

# Regulatory Arbitrage, Supervisory Capacities and Information Sharing in the Wake of Cross-Border Banking Supervision

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## Abstract

The debate on banking supervision is an agenda of utmost importance to the entrepreneurs, banks, researchers and policy makers. This is for obvious reasons that better banking regulations translates to reduced trade barriers, easy access to capital, reduced risk and contributes to economic benefits for all. I study how stringent laws influence arbitrage in cross border banking and how adequate supervisory cooperation in information sharing and supervision capacities can translate to better regulations for cross border activities. I propose a model that focuses on the regulatory effects of stringent laws and adequate cooperation on cross border banking, and their role in effective bank supervision.

**Keywords:** Banking Supervision, Regulations, Cross-Border Banking, Arbitrage, supervisory capacities.

## 1. Introduction

The global financial crisis of 2008 is believed to be partly associated with failure of supervisory and regulatory frameworks in cross border banking. The failure of large banks such as Lehman Brothers, Fortis and three other Icelandic banks sent global shock waves across the financial systems. As Beck (2016) observes that there was no intervention for these bank failures due to lack of a resolution framework, different supervisory systems between countries and a general misalignment of countries' priorities with regard to banking supervision.

It is worth noting that in many countries, the debate on banking supervision is an agenda of utmost importance to the entrepreneurs, banks, researchers and policy makers (Gwartney et al. 2015). This is for obvious reasons that better banking regulations translates to reduced trade barriers, easy access to capital, reduced risk and contributes to economic benefits for all.

In the practice of banking supervision there have been a number of concerted efforts towards establishing a harmonized supervisory framework. Conventionally, issues relating to cross border banking supervision have been dealt with in three ways: Consolidated supervision which is carried out by the bank group's head quarters in the home country, Memorandum of Understanding and college of supervisors from both home and host countries. As Beck (2016) further notes, while these arrangements remain important, they have focused on 'sunny-day cooperation and failed to draft an agenda on crisis management. They also lack a legal framework.

### 1.1. Research Gap

Following the global financial crisis of the sub-prime mortgages in the 2008, there has been a renewed interest in the study of banking supervision and cross border banking (Kodongo&Natto, 2014; Beck, 2016; Allen et al., 2011; Beck, 2015; Mattila, 2014). It is important that factors affecting banking supervision for cross border banks are well addressed. Previous research has focused on cross border banking' impacts on: financial stability, innovation, firm success, efficiency and market structure (Beck, 2016; Claessens & Van 2016; Bruno&Hauswald, 2015; Astrakhan, 2014; Cihak et al. 2011). However, there have not been many studies addressing banking supervision and cross border banking; therefore this study specifically looks at how stringent bank laws, information sharing and adequate supervisory capacities influence or challenge the regulatory practices in cross border banking. Since cross border banks operate in a complex and more often un-coordinated and dissimilar supervisory territories, which provide leeway to sometimes escape tight monitoring from the regulatory frameworks, this study is timely. With this research, policy makers can decipher better supervision procedures and future researchers can test the accuracy of this model.

This paper has five sections, section II is the theoretical framework on which this study hinges. Section III is the literature review, section IV the summary prepositions and their source authors with the conceptual framework and section V is the conclusion.

## 2. Theoretical framework

Traditionally, banks have been supervised using two approaches: public interest view, and the private interest view. Public interest view is where the government regulates all bank operations from ownership, to entry, and puts restriction on all activities and types of lending. On the other hand, private interest view posits that banks are free to act in a range of markets without the government intervention (Becker, 1968). The private interest view augurs well with the principal- agent theory, where different parties are fronting their self-interest and consequently there are never ending principal-agency problems in the business environment.

For the purposes of reducing information asymmetry, agency problems and transaction costs involved in

banking, and to achieve independent supervision creation of an agency that is independent of the government, to oversee bank supervision is advocated. This kind of supervision is believed to accord for better information flows, reduced transaction costs and better governance in the banking industry (Becker 1968; Stigler 1974).

Buchanan and Tullock (1962) also advanced another theory known as political regulatory view, which postulates that politicians using their connections can channel bank credits to politically correct or connected firms. This theory is somehow related to the general public view approach to banking theory.

Besides the afore-mentioned general banking supervision theories, there are other recent theories relating to cross border banking and supervision. In a recent study carried out by Kodongo and Natto (2014) on drivers of cross border expansion, they employed the eclectic theory of internationalization. This theory is a branch of economics that is used to analyze the operations of international/ multi-national businesses. Elsewhere D'Hustler (2011) identifies the application of principal- agent theory as the theoretical framework undergirding the information asymmetry problem between home and host banking supervisors.

Finally economic theory has also been advanced as a framework in cross border activities. The theory suggests that foreign expansion should lead to economic benefits such as; lower interest rates, higher profitability and liquidity; healthy competition and compliance (Alade,2014). For the purposes of this study, independent supervision approach, principal- agent theory and the eclectic theory of internationalization shall form its base.

### **3.0. Literature Review**

#### **3.1 Banking Supervision**

Banking supervision is a form of government regulation that subjects the operations of banks to some requirements, guidelines or principles. This is done to foster accountability and transparency between banking institutions, individuals and corporations with whom they undertake banking transactions. Bernanke (2007) observes that banking supervision is however different for every country. Some countries place the role on the central banks, while others appoint an agency to oversee the operations of the bank. They argue that supervision should be independent of the central bank to avoid conflict of interest that arises when a central bank holds both positions of regulation and monetary policy management. Countries such as UK, Japan have a separate banking supervision agency while others such as Netherlands, Germany and most African countries use their central banks to regulate the banking industry.

##### **3.1.1 Basel Principles of Banking Supervision**

Basel I was first established in 1974 when an international bank- Herstatt failed. The accord was set up to come up with approaches for banking supervision. In 1988 they first released an accord that outlined banks' capital adequacy and their risk profiles. Basel I was quickly criticized especially with the Mexican and Asian crises in 1997. It was clear that for Basel I to focus only on capital adequacy is incomplete, therefore Basel II came into operation which focused on three major issues: capital adequacy, supervisory review process and market discipline.

In light of the rapid cross border banking networks, Basel III was later developed with the aim to strengthen capital requirements for banks so as to prevent them from taking up excessive risks that would expose them to collapse. Some of the main Basel III changes require that banks maintain quality, consistency, and transparency in their capital disclosures, introduce leverage ratios as a supplementary measure to the risk framework and strengthen the risk coverage of capital frameworks (Raman, 2014). Basel III is not a replacement to Basel II rather, it is an extension. Basel II was recommended for modification due to the collapse of the banking industry in 2008 which arose from: excessive on and off – balance sheet leverage; erosion of the level and quality of capital and insufficient liquidity. Suffice to say, with proper implementation of Basel III, risk management and compliance in the banking industry can be enhanced.

#### **3.2. Regulatory Arbitrage**

“Regulatory arbitrage is a practice whereby firms capitalize on loopholes in regulatory systems in order to circumvent unfavourable regulation. Arbitrage opportunities may be accomplished by a variety of tactics, including restructuring transactions, financial engineering and geographic relocation” (Basel 2010).

Houston (2012) explores the extent to which regulatory arbitrage has taken place and its global impact to the bank' lending, using both simple matching and probit regression analysis. The results showed that bank flows are positively related to the number of activity restriction and the stringent laws exercised in the banks' source countries and negatively related to the laws in place in the host country. The study further considered the effects of specific regulations on a number of issues as: can cross border banks own non- financial firms in the host country? How independent is the bank regulatory authority of the host government? What is the degree of audit and transparency disclosure that is espoused by the host country? And to what extent does the supervisory authority exercise its power? In answering these questions, evidence was gathered confirming that capital tends to flow from countries with stringent restrictions to less restrictive jurisdictions.

In an effort to remedy the challenges of regulatory arbitrage, there has been an ongoing discussion on the need to change the supervisory designs of the global financial system. As much as many have stressed for more vigilant regulation, of greater concern is the possibility of banks circumventing the stringent regulations and moving their businesses to less regulated markets (Houston, 2011; Levine 2009; Ongena, Popov and Udell (2013). This switching of markets would be detrimental to the management of risk leading to the contagion effect. Risks experienced in one market are likely to spill over to all the other countries where a particular bank holds a subsidiary. It is beneficial when regulations across financial markets are harmonized. However, Houston interestingly observes that there are benefits that accrue from allowing different regulations in different markets especially when the risk of regulatory arbitrage is minimal.

Proposition 1:

*Banks will practice regulatory arbitrage to the extent that their home countries have stringent banking laws.*

Proposition 2:

*To the extent that that regulatory arbitrage is practiced, there will be switching of markets that would be detrimental to the management of bank supervision risk due to the contagion effect (risk spill over to the other countries).*

Taboada and Karolyi (2013) states that regulatory arbitrage is driven by two important approaches: on one hand the desire to maximize the shareholders wealth by participating in markets that have great investment opportunities and less stringent laws which translates to less transaction costs and higher returns. On the other hand, banks would engage in cross border expansion activities that are likely to increase their risk exposures due to lax and weak regulations in the host countries. This venture could have negative effects on the performance of banks and hence a reduced shareholders' return.

Cross border acquisition is one of the channels through which banks engage in regulatory arbitrage. Arbitrage directs capital flows from countries with strong regulations, stronger property and creditors' rights to countries with weaker regulations. This kind of interactions between strong economies- (home countries with host countries provide a stronger regulatory cooperation which is a health aspect in cross border banking (Carbo and Rodriguez, 2012; Hagendorff, 2013; Acharya et al. 2010; Barth et al. 2013; Houston et al. 2012).

Proposition 3:

*To the extent that banks want to practice regulatory arbitrage, the most prevalent medium is cross border banking*

Proposition 4:

*Cross border banking presents challenges that can be addressed by better information sharing, adequate supervision capacities in banking supervision*

### **3.3. Banking regulatory supervision and cooperation**

In a recent literature survey by Beck (2016) he notes that during the global financial crisis of 2008, failures of large cross-border banks such as Lehman Brothers, Fortis and three Icelandic banks was notable. There were great efforts to bail out financial markets but there was lack of equivalent efforts to rescue cross- border banks. Instead the failures led to political conflicts, unrest between host and home countries on how to resolve the crisis.

#### **3.3.1. Supervision capacities**

Supervision capacities refer to adequate internal controls, resolution powers, licensing, weak cooperation and disparities in the level of supervisory expertise. Whenever any of those lacks, there are weak banking supervision.

As discussed by Beck (2016), the reason for lack of any rescue plans for banks during the financial crisis was due to: absence of resolution framework; different regulatory and legal systems between countries and a deficiency in close cooperation. Beck's paper discusses both academic and policy discussions over the past years on cross border cooperation on bank supervision. In the study there are specific documentations on pre-crisis development in cross border banking and lessons learned from the crisis. And a study on the recent developments and way forward for research and practice.

The findings from the survey indicated that theoretical predictions on cross border banking are ambiguous and rely on assumptions made about relative advantage and cost structures of foreign and domestic banks. The empirical literature also indicated that results are context-specific, and the effect of cross border banking (CBB) on financial stability is still ambiguous but would largely depend on regulatory capacities in place. Albeit to say, CBB helps brings in capital during a crisis but they also propagate the contagion effect into the local economy.

Proposition 5:

*The amount of capital flows brought in by cross border banking during a crisis will be positively related to the contagion effect experienced by the local economy*

Allen et al. (2011) notes that cross border banking across the world have been part of the trend towards a globalized finance. The period before the financial crisis saw CBB and wholesale funding expand rapidly. It is worth noting that the Basel Committee was formed to address the failures of CBB which were linked to weak

supervisory capacities.

Traditionally, the complications of CBB have been dealt with in three ways: consolidated supervision; memorandum of understanding and college of supervisors. The challenge with MOUs is that they are generally non-binding as there are no penalties for failure to comply especially during a crisis. Beck (2016) puts it bluntly that “the value of MOUs rises and falls with the share price of the bank involved”. In general, Beck notes that pre-crisis arrangements for CBB cooperation were focused on sunny-day cooperation but lack details on crisis management.

Beck recommends for a need for a radical rethink of both the rationale for and structure of CBB cooperation between regulators to avoid the contagion effect of risk spill-over’s from one country to other countries. There is also a need for supervisory cooperation that is dynamic. A decade ago home supervisors were mostly in advanced countries, and host supervisors in developing countries, now supervisors fulfill both functions and hence the need for a coordination of heterogeneous countries. Beck, et al. (2014) suggests for a macro-prudential regulation instead of individual banks focus, for there is a gap in regulation.

Whereas research work has focused on optimal supervisory architecture, it is important to realize there is a feedback loop with changes in supervision regulations having an impact on decisions by cross border banks (Calzolari et al., 2015). This means that assessing the interactions between supervisory architecture and the behavior of cross-border banks is a much needed research, a kind that looks beyond national and supranational territories to other forms of cooperation.

Generally, banks groups should be regulated on a consolidated basis whereas the individual banks are supervised on a sub-consolidated manner. The Basel principle 25: declares that cross border banking requires close and transparent information sharing which is a crucial component of effective banking supervision (Basel Committee, 2010). This kind of information cooperation can be supported by MOUs between home and host countries of the cross border banks.

Proposition 6:

*Bank supervision capacities will be weak to the extent that there is inadequate supervisors’ cooperation hence cross border banking will tend to be ineffective*

### **3.4. Information Sharing**

This is the exchange of pertinent information between the home and host country to enhance better cooperation in cross border banking. D’ Hustler (2011) discusses three scenarios that critically require information sharing between home and host countries: preventative supervision stage, deteriorating health of the parent bank and ill-health of the subsidiary in the host country. These three situations need close supervision between the host and home country supervisors. The home supervisor is responsible for the supervision of a bank’s solvency, whereas the host supervisor checks on the optimal liquidity of the banks. For effective cooperation, there must be a clear information sharing arrangements through the MOUs and college of supervisors. Basel II (which highlights international regulatory principles) also stresses the need for information sharing in cross border activities, as a matter of fact, Basel II hinges on three main pillars: capital requirements, supervisory review and increased disclosure requirement.

Despite renewed efforts to address banking supervision cooperation, there are challenges from the host’ perspective: a lack of harmonized regulatory framework for cross border banks; home countries are given lead roles in supervision, such as the provision of timely and accurate information regarding the financial status of the group bank; there are also flaws in the structural incentives between home and host supervisors that makes it hard to cooperate. Besides those, there is lack of accountability and legal penalties for lack of cooperation, this leads to information asymmetry (Pistor, 2010). Since there are no legal enforcements then there is generally a lack of a conflict resolution mechanism befitting both parties. This ultimately breeds ground for an ineffective banking supervision.

Proposition 7

*Information asymmetry will be more common where there is lack of accountability, legal enforcement and a clear cooperation guideline.*

While relying on home consolidated supervision may seem to work during sunny-day cooperation, therein lies the risk when the banks are not performing well. This will be catastrophic when information is not shared in a timely manner to the host supervisor. However, it is worth noting that whenever information regarding an ailing parent bank is shared with the host, the host may practice ring-fencing. That is trying to protect its nation’ financial interests and depositors’. This aspect if not well checked can cause panic across the banks’ subsidiaries leading to deposit runs and bank failures (Claessens et al. 2010; Rosgen, 2007). These mis-alignments of incentives occur due to lack of clear cooperation guideline regarding cross border burden sharing mechanisms.

In the principal-agent framework explored by D’ Hustler (2011), banking supervision requires a lot of specialized complex data. This means that it may not be feasible for principals to monitor the agent- supervisor due to lack of expertise. This leads to information asymmetry. In a rejoinder, Dijkstra (2010) acknowledges that

bureaucrats and even politicians will always act in self-interest to maximize their own economic benefits. By way of example, a regulator may refuse to release information regarding an international bank that is considered lethal for selfish reasons as self-preservation. This information asymmetry leads to ineffective banking supervision as regulators release information or act in favour to those who are likely to influence their lives.

There are different versions to information asymmetry: industry capture, where regulators protect cross border banks over the interest of the general public and political capture where politicians' interests take precedence over other important stakeholders (Buiters 2008). These captures can lead to poor supervisory cross border enforcement laws.

Cross border banking has been described by Claessen et al (2010) as a financial trilemma, comprising of three major issues: preserving the national interests, fostering cross border integration and maintaining global financial stability. He argues those three agendas can never be achieved simultaneously due to lack of a global regulatory framework. There is information asymmetry resulting from the national level as a result of political and industry capture and a general lack of cross border externalities that exist in the different jurisdictions.

Confidentiality issues, supervisors may avoid sharing confidential information that would lead to deposit runs, and yet again some countries lack secrecy laws that would allow them to share information, and that leaves it with MOUs which are also not legally enforceable. There is also lack of legal authority to share banking information; an example is in Poland where the law prohibits the sharing of information that is not for the sole interest of Poland.

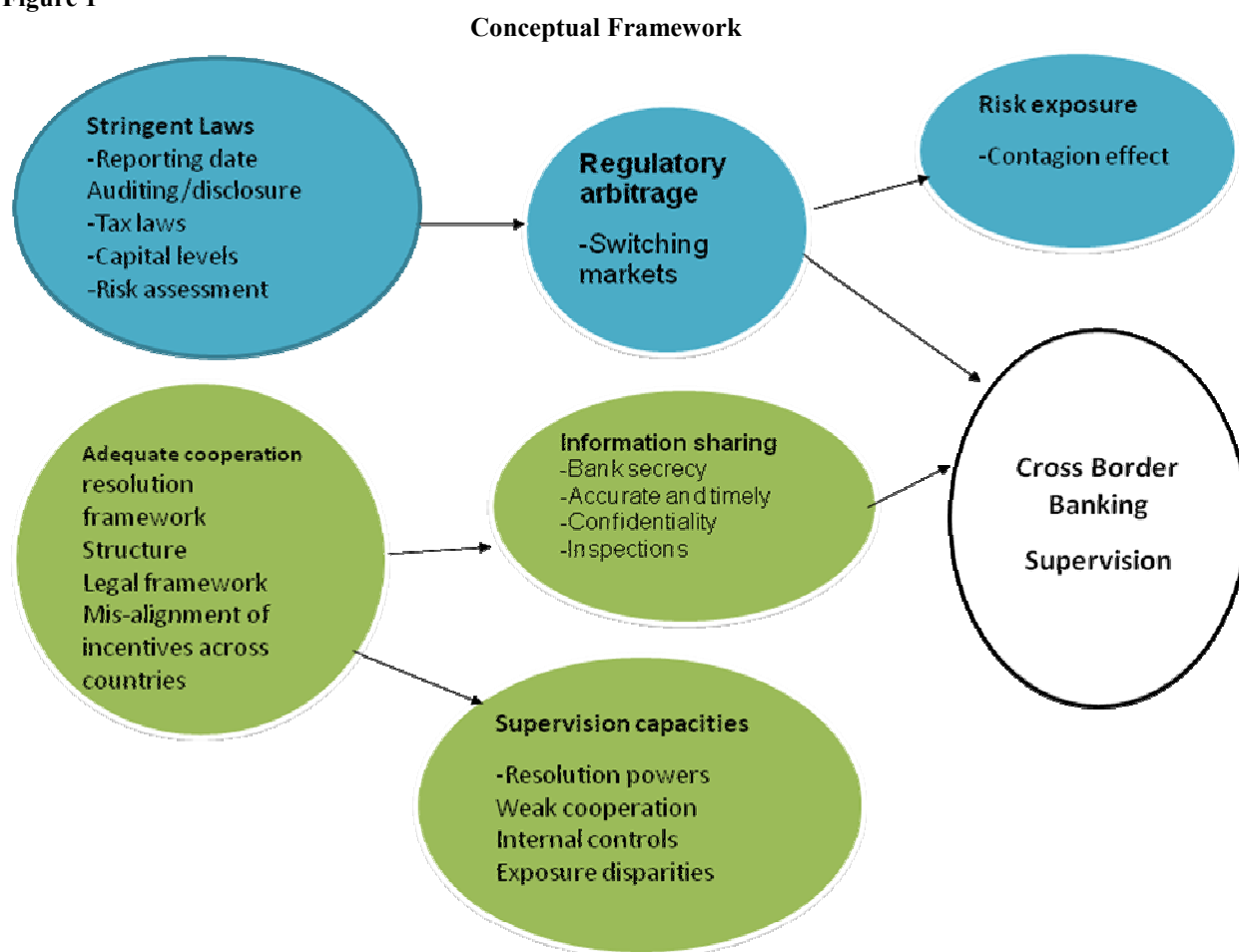
Besides these, there is a lack of a standard reporting systems for the countries involved in cross border banking.

Proposition 8:

*Whenever the materiality of foreign operations is low to the home supervisor, the extent of information sharing is low. Host and home incentives for sharing information increases as operations in the host country become more systemic in cross border banking*

Basel Committee (2010) recommends that information sharing in cross border banking is seminal to crisis planning and management, and urges colleges to ensure timely and accurate information sharing as it promotes effective bank supervision

Figure 1



#### 4. Conclusion

In summary, this paper has discussed cross border banking challenges relating specifically to banking supervision. Two major variables have been discussed: stringent banking laws; and supervision capacities' adequacy and its role in influencing the cross border banking activities. It is concluded that banking supervision in a cross border setting is faced with a myriad of challenges that can be overcome by adoption of macro-prudential policies. Cross border regulatory and supervisory cooperation and information sharing is essential to reaping benefits of cross border banking. This paper recommends for more theoretical and empirical studies to address this highly dynamic issue certainly in the supervision of cross border banking.

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