

# Riding the Regulatory Wave: A Review of Banking Supervision Literature and Future Agendas

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## Abstract

Banks, around the world, are subject to stringent regulations, the impact of which is contested. This paper aims to present a comprehensive overview of the literature on banking regulations and supervision through an in-depth review of previous studies. The study relies on a systematic literature review of 237 research articles, extracted from the Scopus database through a structured process. The findings of the review suggest that the scattered literature can be classified into six major themes, that is, the functioning of the central bank, the role of bank channel in the transmission of monetary policy, bank bailout versus closure, the cost-benefit analysis of banking regulations, deposit insurance, and market discipline. The study illustrates a conceptual framework that captures the relationship between the regulators and supervisors, their policies and the impact that they have on the banking dynamics. The review also revealed certain gaps that shall help guide future studies in this area. This study shall provide bank regulators, policymakers and practitioners with insights regarding the effectiveness of regulatory norms to help them with the formulation and amendment of banking regulations.

**Keywords:** Banking, Bank Regulation, Bank Supervision, Literature Review, Monetary Policy

## Introduction

Banks, an essential component of the financial system, are subject to stringent regulations (Li and Li, 2022; Chortareas et al., 2012). Such regulations and oversights are required to ensure the credibility and stability of the financial system (Cerutti et al., 2016). High bank efficiency has been associated with increased activity regulations, robust official monitoring, and low requirements for capital (Li and Li, 2022).

Banks may involve themselves in risky businesses and undertake investments that bypass supervision, as a response to a higher regulatory

burden, thereby increasing their probability of default and harming their charter value (Jalilian et al., 2007; Nguyen et al., 2019). However, without such regulations and supervision, banks would hold too little capital, considering the high cost of debt, as well as the inability of insured depositors and creditors to penalize risk-taking banks (Walter, 2019). Moreover, banking institutions tend to enjoy an implicit guarantee, which they exploit, since their greatest financial loss is limited to the amount invested in the bank's equity, with the government and creditors bearing the balance of the bank's losses (Grochulski and Slivinski, 2009).

The 2007-09 global banking crisis exposed the role of banking and other financial institutions in funding high-risk mortgage loans. When the equity finance amount arose, the preventive capital buffer proved to be scarce (Aiyar et al., 2015). While policymakers could have essentially reduced the risk of bank failure by asking banks to fund all or a substantial portion of their operations with equity, doing so would have negated the advantages of maturity transformation (Walter, 2019).

Prior to the crisis, several studies highlighted the importance of capital requirements and regulations in avoiding bank failure and protecting customers as well as the entire economy from adverse effects (Chortareas et al., 2012; Hovakimian and Kane, 2000; Gorton and Winton, 1995; Rochet, 1992). However, there are conflicting theories regarding the impact of regulatory and supervisory actions on the performance of banks (Barth et al., 2004; 2007). Few studies, that have been conducted on the relationship between different rules, supervisory practices, and bank performance, mostly concentrate on the experiences of specific countries rather than on the global level (for example, see Barth et al., 2004; Beck et al., 2006; Berger et al., 2008; Singh et al., 2022), with a substantial portion of them relying on accounting measures. Moreover, different proxies have been used in the previous studies for risk and bank capital regulation, leading to contradictory or inconsistent results. This paper aims to present a comprehensive overview of the literature on banking regulations and supervision through an in-depth review of previous studies. By doing so, it highlights the main themes

studied in the literature and identifies the research gaps in this domain.

The analysis of the literature suggests six major themes explored in the domain of banking regulations, expanding from the role of the central bank to the tools of deposit insurance and market discipline. At the same time, the extensive review of literature suggests that research in this area has not yet reached saturation. The findings highlight that the competitiveness in regulations fostered by globalisation and technological advancements has generated a market for regulatory services. However, disparate regulatory frameworks within countries can lead to regulatory arbitrage and undermine supervisory cooperation. Financial innovations like securitisation have made banking institutions more vulnerable, necessitating international coordination and effective, non-discriminatory regulatory reforms. The study's findings paint a comprehensive picture of how banks react to tighter regulations and no regulations. This study shall, thus, provide bank regulators, policymakers and practitioners with insights regarding the effectiveness of regulatory norms to help them with the creation and amendment of banking regulations.

## Research Methodology

The study is based on an in-depth systematic review of literature. There were 4 main steps identified during the search process: determining the relevant keywords and their alternatives, defining precise inclusion and exclusion criteria in terms of timeline, language, etc., locating pertinent studies to analyse, and reviewing the appropriate articles included in the final sample. Figure 1 provides the step-by-step process for extracting articles and their further screening.

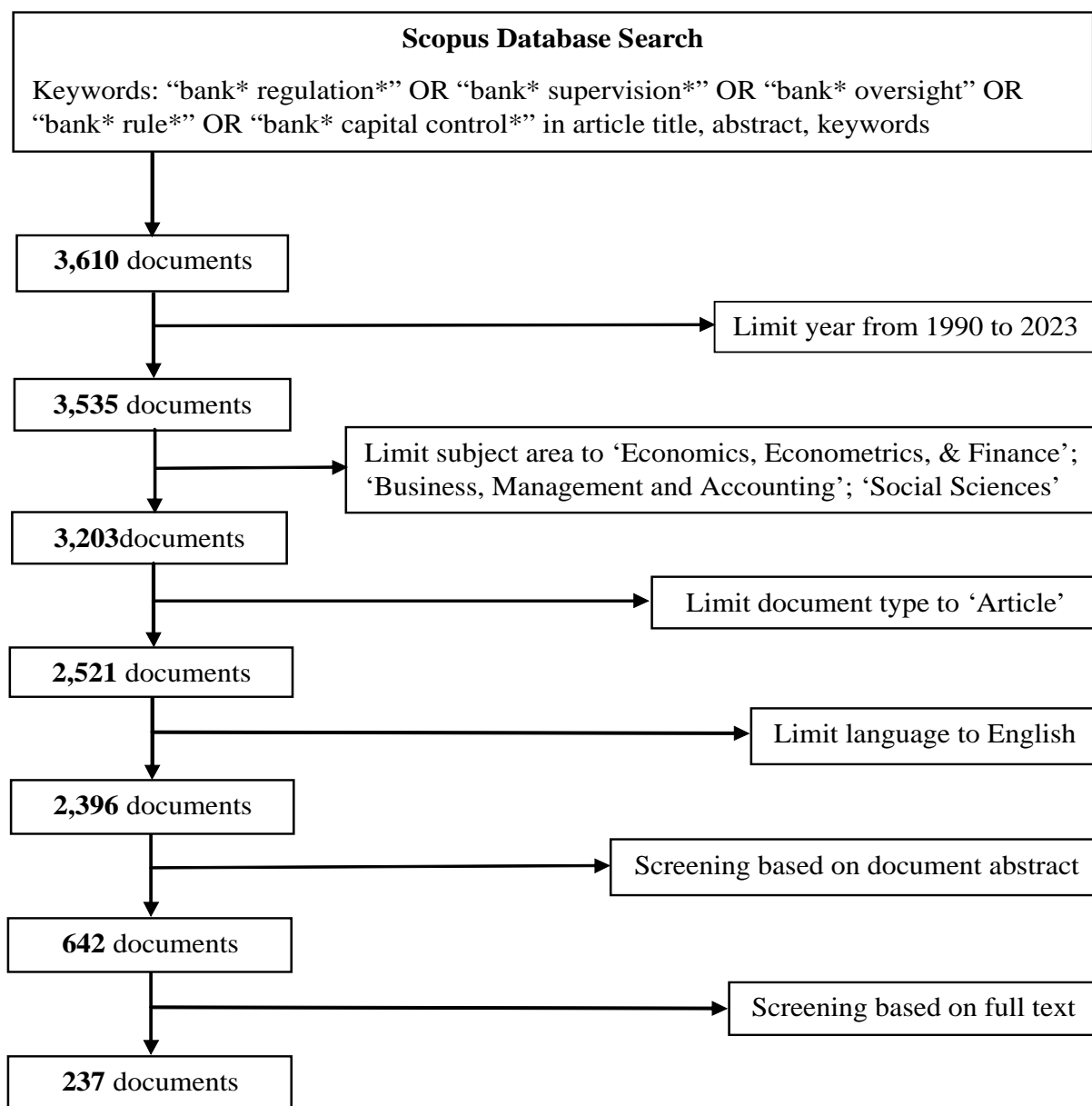
First, a lookup was done in the primary collection of the Scopus database by entering a series of keywords (Figure 1) following a comprehensive analysis of the field's literature. Scopus provides extensive coverage in the most advanced academic fields, including the social sciences, biological sciences, physical sciences, and health sciences (Mongeon and Paul-Hus, 2016). Documents published in the years 1990 to 2023 were included to ensure

that all key developments in the banking sector, including the Basel Accords, privatisation, globalisation and financial crises are captured along with their regulatory implications.

Further, the subject area was limited to Economics, Business, Finance, Social Science and related fields, excluding papers from Science and Mathematical backgrounds. Only those documents that were published as

research articles were screened in, to the exclusion of books, book chapters, conference papers, editorials, etc. in order to ensure high-quality peer review (Sardana et al., 2024). Finally, documents in the English language were subjected to a thorough screening of abstracts, followed by a full-text screening, resulting in a total of 237 articles ending up as part of the in-depth review.

**Figure 1: Inclusion Criterion for Screening Research Documents**



Source: The Authors

The research technique used in this study is a systematic literature review (SLR). It is the most effective technique for examining a research area's conceptual framework (Castriotta et al., 2019) and identifying future directions for exploration, while acknowledging the existing level of research (Li et al., 2017). In contrast to the method of trial and error, SLR attempts to discover studies by systematic search and assessment of the literature in order to identify potential gaps in the literature (Tranfield et al., 2003), allowing a replicable extraction process (Grover and Chawla, 2022; Mishra, 2023).

### **Findings from the Review**

The in-depth review of relevant studies and literature helped to identify six major themes. These themes are elaborated in this section, which have further been used to create and illustrate a conceptual framework in the next section.

### **Functioning of the Central Bank**

A substantial portion of the literature highlights the role of central banks in the regulation and supervision process. Several functions that central banks perform- ensuring financial stability (Calomiris et al., 2016), lender of last resort (LOLR), implementing the monetary policy, and settlement of payments (Goodhart, 2011) have evolved over a period of time in response to various financial and monetary crisis.

Today, the central bank is the centre of the payment system in an economy. The commercial banks are required to register on the books of the central bank in order to facilitate interbank clearing and settlement (Farhan et al., 2022). The ability of commercial banks to draw on their reserves with the central banks, borrow overnight money and use repo with eligible collateral, provides superior information to the central bank about their internal conditions as well as anomalies in the interbank market, thereby enabling it to intervene whenever required. The LOLR function of central banks is one of its most important functions. The overall impact of this function is, however, mixed. On one hand, by saving an illiquid institution, it limits the contagion effect and forestalls systematic risk; while on the other hand, it can induce moral hazard and reckless

behaviour by banks. According to Bagehot (1873), the LOLR function must be limited to solvent but illiquid banks, which should be provided liquidity only at punitive rates to reduce moral hazard. To distinguish between solvent and insolvent banks, the central bank must carefully evaluate the worth of its assets at pre-crisis value (Walter, 2024). At the same time, such a function of the central bank should be subject to constructive ambiguity, to make the intervention unpredictable.

Another well-known function of the central bank is conducting the monetary policy which includes issuing money in a quantity that would ensure price stability, financial stability as well as sustainable growth of output and employment. The aim of the central banks should be to provide a nominal anchor to various economic agents through the monetary policy in order to pin down their expectations regarding the nominal price levels in the economy (Gerth and Bian, 2023). Issues regarding the credibility of central bank in conducting the monetary policy independent of the government, have led to the need to develop a monetary policy framework that would not only ensure the independence of the central bank but also hold it accountable. One such framework is exemplified by inflation targeting. Under inflation targeting, the central bank announces a target level of inflation which can be in the form of a point target or a range, for a time horizon, and drives its monetary policy to ensure that inflation remains near this level (Aglietta and Mojon, 2010).

The end of World War II saw money lose its physical, particularly metallic reference. With the fall of the fixed exchange system and convertibility into gold in the 1970s, the high-powered money issued by central banks became purely fiat, i.e. not backed by any physical commodity. Today, the central banks around the world use many qualitative and quantitative monetary policy instruments, of which three have gained importance: (a) reserve requirements, wherein the banks are required to hold a certain percentage of their deposits in the form of reserves with the central bank, (b) discount windows/ standing facilities, under which a bank can obtain liquidity from the central bank by pledging some collateral at a rate known as discount rate and (c) open market operations, i.e. buying

and selling of certain type of securities by the central bank in the open market.

### **Effectiveness of Bank Lending Channel in the Transmission of Monetary Policy**

Literature suggests that the mechanisms that can be used by a central bank to transmit monetary policy can be divided into two categories: the money view and the credit view (also known as the bank lending channel) (Idrisu and Alagidede, 2020). According to the money view, tightening of the monetary policy and the subsequent increase in interest rates leads to a fall in a borrowing firm's net income due to an increase in its borrowing costs, as well as a fall in its net worth since its future cash flows would be discounted at a higher rate (Wang, 2020). This rise in the external cost of funds leads to a fall in demand for credit as well as a fall in aggregate demand of borrowers. As per the credit view, when the monetary policy tightens and places downward pressure on the bank's reservable deposits, the bank has two options: to replace the reservable deposits with non-reservable liabilities or to shrink its assets, such as loans, in order to bring them in line with the reduced reservable deposits (Ngambou Djatche, 2022). In case the banks are unwilling to insulate their loan portfolio, or are not able to perfectly substitute their lost reservable deposits with other liabilities, the resulting effect would be a fall in the availability (supply) of bank loans that would slow down the aggregate demand in the economy. However, in case the borrowers are able to substitute bank lending with other forms of credit, such as from the capital market, tightening of monetary policy may not have any impact on the aggregate demand.

Studies on bank lending channels provide evidence that the tightening of monetary policy leads to a fall in bank lending (Bashir et al., 2022). Further, this fall is associated with a decrease in bank loan supply rather than a decrease in the demand for bank loans due to economic slowdown, as evidenced by the increase in other forms of credit such as commercial paper issuance during the same period (Kashyap et al., 1993; Ludvigson, 1998). The use of panel data has brought forward the bank characteristics that determine the ability of the bank to raise non-reservable liabilities to substitute the lost reservable deposits and

hence, influence the impact of monetary policy. These characteristics include: (a) bank size, as smaller banks have limited access to financial markets as compared to large banks, and hence are more responsive to monetary policy (Kashyap and Stein, 1995); (b) liquidity position, as a bank with liquid securities would be able to adjust its position by selling these liquid securities, thereby not affecting its loan portfolio (Kashyap and Stein, 2000); (c) affiliation of the bank with a large holding company, which are better able to insulate themselves due to internal channelling of funds as well as ease of raising external financial resources by the large holding institution (Campello, 2002); (d) the capital constraints of banks, in the sense that banks that are capital constrained are restricted in their ability to respond to monetary policy shocks as they cannot easily alter the size of their balance sheets (Peek and Rosengren, 1995), and lastly; (e) ease of access to capital markets, the result of which is that loan portfolios of publicly traded banks shrink less as compared to those of non-publicly traded, in response to tightening monetary policy (Holod and Peek, 2007).

For the monetary policy to be effective, it is necessary that the bank-dependent borrowers are not able to substitute their bank loans with other external sources of finance, following a fall in the supply of bank loans (Gomez-Gonzalez et al., 2020). Aggregate evidence shows that when bank lending declines, other creditors/lenders usually do not rush in to fill the funding gap (Ashcraft, 2005; Peek and Rosengren, 2000). Studies conducted using micro-level data of non-financial firms supported this by showing that firms that are dependent on external finance, particularly small firms that are bank-dependent, face adverse shocks in their economic activities (Cainelliet al., 2020), due to a tightened monetary policy and the resultant restrictions in bank loan supply (James, 1987; Slovin et al., 1993; Peterson and Rajan, 1995). Hence, the bank lending channel of transmission of monetary policy is effective, given that banks do not possess the above-mentioned characteristics.

### **Extended Role of Lender of Last Resort: Bailout v/s Closure**

Although the functions of a central bank have already been discussed extensively, but one function that warrants

additional discussion, as is done in multiple studies, is its role as a Lender of Last Resort (LOLR). The major issue surrounding the role of LOLR is that although this facility should be extended to illiquid but solvent banks (Bagehot, 1873), it becomes very difficult to distinguish liquidity shocks from solvency shocks because of market imperfections. In such a situation, the role of LOLR is related to the effective bank closure policy and the safety net.

The two types of shocks - insolvency and liquidity shocks, are unidentifiable and indistinguishable because of the two complementary functions that a bank performs: accepting demand deposits (liabilities) from surplus units and providing loans and advances (assets) to deficit units (Diamond and Rajan, 2005). A bank, thus, faces liquidity shocks that arise due to early withdrawals by all the depositors of the bank (Shahin, 2022) and a solvency shock when it faces a fall in the value of assets against its liabilities. Since both the shocks can lead to one another, it becomes difficult to distinguish the actual cause of the banking shock, and whether the bank is insolvent or just illiquid. The central bank may face the possibility that an insolvent bank poses as an illiquid bank and hence, is able to borrow from the central bank or the interbank market (Freixas et al., 2004). In such a case, it has been argued that banks should lend at a penalty rate which is lower than the interbank rate, the reason being that the penalty would penalise the insolvent banks from borrowing from the central bank while the illiquid but solvent banks can borrow at a below interbank rate by providing good quality collateral (Freixas et al., 2004). However, when it is clear that a bank is insolvent, then the central bank would have to take a decision regarding the continuation or closure of the bank.

It has been found that in case there are more than one domestic regulator for the banking sector, the decentralisation of regulatory powers may lead to conflict in the objectives of their interventions, while each of them tries to minimise their own costs. When the supervision is divided between LOLR and deposit insurance, then the LOLR is likely to be biased towards the continuation of a bank, i.e. bailout, and the deposit insurance towards

liquidation. The reason being the LOLR that would lend to the bank would only face losses up to the amount of loan lent in case the bank fails, while the deposit insurance would have to bear the cost of paying out the amount of insured deposits to the depositors and not just the cost of the loan loss (Repullo, 2000; Kahn and Santos, 2005). Therefore, the incentives of the regulators as well the extent of the power allocated to them would be instrumental in deciding the type of LOLR policy. Taking a step further, in the case of a multinational bank, a number of regulators from various countries come into the picture, which intensifies the conflict of objectives as each regulator would have a different view of the liquidation versus continuation decision. In such a situation, a bailout may not be possible due to the free rider problem and hence, the multinational bank is more likely to be liquidated (Freixas, 2003; Goodhart and Schoemaker, 2006).

### **Cost-Benefit Analysis of Bank Regulation and Supervision**

The literature has raised a question on whether introducing or enhancing regulatory norms on banks is worth the pain and effort. The variations in the regulations and supervisions across countries have created a worldwide market for regulatory services which provides the bank with an opportunity to analyse the regulatory schemes in different jurisdictions, and then base their own activities where the benefit of regulation is maximum and/or cost is minimum. These regulatory services are offered competitively by several regulators around the world, and as the banks' cost of switching from one regulatory jurisdiction to another has been decreasing, the global market for financial regulation services has become even more competitive. To avoid regulatory arbitrage, the need to undertake supervisory cooperation across countries has been recognised in the literature.

Globalization and technological advancements have not only lowered the cost of entry of financial firms into new geographies but have also allowed them to take up innovative instruments, the most important being securitization. On the regulatory side, securitization brought different firms that were supervised separately under different jurisdictions, in competition with one

another, which ultimately put pressure on the bank regulators to lax their vigilance and legitimate these innovative products by the banks without fully understanding its threats on their countries' financial markets. This response to the competitive pressure, although called financial deregulation, is in real sense 'de-supervision' (Kane, 2010). Not only this, but the bank supervisors even started outsourcing their duties of vigilance to credit rating agencies without binding these agencies to the consequences of their wrong ratings (Portes, 2008). The increase in conflicts of interest arising out of regulatory arrangements along with regulatory competition and financial innovations have, in turn, increased the fragility of banking systems, as well as the probability of regulation-induced banking crisis.

What a country requires is financial reforms, which ensure that regulation and supervision are efficient and non-discriminatory and that the regulators are held accountable for their actions by linking their compensation to the outcomes of their policies.

#### **What Encompasses a Good Deposit Insurance Scheme?**

The main objective of setting up deposit insurance in a country is to safeguard small retail depositors and assure them of access to their deposits even in case of bank insolvency (Sardana and Shukla, 2020). This is done to avoid a run-on bank by panicked depositors and hence, reduce the negative externalities associated with it, such as loss to depositors, disruptions to the payment system, bank failure, contagion as well as adverse spillover effects on the real economy (Demirgüç-Kunt and Detragiache, 1998). There is ample literature that suggests that this safety net comes with certain costs (Kane, 1989). First, it leads to a moral hazard problem on the part of the banks, incentivising them to engage in risky investment or lending (Gupta and Sardana, 2021), and second, there is leniency in the monitoring undertaken by depositors as they are assured that no matter what, their deposits are insured. The gambling done by banks is beneficial to bank managers and shareholders if it succeeds and pays off well. However, in case it fails, the cost is borne by the insurers, the insurance agency and ultimately the taxpayers (Demirgüç-Kunt and Kane, 2001).

Different countries have adopted different structures for their deposit insurance. In certain countries, money is already collected from the banks in the form of premiums which can be based on risk or a flat rate, whereas in others, funding is done after the failure of an institution becomes apparent- from the surviving banks (Sardana and Singhanian, 2024). Certain countries also have government guarantees, wherein the government promises to make for the loss partly, using taxpayers' money, while in other countries, such as Germany, injection of public money is restricted or prohibited. In the USA, deposit insurance is a kind of mutual institution managed by the Federal Deposit Insurance Corporation to which premium is contributed by banks, calculated on the basis of their risks, and the US treasury also provides a line of credit to it (Eisenbeis and Kaufman, 2008; Demirgüç-Kunt et al., 2008).

There are a number of lessons that can be drawn regarding a good deposit insurance scheme, capable of safeguarding a banking system from crisis. First, this scheme may fail to serve its purpose in case its funding falls short, thereby necessitating a guarantee that is credible, either represented by a deposit insurance fund or a government guarantee. Second, a proper allocation of power among the relevant authorities for the resolution of failed or troubled banks is necessary to avoid burdening the depositors or customers with the cost of failure. Even if a deposit guarantee is in place, it may still result in a bank run due to uncertainty or delay in the procedures to be followed for resolution (Bliss and Kaufman, 2007). Therefore, the decision to close an unhealthy bank should be in the hands of the regulators rather than the court, and a bankruptcy code specifically for the banks should be established to avoid any kind of ambiguity. Third, a key to safeguarding the deposit insurance fund is ensuring timely monitoring, effective risk management and prompt action on the discovery of a banking problem. Instead of delaying the recognition of losses and taking action after an institution has become insolvent, the regulators should get alert and act on the first signs of trouble in a bank such as a decline in its capital levels (Eisenbeis and Kaufman, 2008). These features not only reduce the losses but also reduce the need for deposit insurance and the moral hazards associated with it.

### Market Discipline as a Tool for Bank Monitoring

The banking sector in all countries is subject to government regulations. The reason is that banks are considered to be unusually opaque and hence, pose difficulty in being monitored by the market. Thus, the government often steps in to strengthen or replace the lost market discipline through prudential regulations (Flannery, 1982). However, empirical evidence on the opacity of banks is limited, with some studies pointing out that all market participants have equal information about the bank and its performance (Flannery et al., 2004), and another set of studies providing evidence to the contrary (Morgan, 2002; Iannotta, 2006). Hence, it has been suggested that market discipline should now supplement government regulation to control bank risk-taking. Market discipline, in the context of banks, involves 2 stages. The first is that the market participants outside the bank should be able to timely and accurately monitor the banks, which would be reflected in the banks' security prices. The second stage is that banks' investors are able to influence the behaviour of the banks' managers (Bliss and Flannery, 2002). This influence can be direct, such as a premium on bond issue which may encourage the bank to recapitalize, or can be indirect, wherein the government supervisors use the security prices to identify the banks that need supervisory attention.

A number of studies provide empirical evidence that on average, banks' security prices do reflect the changes in the risks of banks. Yields on subordinated debt issued by banks do provide an indication to the bank's default risk, if and only if, government support to the debenture holders is curtailed (Flannery and Sorescu, 1996). This result is valid across countries as well, wherein, the debenture spreads reflect not only the bank's inherent risk but also any type of government support that is likely to be extended to debenture holders in case the bank faces any shocks (Sironi, 2003; Pop, 2006). Extending the market monitoring studies to the US interbank market shows that even the interbank loans and rates are sensitive to the borrowing bank's portfolio risk, income and capital ratios (Furfine, 2001; King, 2008). Quantity effect (the change in the quantity of deposits with a bank due to changes in the bank's health) is also found to be operative in the case of banks. This means that depositors start withdrawing funds from banks which

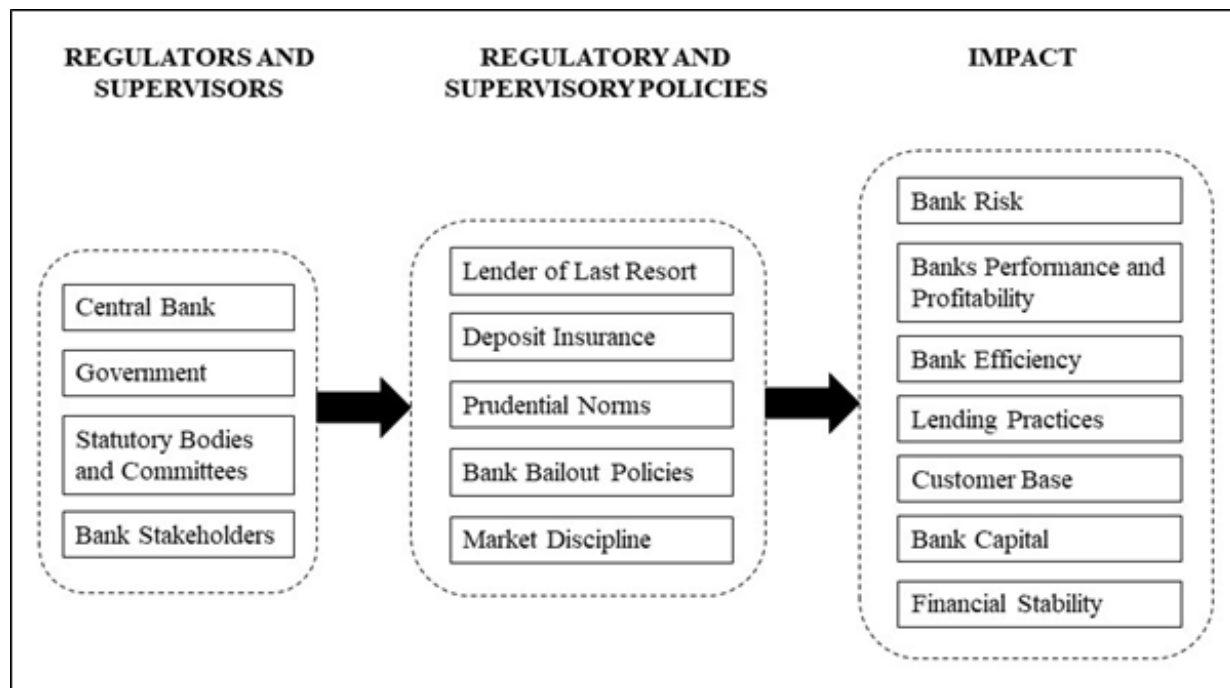
they perceive as taking higher risks, and even if the bank increases their deposit rates, it fails to attract depositors (Saunders and Wilson, 1996; Martinez-Peria and Schmukler, 2001).

Although market information can be used to monitor the banks, as well as directly or indirectly influence them, there are certain caveats, the major being that a bank's security prices may not be exogenous, but endogenous estimates of a bank's value. This is because, firstly, banks tend to issue debentures when the markets are most optimistic, due to which the debenture's issue price may understate the bank's risk (Covitz et al., 2004). One way to avoid this endogeneity may be to look at the secondary market prices of debentures, but this too poses a problem because debentures usually trade in thin markets and hence the prices may not be informative (Pop, 2006). Second, if the supervisors use the security prices in order to exercise indirect influence on banks, then the prices become an ambiguous indicator of the bank's true value because these prices may not only react to the bank's true condition but also to the probable action that the supervisors might take to improve the bank's condition. In other words, if the supervisors react to market prices, then those prices stop behaving the way that they used to do (Leharet et al., 2007; Bondet et al., 2006; Birchler-Facchini, 2007). Lastly, if the supervisors intervene based on security prices, then the private firms may lose the incentive to gather information about the banks in order to benefit from trading on the basis of this superior information. Hence, even private firms may reduce their market monitoring efforts as a result of which security prices may stop providing useful signals (Leharet et al., 2007).

### Conceptual Framework

A conceptual framework is designed based on the review findings of the relevant research articles in this domain. The framework of banking regulation and supervision presents the relationships among various entities involved, whose policies and dynamics have a direct impact on bank risks and practices (Figure 2). They include the central bank, the statutory committees exerting prudential norms, the government and the other stakeholders of the bank's existence, who act as regulators and ensure supervisory oversight.



**Figure 2: Conceptual Framework of Research in Banking Regulations& Supervisions**

Source: The Authors

To streamline the establishment and operations of credit entities, the functioning of the banking system in its entirety, the creation and upkeep of a stable legal order in the banking sector, and the protection of the legitimate interests and rights of its participants, government regulation of banking activities is essential (Zalutka et al.,2022). The development in complexity and popularity of financial products due to democratization, liberalization, and extensive innovation has also led to a desire for significantly more stringent regulation of financial institutions than what existed before the global financial crisis (Godspower-Akpomemie and Ojah, 2021).

In the previous thirty years, there have been banking crises in over 100 nations. These events are commonplace in the world of international finance. Due of this, majority of the nations have implemented a safety net for the financial sector that combines a number of measures, including deposit protection, a supervisory and regulatory framework, and bank insolvency laws (which may include provisions unique to banks or simply general corporate

bankruptcy laws with some extra provisions), and the central bank's position as lender of last resort (Campbell and Lastra,2009).

An expansion of central banks' participation in financial system regulation and supervision is justified by their positions as lenders of last resort and as supervisors of systemically important financial institutions (Ojo and Marianne,2009). Many factors contribute to the central bank's ability to play such a significant role in supervision, such as its ability to maintain enough liquidity to regulate its operations when markets operate at sub-standard levels of liquidity, and its ability to supply liquidity on a private basis because of the sizeable amount of liquid assets it holds in reserve (Buiter,2008).

Further,banks are regulated by governments via various regulatory measures and norms (Zalutka et al., 2022). They consist of deposit insurance, lowering the cost of bank insolvency, preventing the negative economic effects of bank failures, safeguarding the payments system,

advancing the objectives of duly elected officials, and safeguarding consumers (Benston, 2000). For those without extensive financial knowledge, deposit insurance provides a secure savings option (Pennacchi, 2006). If a bank's capital decreases and default risk materializes, its capacity to generate liquid transaction deposits may be compromised. Deposit insurance in this case makes deposits default-free, which restores deposit liquidity (Pennacchi, 2006).

In countries where banks are poorly capitalised and depositors are poorly educated, insurance coverage is higher (Laeven, 2004). Bank insurance works to prevent excessive bank loan liquidation by taking away the impulse to begin a bank run (Diamond and Dybvig, 1983; Sardana and Singhanian, 2022). However, these insurances entail costs as bank failures expose the central government to losses, and therefore, banking regulation and supervision are necessary (Flannery, 1982). The likelihood of the collapse of a bank is possibly higher in the presence of low government oversight and regulation in this regard than when there is no sort of deposit insurance (Pennacchi, 2006).

Prudential norms include minimal capital requirements, standards for liquidity or portfolio of loan diversification, restrictions on a bank's lines of business or investment portfolio, and other limitations meant to restrict the kinds of risks that a financial company can take (Flannery, 1995). Prudent rules must be expanded to include deposit-taking NBFIs as financial systems diversify. While there should be a single regulator for all deposit-taking organizations, these rules don't have to be the same as those that apply to banks (Brownbridge et al., 2002).

During a crisis, the losses incurred by banks and other financial organizations result in losses for their own creditors and investors as well as, and potentially, losses for the government in the form of bailouts. The distribution of a bank's losses between the public and private sectors has an impact on society's resource allocation as well as normal behaviour and incentives (Keister and Mitkov, 2023). Protecting the financial markets against widespread contagion, like the panic that followed Lehman Brothers'

bankruptcy, is one of the benefits of a bailout. Traditionally, this has been seen as a trade-off between the regulators' need to minimize contagion or moral hazard (Caux et al., 2007). The bailout authority, in contrast to private agents, has the right to tax profitable companies and utilize the proceeds to compensate struggling companies for contract renegotiations (Chari and Kehoe, 2013). The primary objection to bank bailouts is the formation of moral hazard, as empirical research shows that banks would take on greater risk if they were certain of receiving support in bad times (Caux et al., 2007).

Another way of exercising supervision is through direct and indirect market discipline. The goal of market discipline reform is to make market forces successful in lowering the risk that banks take so that if their banks fail, bank owners and creditors would be more vulnerable to losses (Gilbert, 1990). Market discipline is applied when the pricing of bank securities accurately represents the bank's underlying risk. This can restrict bank risk-taking either directly through the debt issuance channel or indirectly by communicating the bank's true risk to banking supervisors and market participants through the secondary market prices (Kwan, 2022).

All these regulatory policies have been found to influence and impact various bank parameters, including, but not limited to, banks' risks, profitability, performance, efficiency, lending quality and practices, customer base and market share, banks' capital base, and financial stability.

## Discussion and Future Research Avenues

Regulations in the banking sector have witnessed multiple shifts, not only in the practical sense but research sense as well. With a significant segment of banking literature focusing on this sector's regulation and supervision, research studies have often shown contradictory results.

This study relied on a systematic literature review to present a comprehensive analysis of the relevant literature in the domain of banking regulations and supervision. The findings of the review show that the scattered literature can be classified into six major themes, that is, functioning of the central bank, the role of the bank channel in the transmission of monetary policy, bank bailout versus

closure, the cost-benefit analysis of banking regulations, deposit insurance, and market discipline. The literature, however, is not yet saturated and has scope for further evolution. The literature review revealed certain gaps that might help guide future studies in this area. Scholars and academicians can tap into the research topics elaborated below.

### **Emerging Role of Artificial Intelligence in Banking Supervision**

Artificial Intelligence (AI) and machine learning (ML) have enormous potential benefits for banking supervision, as it does for many other businesses that rely largely on correct information (Mishra and Sharma, 2023). Developments in the early warning systems (EWS) for bankruptcy have refined risk analysis and testing (Guerra and Castelli, 2021). Financial companies (both regular banks and those operating in the shadow banking industry) may be able to circumvent financial rules by utilizing big data and machine learning. This would make it more challenging for bank supervisors to keep an eye on regulatory compliance (Jagtiani et al., 2018).

Although previous research has discussed ML in the financial industry more broadly, it has not thoroughly examined the advantages and disadvantages of AI and ML in the particular setting of regulatory frameworks. Furthermore, not enough research has been done on the moral issues and possible biases related to ML models in credit risk evaluation and other regulation-related processes. The development of algorithms to detect unusual patterns in transactions and the use of ML to analyse economic data and forecast trends that may affect the banking industry can be touched upon.

### **The Reliance on Fintech**

Banks have consistently used emerging technologies to provide banking services more efficiently. Technological progress creates fresh possibilities for banks and their clients as well as increased risk due to money laundering and cyber attacks. In light of this, banks have modified their business plans. They collaborate with FinTech to create and provide innovative technologies (Nuyens, 2019). In the FinTech industry, regulators and supervisors also undergo a

progressive transformation as they support the expansion of their operations and begin to oversee the services they provide. Therefore, even if digital and financial technology can be a hindrance to both banks and regulators, they also create a new cross-border ecosystem where tech businesses and banks work together and compete, while authorities and supervisors modify their oversight. If fair competition is maintained, this will result in improved financial products and services for consumers and increased added value for society (Nuyens, 2019). This reliance and collaboration, however, needs to be further explored to understand the synergies and challenges for bank regulations.

### **Incorporation of Sustainable Regulatory Practices and Climate Change**

Banks are already taking steps to identify environmental risks and assist in the shift to an economy that is more sustainable, by integrating or mainstreaming sustainability considerations into their risk-handling frameworks and governance structures in response to demand from consumers, investors, and regulators (Alexander and Fisher, 2018; Feridun and Güngör, 2020).

A significant knowledge vacuum remains about the ways in which certain regulatory actions affect the adoption of sustainable finance principles in the banking industry, despite the fact that there is an increasing corpus of work discussing the relationship between finance and climate change. The efficiency of the present regulatory frameworks, the difficulties encountered in implementing them, and the possible improvements required to motivate banks to actively participate in mitigating climate change have not been extensively examined in the literature. By providing a comprehensive review of the regulatory backdrop and highlighting specific areas where advancements are necessary to promote green banking operations and eventually support global climate objectives, research should seek to close this gap.

To help enhance the evaluation of financial risks associated with climate change, we need to quantify risks on a broad scale, and it is necessary to perform studies that map the physical dangers and the risks arising from the transition itself. Additionally, quantitative evaluations of climate-

related risks should be conducted using scenarios for the "green transition" (Aufauvre and Bourgey, 2019).

### **Studies on Systemic Risks**

A considerable number of studies have been undertaken on systemic risks in the banking sector. However, there are disagreements on how to define the concept, especially with banking regulations. Prioritizing aggregate financial ratios in early systemic risk assessment attempts, a range of institution-level systemic risk measuring approaches have just lately been put out (Vanhoose, 2011).

There aren't many studies looking at how well cross-border regulatory coordination works to stop systemic failures. The difficulties of coordinating regulatory actions across jurisdictions and other weaknesses in the present frameworks for cross-border collaboration are frequently ignored by research, thereby presenting opportunities for exploration.

### **Effectiveness of Anti-Money Laundering (AML) Initiatives**

One reason why banks are increasing their regulation is the growth of money laundering. Since financial centres abroad have long been utilized by dishonest people to conceal income from local tax agencies and evade taxes, they now come under scrutiny in addition to the data confidentiality regulations (Cox, 2014).

Although the significance of bank supervision in AML initiatives is acknowledged, little is known about the best supervisory techniques. Furthermore, research frequently fails to assess the full significance of supervisory compliance measures' effects on banks' AML conformity. The literature recognizes that technical advancements like blockchain and AI have the potential to improve AML procedures. Nonetheless, a deficiency of study exists on the comprehension of the obstacles and prospects linked to the pragmatic integration of these technologies. Research is required to examine the precise obstacles to integration, possible hazards, and the general influence that technology may have on the efficacy of AML initiatives.

### **Conclusion**

This study aimed at undertaking a systematic literature on

banking regulations, through a structured collection of relevant research articles and evaluating them for drawing insights into the literature. This study has consolidated and summarized the existing body of knowledge in order to provide familiarity with the current standing of the banking regulatory system as well as its limitations, on the grounds of a few conflicting views as well as research findings.

The SLR facilitated the identification of six major themes explored extensively in the literature. The findings from this study shall have implications for multiple stakeholders. It shall assist policymakers in identifying gaps and recommending areas in regulatory and supervisory norms that require further attention, in order to create frameworks that are more comprehensive and flexible. It will also provide insights into how well the current systems are working. The paper's outcomes can serve as a foundation for the creation of new rules or the improvement of current ones, which will enhance the stability and integrity of the financial system. Additionally, the paper provides a deeper understanding of the risks associated with regulatory and supervisory activities, which the banks and bank managers can use to build risk mitigation plans. Investors can utilize the study to evaluate the risk profiles of various banks in order to make well-informed judgments. The more they comprehend the regulatory impact of a bank, the more accurate assessment of the bank's prospective risk can be made. In contrast, depositors and customers gain from a well-regulated banking system since it allows them to evaluate the security and safety of their money. Finally, the identified gaps shall enable researchers to investigate the topics further and carry out research to gain deeper knowledge.

Since this study exclusively employed the Scopus database, it may suffer from certain limitations. The analysis may have overlooked the works that would have provided value but weren't included in Scopus. Other fine nuances that may have been investigated to gain a deeper grasp of the topic may have been overlooked by applying more timeline and keyword filters. Despite these limitations, the current study shall be a useful resource for summarizing the body of knowledge and pointing out directions for further research in the banking industry.

## References

- Aglietta, M., & Mojon, B. (2010). Central Banking, in: Berger A., Molyneux P., Wilson J.
- Aiyar, S., Calomiris, C. W., & Wieladek, T. (2015). Bank capital regulation: Theory, empirics, and policy. *IMF Economic Review*, 63(4), 955-983.
- Alexander, K., & Fisher, P. (2018). Banking regulation and sustainability. Available at SSRN 3299351.
- Ashcraft, A. B. (2005). Are banks really special? New evidence from the FDIC-induced failure of healthy banks. *American Economic Review*, 95(5), 1712-1730.
- Aufauvre, N., & Bourgey, C. (2019). The role of central banks and supervisory authorities in stimulating consideration for long-term issues: The case of climate change. In *Annales des Mines-Réalités Industrielles* (Vol. 4, pp. 60-63).
- Bagehot, W. (1873). *Lombard Street: A Description of the Money Market*. HS King & Company.
- Barth, J. R., Caprio Jr, G., & Levine, R. (2004). Bank regulation and supervision: what works best? *Journal of Financial Intermediation*, 13(2), 205-248.
- Barth, J. R., Caprio Jr, G., & Levine, R. (2007). Reassessing the rationale and practice of bank regulation and supervision around the globe.
- Bashir, U., Yungang, Y., & Hussain, M. (2020). Role of bank heterogeneity and market structure in transmitting monetary policy via bank lending channel: empirical evidence from Chinese banking sector. *Post-Communist Economies*, 32(8), 1038-1061.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2006). Bank supervision and corruption in lending. *Journal of Monetary Economics*, 53(8), 2131-2163.
- Benston, G. J. (2000). Is government regulation of banks necessary? *Journal of Financial Services Research*, 18, 185-202.
- Berger, A. N., Klapper, L. F., & Turk-Ariss, R. (2008). Banking structures and financial stability. *Journal of Financial Services Research*.
- Birchler, U. W., & Facchinetti, M. (2007). Can bank supervisors rely on market data? A critical assessment from a Swiss perspective. *Swiss Journal of Economics and Statistics*, 143, 95-132.
- Bliss, R. R., & Flannery, M. J. (2002). Market discipline in the governance of US bank holding companies: Monitoring vs. influencing. *Review of Finance*, 6(3), 361-396.
- Bliss, R. R., & Kaufman, G. G. (2007). US corporate and bank insolvency regimes: a comparison and evaluation. *Virginia Law and Business Review*, 2, 144.
- Bond, P., Goldstein, I., & Prescott, E. S. (2006). Market-based regulation and the informational content of prices. *Market-Based Regulation and the Informational Content of Prices* (December 2006) .
- Brownbridge, M., Kirkpatrick, C., & Maimbo, S. M. (2002). Prudential regulation. *Finance and Development*, 1(1), 1.
- Buiters, W. H. (2008). Central banks and financial crises. Discussion Paper No. 619. Available at <https://eprints.lse.ac.uk/24438/1/dp619.pdf>
- Cainelli, G., Giannini, V., & Iacobucci, D. (2020). Small firms and bank financing in bad times. *Small Business Economics*, 55, 943-953.
- Calomiris, C. W., Flandreau, M., & Laeven, L. (2016). Political foundations of the lender of last resort: a global historical narrative. *Journal of Financial Intermediation*, 28, 48-65.
- Campello, M. (2002). Internal capital markets in financial conglomerates: Evidence from small bank responses to monetary policy. *The Journal of Finance*, 57(6), 2773-2805.
- Castriotta, M., Loi, M., Marku, E., & Naitana, L. (2019). What's in a name? Exploring the conceptual structure of emerging organizations. *Scientometrics*, 118(2), 407-437.
- Chiades, P., & Gambacorta, L. (2004). The Bernanke and Blinder model in an open economy: The Italian case. *German Economic Review*, 5(1), 1-34.
- Chortareas, G. E., Girardone, C., & Ventouri, A.

- (2012). Bank supervision, regulation, and efficiency: Evidence from the European Union. *Journal of Financial Stability*, 8(4), 292-302.
- Covitz, D. M., Hancock, D., & Kwast, M. L. (2004). A reconsideration of the risk sensitivity of US banking organization subordinated debt spreads: A sample selection approach. *Economic Policy Review*, 10(2).
  - Cox, D. (2014). *Handbook of anti-money laundering*. John Wiley & Sons.
  - De Caux, R., McGroarty, F., & Brede, M. (2017). The evolution of risk and bailout strategy in banking systems. *Physica A: Statistical Mechanics and its Applications*, 468, 109-118.
  - Demirgüç-Kunt, A., & Detragiache, E. (1998). *Financial liberalization and financial fragility* (No. 1917). World Bank Publications.
  - Demirgüç-Kunt, A., Kane, E., Karacaovali, B., & Laeven, L. (2008). 11 Deposit Insurance around the World: A Comprehensive Database. *Deposit insurance around the world: Issues of design and implementation*, 363.
  - Diamond, D. W., & Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. *Journal of Political Economy*, 91(3), 401-419.
  - Diamond, D. W., & Rajan, R. G. (2005). Liquidity shortages and banking crises. *The Journal of Finance*, 60(2), 615-647.
  - Eisenbeis, R. A., & Kaufman, G. G. (2008). Cross-border banking and financial stability in the EU. *Journal of Financial Stability*, 4(3), 168-204.
  - Eisenbeis, R. A., & Kaufman, G. G. (2008). Cross-border banking and financial stability in the EU. *Journal of Financial Stability*, 4(3), 168-204.
  - Farhan, A. M., Jaradat, S. A., Ezat, A. N., Hamza, Y., Mahmoud, M. A., Abulaila, M. D., ... & Jaradat, S. S. (2022). The Impact of the Regulatory and Financial Policies of the Central Bank on Commercial Banks. *Journal of Language and Linguistic Studies*, 18(3).
  - Feridun, M., & Güngör, H. (2020). Climate-related prudential risks in the banking sector: A review of the emerging regulatory and supervisory practices. *Sustainability*, 12(13), 5325.
  - Flannery, M. J. (1982). Retail bank deposits as quasi-fixed factors of production. *The American Economic Review*, 72(3), 527-536.
  - Flannery, M. J. (1982). Risk and Capital Adequacy in Commercial Banks. *Journal of Finance*, 37(3), 891-895.
  - Flannery, M. J. (1995). Prudential regulation for banks. In *Financial stability in a changing environment* (pp. 281-328). London: Palgrave Macmillan UK.
  - Flannery, M. J., & Sorescu, S. M. (1996). Evidence of bank market discipline in subordinated debenture yields: 1983–1991. *The Journal of Finance*, 51(4), 1347-1377.
  - Flannery, M. J., Kwan, S. H., & Nimalendran, M. (2004). Market evidence on the opaqueness of banking firms' assets. *Journal of Financial Economics*, 71(3), 419-460.
  - Freixas, X. (2003). 'Crisis Management in Europe', in Kremers, J., Schoenmaker, D., and Wierst, P. (eds.), *Financial Supervision in Europe*, Cheltenham: Edward Elgar, 102–19.
  - Freixas, X., Rochet, J. C., & Parigi, B. M. (2004). The lender of last resort: A twenty-first century approach. *Journal of the European Economic Association*, 2(6), 1085-1115.
  - Furfine, C. (2001). Bank portfolio allocation: The impact of capital requirements, regulatory monitoring, and economic conditions. *Journal of Financial Services Research*, 20(1), 33-56.
  - Furfine, C. H. (2001). Banks as monitors of other banks: Evidence from the overnight federal funds market. *The Journal of Business*, 74(1), 33-57.
  - Gerth, F., & Bian, Y. (2023). The FED's Strategy on a Targets-based Monetary Policy Framework. *Financial Economics Letters*, 2(1), 22-29.
  - Gilbert, R. A. (1990). Market discipline of bank risk:

- Theory and evidence. *Federal Reserve Bank of St. Louis Review*, 72(1), 3-18.
- Godspower-Akpomiemie, E., & Ojah, K. (2021). Market discipline, regulation and banking effectiveness: do measures matter? *Journal of Banking & Finance*, 133, 106249.
  - Gomez-Gonzalez, J. E., Kutan, A., Ojeda-Joya, J. N., & Ortiz, C. (2021). Does the financial structure of banks influence the bank lending channel of monetary policy? Evidence from Colombia. *International Journal of Emerging Markets*, 16(4), 765-785.
  - Goodhart, C. A. E. (2011). The changing role of central banks. *Financial History Review*, 18(2), 135-154.
  - Goodhart, C., & Schoenmaker, D. (2006). Burden sharing in a banking crisis in Europe. *Sveriges Riksbank Economic Review*, (2), 34-57.
  - Gorton, G. B., & Winton, A. (1995). Bank capital regulation in general equilibrium. NBER Working Paper No. 5244. Available at [https://www.nber.org/system/files/working\\_papers/w5244/w5244.pdf](https://www.nber.org/system/files/working_papers/w5244/w5244.pdf)
  - Grochulski, B., & Slivinski, S. (2009). Systemic Risk Regulation and the "Too Big to Fail" Problem, No. 09-07.
  - Grover, A., & Chawla, G. (2022). Antecedents of Employee Experience: A Systematic Review of Literature. *Management Dynamics*, 22(2), 90-100.
  - Guerra, P., & Castelli, M. (2021). Machine learning applied to banking supervision a literature review. *Risks*, 9(7), 136.
  - Gupta, J., & Sardana, V. (2021). Deposit insurance and banking risk in India: Empirical evidence on the role of moral hazard. *Mudra: Journal of Finance and Accounting*, 8(2), 79-94.
  - Holod, D., & Peek, J. (2007). Asymmetric information and liquidity constraints: a new test. *Journal of Banking & Finance*, 31(8), 2425-2451.
  - Hovakimian, A., & Kane, E. J. (2000). Effectiveness of capital regulation at US commercial banks, 1985 to 1994. *Journal of Finance*, 55(1), 451-468.
  - Iannotta, G. (2006). Testing for opaqueness in the European banking industry: evidence from bond credit ratings. *Journal of Financial Services Research*, 30, 287-309.
  - Iddrisu, A. A., & Alagidede, I. P. (2020). Revisiting interest rate and lending channels of monetary policy transmission in the light of theoretical prescriptions. *Central Bank Review*, 20(4), 183-192.
  - Jagtiani, J., Vermilyea, T., & Wall, L. D. (2018). The roles of big data and machine learning in bank supervision. *Forthcoming, Banking Perspectives*.
  - Jalilian, H., Kirkpatrick, C., & Parker, D. (2007). The impact of regulation on economic growth in developing countries: A cross-country analysis. *World development*, 35(1), 87-103.
  - James, C. (1987). Some evidence on the uniqueness of bank loans. *Journal of Financial Economics*, 19(2), 217-235.
  - Kahn, C. M., & Santos, J. A. (2005). Allocating bank regulatory powers: Lender of last resort, deposit insurance and supervision. *European Economic Review*, 49(8), 2107-2136.
  - Kane, E. J. (1989). S&L insurance mess, the: How did it happen?
  - Kane, E. J., & Demirgüç-Kunt, A. (2001). Deposit insurance around the globe: where does it work?
  - Kane, T. J. (2010). The importance of startups in job creation and job destruction. Available at SSRN 1646934 .
  - Kashyap, A. K., & Stein, J. C. (1995, June). The impact of monetary policy on bank balance sheets. In *Carnegie-rochester conference series on public policy* (Vol. 42, pp. 151-195). North-Holland.
  - Kashyap, A. K., & Stein, J. C. (2000). What do a million observations on banks say about the transmission of monetary policy? *American Economic Review*, 90(3), 407-428.
  - Kashyap, A. K., Stein, J. C., & Wilcox, D. W. (1993). Monetary Policy and Credit Conditions: Evidence from the Com. *Notes*, 2, 1-08.

- King, M. (2008). Banking and the Bank of England. *Bank of England Quarterly Bulletin*, Q3.
- Kwan, S. H. (2002, December). The promise and limits of market discipline in banking. Federal Reserve Bank of San Francisco.
- Laeven, L. (2004). The political economy of deposit insurance. *Journal of Financial Services Research*, 26, 201-224.
- Lastra, R., & Campbell, A. (2009). Revisiting the lender of last resort. *Banking & Finance Law Review*.
- Li, C., Wu, K., & Wu, J. (2017). A bibliometric analysis of research on haze during 2000–2016. *Environmental Science and Pollution Research*, 24, 24733-24742.
- Li, S., & Li, X. (2022). Bank competition, regulation, and efficiency: evidence from the Asia-Pacific region. *Asia-Pacific Journal of Accounting & Economics*, 29(3), 715-742.
- Ludvigson, S. (1998). The channel of monetary transmission to demand: evidence from the market for automobile credit. *Journal of Money, Credit and Banking*, 365-383.
- Martinez Peria, M. S., & Schmukler, S. L. (2001). Do depositors punish banks for bad behavior? Market discipline, deposit insurance, and banking crises. *The Journal of Finance*, 56(3), 1029-1051.
- Mishra, A. K. (2023). Payment Banks in India: Review and Research Agenda. *Management Dynamics*, 23(2), Article 5.
- Mishra, A., & Sharma, M. (2023). Artificial Intelligence and its impact on different business functions. *Management Dynamics*, 23(2), Article 6.
- Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: a comparative analysis. *Scientometrics*, 106, 213-228.
- Ngambou Djatche, M. J. (2022). Monetary policy, prudential policy and bank's risk-taking: A literature review. *Journal of Economic Surveys*, 36(5), 1559-1590.
- Nguyen, Q. T. T., Gan, C., & Li, Z. (2019). Bank capital regulation: How do Asian banks respond?. *Pacific-Basin Finance Journal*, 57, 101196.
- Nuyens, H. (2019). How disruptive are FinTech and digital for banks and regulators?. *Journal of risk management in financial institutions*, 12(3), 217-222.
- Ojo, M. (2009). Central bank's role and involvement in bank regulation: Lender of last resort arrangements and the Special Resolution Regime (SRR).
- Peek, J., & Rosengren, E. (1995). Bank regulation and the credit crunch. *Journal of Banking & Finance*, 19(3-4), 679-692.
- Peek, J., & Rosengren, E. S. (2000). Collateral damage: Effects of the Japanese bank crisis on real activity in the United States. *American Economic Review*, 91(1), 30-45.
- Pennacchi, G. (2006). Deposit insurance, bank regulation, and financial system risks. *Journal of Monetary Economics*, 53(1), 1-30.
- Petersen, M. A., & Rajan, R. G. (1995). The effect of credit market competition on lending relationships. *The Quarterly Journal of Economics*, 110(2), 407-443.
- Pop, N. A., & Pelau, C. (2006). Dimensions of relationship marketing in the Romanian bank sector. Case study: BRD Express. *Management & Marketing*, 1(4).
- Portes, R. (2009). Global imbalances. *Macroeconomic Stability and Financial Regulation: Key Issues for the G20*, 19.
- Repullo, R. (2000). Who should act as lender of last resort? An incomplete contracts model. *Journal of Money, Credit and Banking*, 580-605.
- Rochet, J. C. (1992). Capital requirements and the behaviour of commercial banks. *European Economic Review*, 36(5), 1137-1170.
- Sardana, V., & Shukla, A. (2020). Deposit insurance coverage limit: How much is enough? Evidence from India. *Indian Journal of Finance and Banking*, 4(4), 66-83.
- Sardana, V., & Singhania, S. (2022). Fifty years of research in deposit insurance: A bibliometric analysis



- and review. *FIIIB Business Review*, 23197145221116455.
- Sardana, V., & Singhania, S. (2024). **Insuring Deposits, Ensuring Stability: A Critical Evaluation of Six Decades of Deposit Insurance in Indian Banking Sector**, *Journal of Risk Management in Financial Institutions*, 17(2), ahead-of-print.
  - Sardana, V., Mohapatra, A.K., Singhania, S. & Chakrabarti, D. (2024). Changing Dynamics of Banking Landscape: What Do We Know and What Lies Ahead?. *Prabandhan: Indian Journal of Management*, 17(1), 8-23.
  - Saunders, A., & Wilson, B. (1996). Contagious bank runs: evidence from the 1929–1933 period. *Journal of Financial Intermediation*, 5(4), 409-423.
  - Seppi, D. J., Lehar, A., & Strobl, G. (2007). Using Price Information as an Instrument of Market Discipline in Regulating Bank Risk. Available at SSRN 1108627 .
  - Shahin, M. (2022). The impact of long-term riskless asset on ensuring liquidity and preventing banking fragility. *Journal of Economic Studies*, 49(4), 683-698.
  - Singh, A. K., Sardana, V., Singhania, S., Vikram, A., & Attree, A. K. (2022). Impact of board composition on bank performance: evidence from the Indian banking sector. *Prabandhan: Indian Journal of Management*, 15(11), 8-23
  - Slovin, M. B., Sushka, M. E., & Polonchek, J. A. (1993). The value of bank durability: Borrowers as bank stakeholders. *The Journal of Finance*, 48(1), 247-266.
  - Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207-222.
  - VanHoose, D. D. (2011). Systemic risks and macroprudential bank regulation: A critical appraisal. *Networks Financial Institute Policy Brief*, (2011-PB), 04.
  - Walter, J. R. (2019). US bank capital regulation: History and changes since the financial crisis. *Economic Quarterly*, (1Q), 1-40.
  - Walter, T. (2024). Made to measure: how central banks deliver performances of their worth and why unconventional monetary policy is reversing the burden of proof. In *Handbook on Measuring Governance* (pp. 259-272). Edward Elgar Publishing.
  - Wang, T. (2020). Monetary policy instruments. In *The Handbook of China's Financial System* (pp. 63-86). Princeton, NJ: Princeton University Press.
  - Zalutka, K., Pasichnyk, V., Smolinska, N., Grybyk, I., & Antonova, L. (2022). Features of the Impact of Social and Digital Changes on the System of Government Regulation of Banking Activity. *International Journal of Computer Science & Network Security*, 22(4), 217-222.