SSM is an ambitious task in institutional harmonization and supervisory centralization. It contemplates several dimensions: defining and implementing a coherent harmonized legal and regulatory framework for banks; building an effective central supervisory apparatus and defining its legal framework, governance, and procedures; coordinating the operations of national competent authorities within a single rule-book in a coherent arbitrage between the union and national legal frameworks; a consolidated assessment of the balance sheet of the 129 largest and systemically relevant banks in Europe (i.e., the "most significant entities," which account for around €25 tln in assets, 80% of the Euro Area); and addressed coordination failures by giving supervision powers on these banks to a supranational authority, the European Central Bank (ECB).

These developments represent major changes in the organization of cross-border banking supervision that will have profound implications for the industry worldwide. What should not be overlooked is the fact that the banking system itself will not remain indifferent to such a drastic overhaul of the supervisory architecture.

In a forthcoming article in the Review of Financial Studies, entitled "Multinational banks and supranational supervision," we investigate the effects of centralization of supervision of MNBs within a supranational authority, taking account of the industry's adjustments.

Putting a supranational supervisor, such as the ECB, in charge of all of an MNB's units solves the issue of "supervisory failing" that became evident during the crisis. A single supervisor, internalizing the consequences of its actions across countries, is the type of international coordination that was lacking during the crisis. However, as stated, the industry itself will not be indifferent and will very probably adjust to these major institutional changes in ways that will make the overall effects of supranational supervision far less obvious.

To address these possibilities, we investigate supervisors' incentives to monitor the activities of a bank. The supervisor can detect poorly performing assets and steer the bank towards safer activities, thereby reducing the risk of failure and the costs to the deposit insurer. The incentives to monitor clearly depend on the different institutional environments and the bank's network organization of foreign affiliates. Banks can expand abroad with independently incorporated subsidiaries that are protected by limited liability with respect to the other banks within the cross-border group. The current institutional arrangements imply that, absent international coordination, the host authority is in charge of supervision of foreign subsidiaries and in case of failure the host authority will be responsible for reimbursing local depositors. Alternatively, MNBs may expand abroad with branches that share assets and liabilities with the "mother" bank in the "home" country of origin (because they are not independent legal entities) and are normally supervised and insured by the home country authorities. If supranational supervision comes into effect, such as with the SSM, the responsibility of supervision goes to the supranational authority, such as the ECB, irrespective of the bank's organization vis-à-vis its subsidiaries and branches. Deposit insurance could in principle be centralized and mutualized as well. However, to our knowledge this step has not been followed yet, neither in the SSM nor in other cases of coordinated supervision.

In our analysis, we clearly show how the lack of coordination generates undesirable consequences in terms of externalities, i.e., material effects of action or inaction of a national authority on the other countries in which the MNB is active. In particular, if the foreign supervisor decides to limit the monitoring of the foreign subsidiary of the MNB, it reduces the availability of information about the foreign subsidiary's assets that could be important for the supervisor of the home unit.[2]

[2] Foreign assets could be seized, at least in part, by the home supervisor in case of trouble with the home unit of the MNB. The other direction of the externality (e.g., the home supervisor limiting monitoring) is less of an issue because the liability structure of a subsidiary is asymmetric, as explained, and the foreign supervisor knows that it cannot expect much from the home units in case the foreign subsidiary faces difficulties.

Furthermore, monitoring, and subsequent possible conservatorship interventions in the foreign subsidiary, directly reduce the availability of these (or some of these) foreign assets to counter losses in the home unit.[3] None of these effects would be present in case of an MNB organized with foreign branches (the home supervisor would be responsible for monitoring and insuring all depositors worldwide) or in the case of supranational supervision independent of the organizational form of the foreign unit.

Investigating these two externalities, we are able to show that supranational supervision does not necessarily imply more intense monitoring than in the case of independent national supervision, as the two externalities interact in a subtle way (more details can be found in our paper). However, if the bank does not modify the organizational form of its foreign activities, we can predict that supranational supervision reduces the expected costs for deposit insurance funds, which is a desirable effect of coordinated supervision.

What is more, we are able to go one step deeper into our understanding of supranational supervision and predict whether and how the MNB may want to adjust its foreign organization to the modified supervisory and monitoring environment.

Since the bank's expected profits are depressed by monitoring and associated risk-reducing interventions, when supranational supervision implies more monitoring of foreign subsidiaries the bank has an incentive to reorganize into foreign branches. Alternatively, if this reorganization involves excessive administrative costs, it may even prefer to shut down foreign activities altogether, thus reducing the internationalization of banking markets. The opposite holds in case of reduced monitoring with supranational supervision.

Interestingly, in either case the MNB readjusts towards foreign organizations and activities in pursuit of reduced monitoring. Both the reorganization of banking activities and the associated reallocation of monitoring then have material consequences on the (expected) costs of deposit insurance funds and overall welfare. This is different from what is found if the MNB keeps its foreign organization unchanged. When it does adjust its structure to supranational supervision and transforms foreign branches into subsidiaries (or shutting down foreign branches), the expected costs of deposit insurance funds increase and overall welfare reduces. Surprisingly, national supervision in this case is a superior institutional arrangement than supranational supervision. More benign consequences are realized instead when the bank transforms the foreign subsidiaries into branches or opens foreign units, as a consequence of supranational supervision. Moreover, all these changes in the bank's activities have material consequences not only on the actual costs for the deposit insurance funds but also on their distributions across countries.

Are MNBs effectively adjusting to the moves towards coordination and supranational supervision, such as the SSM in Europe? It is probably too early to say for sure, but there are important signs that this is already happening. For example, the large Scandinavian bank Nordea in 2017 converted its subsidiaries in Denmark, Finland, and Norway into branches and also announced the move its headquarters from Sweden to Finland, thus ultimately transferring supervisory responsibility to the SSM. At a more general level, in the Euro area countries there were 550 branches and 310 subsidiaries from other E.U. countries in 2012.[4] Although the number of branches remained almost unchanged in 2016 (552), that of subsidiaries dropped to 232. At the global level, the number of subsidiaries have instead increased over the same period,[5] which leads one to think that the marked different trend and the relative "branchification" in the Euro area is (also) a consequence of SSM and the inception of supranational supervision.

Note that, luckily, the changes observed in the case of the SSM in Europe correspond to benign effects of supranational supervision and industry reaction (from subsidiaries to branches). However, it is important to point out that despite the intense policy debate that took place when the SSM was planned, there was no explicit discussion of how cross-border banks could have responded to this institutional change, at least to our knowledge.

In the end, it seems that the industry is reacting in a positive manner, but things could have gone (and can still go) wrong with transformation of foreign branches

[3] The home supervisor is, in any case, a residual claimant of foreign assets, if the foreign subsidiary has enough residual assets and after foreign depositors have been reimbursed. Consequently, it cares for the upside of the returns in the foreign subsidiary.

[4] See the ECB's report on the E.U. structural financial indicators, https://bit.ly/2xBYHij

[5] See, The globalisation of banking: How is regulation affecting global banks?", BBVA Research, 8 August 2016.

into subsidiaries (as it happened, for example, with the branches of the Greek Alpha Bank in Romania and Bulgaria that were bought in 2015 by other Greek banks and then reorganized into subsidiaries, backed up by the more solid Romanian and Bulgarian national deposit).[6]

We think our analysis provides a broader message that is reminiscent of the famous Lucas' critique in macroeconomic policies of the seventies. If we want to understand and predict the consequences of important policy shifts, such as the move to supranational supervision, we need to understand how the relevant economic agents, in our case banks, will react and should not take the environment, the banking industry structure, as given and fixed. The strategic reaction of agent, the banks, can be substantial and, in some cases, unwind the intended consequences of policy reforms. This need for "microfunding" policy reforms by accounting for banks' reaction is in fact a general message that goes beyond the case of supranational supervision. For example, the SSM currently lacks a European common deposit insurance that is a major limitation of the Banking Union architecture. However, we need to understand the potential reaction of the European banking industry to such a reform and its redistributive consequences across countries.

We conclude by mentioning a new policy perspective that emerged in our research as a sensible and effective one when dealing with cross-border banking, supervision, and associated externalities. An MNB organized with foreign subsidiaries effectively enjoys an implicit subsidy as compared with foreign branches. In fact, the foreign deposit funds may have to reimburse foreign depositors even if other units in the group are paying dividends to shareholders. To account for this implicit subsidy, one could account for the different costs that different bank organizations (branch or subsidiaries) impose on deposit insurance funds, to some extent in line with the idea of risk-based insurance premia. This type of "representation-form-dependent" premia, would align the bank's profitability with welfare and provide banks with the incentives to adopt a preferred representation form that reflects welfare at large. With this type of policy, the moving target of supranational supervision, i.e., the reorganization of banks, would not be a problem because the policy itself adapts to the target.

6 See "Greek Eurobank Takes Over Alpha Bank's Branch Network in Bulgaria," July 18, 2015, at www.novinite.com.

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