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Empirical Study on Banking Crisis and its Macroeconomic Impact

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Abstract

The rationale of the present study is to explore the development of banking crisis and identify the reasons along with the consequences including the impact on economy, society, and geopolitical stability. It also presents an insightful overview of the banking crisis in India from 2010 to 2024, contextualizing it within the global financial landscape. An initial local crisis in the western world has percolated to other countries as well without any exception to Indian banking scenario. The study follows a systematic literature review methodology examining the causes and consequences of the banking crisis, the study sheds light on various critical factors. The present study takes a macro view of fiscal crisis followed by banking crisis per se. An effort has been made to highlight the causes of banking crisis and its consequences on growth impact on Indian economy. This study has been done based on existing literature which has formed the basis of theoretical concept formulated for the study. The study primarily has three objectives: To Identify the causes of banking crisis globally, to analyse whether there exists any homogeneity or heterogeneity in the causes and to evaluate its impact on the industrial growth and overall economy. The study has been made both at macro and micro levels taking into cognizance international and national financial institutions which have faced severe fiscal crisis. The paper also endeavours to generalize the theory of bank failure, bank crisis extracted from the available literature. The study found various causes of banking crises along with its impact on various constructs such as customer satisfaction, borrowers demand, bank images, aggressive interest rates, unprecedented deposit outflows

and industrial growth. The evidence in the present paper supports the view that if banking crises exogenously hinder real activity, dependent sectors on external finance underperform during the crises period. The study concludes that potential policy and smart rescue plans are the need of the hour which can go a long way in alleviating the impact of frequent banking crisis.

Key Words: *Banking crisis, global financial landscape, Indian economy, financial stability, macro financial analysis.*

Introduction

Banking crises have been a common phenomenon in global finance, characterized by the rapid deterioration of the banking sector's stability, often leading to significant economic turmoil. A comprehensive understanding of the causes and effects of banking crises is essential for policymakers, economists, and financial institutions to develop strategies that reduce risks and promote sustainable economic growth.

Financial crises can occur in different forms and can have serious impact on both the National and International economy. These crises fall into four main categories: currency crises, sudden stop crises, debt crises, and banking crises (Claessens & Kose, 2013). While any of them can cause major disruptions, this study focuses on banking crises, which are especially damaging because they affect lending, business growth, and overall economic stability.

A banking crisis happens when banks can no longer meet their financial obligations, often due to lack of confidence, rising bad loans, or deeper problems within the financial system. This results in a credit crunch, reducing lending capacity, a slowdown in the businesses, reducing economic growth, and creating further financial instability. These crises can also harm society by affecting people's trust in banks, making it harder for businesses to operate, and even impacting political stability.

Banking crises are not limited to a single country. Often, a crisis that starts in one part of the world can spread to others. For example, the global fiscal crisis of the 2000s affected many countries, including India. India's banking sector faced its own challenges from 2010 to 2024, such as bad loans and liquidity issues that mirrored the global crisis.

This study seeks to explore the development and progression of banking crises and their macroeconomic impact, with a specific focus on the Indian economy from 2010 to 2024. Through a systematic literature review, the paper delves into the causes of banking crises and investigates whether these causes are homogeneous or heterogeneous across different economies. It also evaluates the consequences of banking failures on critical sectors such as industrial growth and customer confidence, as well as on broader macroeconomic variables like inflation, unemployment, and public debt.

The research not only scrutinizes banking crises at the macro level but also analyses micro-level institutional factors that contribute to bank failures. By contextualizing the Indian banking crisis within the broader global financial landscape, this study provides a better understanding of how crises evolve and propagate. Moreover, the findings underscore the importance of initiative-taking policy measures and smart rescue services to reduce the severity and recurrence of banking crises. Through these insights, the paper contributes to the theoretical and practical discourse on financial stability, highlighting the pressing need for robust institutional frameworks to hedge against future crises.

Literature review

The study of banking crises has been explored extensively by various researchers, shedding light on their causes, consequences, and overall impact on economies.

Numerous studies have examined the root causes of banking crises, highlighting various factors based on regional and global contexts. (Ozili, 2023) characterized the 2023 banking crisis in the US and Europe as the most severe since the 2007-2008 financial crisis and attributed it to aggressive interest rate hikes by the US Federal Reserve, which caused significant losses on government bonds held by US banks, leading to deposit outflows and bank collapses. Similarly, (Klomp, 2009) emphasized heterogeneity in crisis causes across 110 countries, identifying high credit growth, negative GDP growth, and rising interest rates as key triggers for banking crises. (Llewellyn, 2002) added that macroeconomic instability combined with weak internal risk management systems significantly contributed to financial instability. (Baron et al., 2023) further examined how large banks, engaging in higher risk-taking, were particularly vulnerable to crises, experiencing greater equity losses despite more stable funding and regulatory rescues. (Uppal, 2011) highlighted that the new private banks improved their performance and became competitive with foreign banks in contrast to the public sector banks. On a different note, (Sun & Ni, 2021) demonstrated that greater bank integration helped reduce insolvency risks, suggesting that greater integration aids in risk diversification and thus improving system stability.

Internal governance failures and inadequate regulatory oversight have also been identified as significant contributors to banking crises. (Barik, 2022) critically analysed the Yes Bank crisis, highlighting governance issues and the lack of effective risk management. The study pointed out that internal risk practices were often fragile and poorly planned, leading to the bank's downfall. Similarly, (Gayathri & Mangaiyarkarasi, 2018) analysed the Punjab National Bank (PNB) scam, which raised concerns about operational practices and auditing processes, critiques the RBI's failure to detect the fraud and calls for enhanced internal processes and oversight mechanisms within banks and regulatory bodies. (Yan, 2023) provided a detailed analysis of the collapses of Silicon Valley Bank (SVB) and Credit Suisse, demonstrating the impact of weak regulatory frameworks and the need for a comprehensive review of prudential policies and rescue plans. These cases illustrate that failures in internal governance and regulatory oversight are pivotal in the occurrence of banking crises.

Banking crises have a profound impact on economic growth, particularly through their effect on customer trust, business financing, and economic shocks. (Skowron & Kristensen, 2012) examined how the recent banking crisis in Poland shifted focus towards the importance of a bank's image in maintaining customer satisfaction and loyalty, highlighting the indirect effect of crises on customer relations. (Chava & Purnanandam, 2011) explored how banking crises limit firms' access to external capital, further propagating economic shocks through the banking system and emphasizing the interconnectedness of global financial markets. (Claessens & Kose, 2013) provided a broader perspective by categorizing financial crises into four types—currency, sudden stop, debt, and banking crises—and emphasized the severe negative effects these crises have on economic activity, often leading to more prolonged recessions than standard economic downturns.

To summarize, the literature highlighted the complex and multi-faceted nature of banking crises, with diverse causes, impacts on different stakeholders, and significant implications for macroeconomic stability and growth. Further, it is also observed that the problem being of an ongoing nature, is under-research and the literature available is scanty in nature. Hence, this area needs further empirical research to highlight the numerous causes and the impacts of banking crisis on the global economy.

Study Objectives

To Identify the causes of global banking crisis.

To analyse homogeneity or heterogeneity existing in the causes.

To evaluate its impact on the industrial growth and overall economy.

Methodology

The study adopts a Systematic Literature Review (SLR) approach to synthesize and analyse existing research on banking crises and their macroeconomic impact. By utilizing secondary data from a broad spectrum of published research, the paper explores the causes of global banking crises, their regional variations, and its effects on industrial growth and macroeconomic stability.

Relevant literature was retrieved from databases like Google Scholar, Emerald Insight, Elsevier ScienceDirect and SpringerLink using relevant keywords such as "Banking crisis," "Global financial landscape," "Indian economy," "Financial stability," and "Macro financial analysis." Additionally, VOSviewer was used to map research trends and identify future areas for study.

This methodological approach facilitates a systematic and structured analysis of extant literature, providing valuable insights into the banking crisis and its macroeconomic implications.

Results of the Systematic Literature Review

The systematic review of key studies provides valuable insights into the causes, effects, and broader implications of banking crises, laying the foundation for a deeper understanding of their impact on industrial growth and macroeconomic stability.

Descriptive Analysis

This research paper conducts a descriptive analysis of 22 previous studies on banking crises. In addition to the literature review, the research studies the 14 international banking crises and 14 national banking crises that occurred between 2010 and 2024. The analysis underscores the interconnectedness of global financial markets, citing events such as the collapse of Silicon Valley Bank and the Credit Suisse crisis in 2023 as prime examples of how regional financial distress can ripple through global economies.

Focusing on the Indian banking sector, the paper investigates pivotal case studies, including the Yes Bank crisis and the Punjab National Bank (PNB) scam. These events reveal systemic issues such as governance deficiencies, regulatory shortcomings, and inadequate risk management frameworks that have severely impacted banking stability. Macroeconomic pressures, such as rising interest rates and insolvency risks, further compounded these crises, highlighting the sector's vulnerabilities.

The analysis concludes with policy recommendations, advocating for stronger regulatory frameworks to mitigate future banking crises. By exploring both specific case studies and broader trends, the research underlines the importance of enhancing governance and oversight mechanisms to strengthen banking systems and foster economic stability globally.

Methodological information

Table.1: Methodology used in the overall sample.

Grouped Methodology	Frequency	Percentage
Secondary data (financial data, news articles, dataset of annual balance sheets of banks)	4	18.18
Regression and Statistical Methods (regression analysis, robustness checks using random effects models, ratio analysis)	3	13.64
Advanced Mathematical Models (principal component analysis (PCA), Merton's (1974) model, Vassalou and Xing's (2004) approach)	3	13.64
Empirical and Qualitative Analysis (includes empirical analysis of data, discourse analysis, questionnaire-based approach)	3	13.64
5W2H Quality Management (5W2H quality management tool)	2	9.09
Logit Models (dynamic logit model, random coefficient logit model)	2	9.09
Rajan and Zingales (1998) methodology	1	4.55
Bayesian estimation method	1	4.55
Historical and Institutional Analysis	1	4.55
Financial Distress Indicators and Policy Indices	1	4.55
Systematic Dating of Crises	1	4.55
Total	22	100%

The methodological framework for this research paper, which analysed 22 previous research papers, reveals several key approaches used in examining banking crises. The most frequently employed methodology include secondary data sources, such as financial data, news articles, and datasets of annual balance sheets of banks, along with Regression and statistical methods like regression analysis and ratio analysis. Advanced mathematical models, including principal component analysis (PCA) and Merton's model, also play a significant role. Empirical and qualitative analysis, such as discourse analysis and questionnaire-based approaches, further enrich the understanding of crisis dynamics.

Additionally, other methods are employed selectively, providing deeper insights into more specific or complex aspects of banking crises. Overall, these diverse methodologies provide a robust framework for understanding the various dimensions of banking crises.

Citation classics

Table 2 provides an overview of the top 10 most-cited papers related to banking crises, representing key contributions to the field. Laeven and Valencia's Systemic Banking Crises Database (2012, 2020) emerges as a citation classic, widely regarded as a foundational dataset for crisis analysis. (Chava & Purnanandam, 2011) influential work explores the effects on bank-dependent borrowers, shedding light on the vulnerabilities of credit markets, which has made it a critical reference for financial researchers. (Claessens & Kose, 2013) offer comprehensive theoretical insights into the types and

implications of financial crises, further solidifying their paper's status as a highly cited reference in the discourse on crisis mechanisms.

Additionally, papers examining macroprudential policies and customer loyalty, reflecting the diverse methodological approaches and perspectives within banking crisis literature. These highly cited works highlight the multidimensional nature of banking crises research, ranging from empirical analysis to policy and behavioral implications, cementing their status as citation classics in the field.

Table.2: Top 10 citations related to Banking Crisis according to Google Scholar

Title	Author	Year	Doi	Total Citations
Systemic Banking Crises Database	Luc Laeven, Fabian Valencia	2012	https://doi.org/10.1057/imfer.2013.12	4123
The effect of banking crisis on bank-dependent borrowers	Sudheer Chava, Amiyatosh Purnanandam	2011	https://doi.org/10.1016/j.jfineco.2010.08.006	941
Financial Crises: Explanations, Types, and Implications	Stijn Claessens and M. Ayhan Kose	2013		790
Systemic Banking Crises Database II	Luc Laeven Fabian Valencia	2020	https://doi.org/10.1057/s41308-020-00107-3	405
An analysis of the causes of recent banking crises	David T. Llewellyn	2010	https://doi.org/10.1080/13518470110071182	168
Causes of Banking Crises Revisited	Jeroen Klomp	2009	https://doi.org/10.1016/j.najef.2009.11.005	142
The financial crisis and Indian banks: Survival of the fittest?	Barry Eichengreen, Poonam Gupta	2013	http://dx.doi.org/10.1016/j.jimonfin.2013.06.022	92
Macroprudential Policies, Economic Growth, and Banking Crises	Mohamed Belkhir, Sami Ben Naceur, Bertrand Candelon, and Jean-Charles Wijnandts	2020	https://doi.org/10.1016/j.ememar.2022.100936	59
The impact of the recent banking crisis on customer loyalty in the banking sector	Lukasz Skowron Kai Kristensen	2012	https://doi.org/10.1108/17542731211270052	53
El Diluvio: The Spanish Banking Crisis, 2008-2012	Tano Santos	2017		33

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International Banking Crisis

The Table summarizes the notable international banking crises from 2010 to 2023, highlighting significant institutions involved and their respective countries, the causes and effects of the crisis:

<i>Year</i>	<i>Name of the Institution</i>	<i>Place</i>	<i>Causes</i>	<i>Effects</i>
2010	Anglo Irish Bank	Ireland	- Excessive property lending	- Nationalized by the Irish government
			- Lack of regulation	- €67.5 billion EU and IMF bailout
			- Exposure to property bubble collapse	
2010	Hypo Alpe-Adria-Bank	Austria	- Aggressive expansion in the Balkans	- Nationalized by the Austrian government
			- Poor lending practices	- Billions in taxpayer losses
			- Political interference	
2011	Dexia Bank	Belgium/France	- Exposure to European sovereign debt	- Nationalized and split up
			- Reliance on short-term borrowing	- Billions in costs to taxpayers
2012	Bankia	Spain	- Exposure to property bubble	- €19 billion bailout
			- Poor governance	- Public unrest
			- Bad loans	
2012	Cyprus Popular Bank (Laiki Bank)	Cyprus	- Heavy exposure to Greek debt	- Shut down; heavy depositor losses
			- Housing bubble	- International bailout
			- Poor risk management	
2014	Banco Espírito Santo	Portugal	- Fraudulent accounting	- €4.9 billion bailout
			- Exposure to bad loans	- Bank restructuring

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			- Risky foreign investments	
2015	Banco Monte dei Paschi di Siena	Italy	- Poor management	- Rescue package from the government
			- Risky derivative trades	- Deepened banking instability
			- Large-scale non-performing loans	
2016	Moza Banco	Mozambique	- High levels of bad loans	- Central bank intervention
			- Internal corruption	- Capital injection for stabilization
			- Exposure to sovereign debt crisis	
2018	Danske Bank	Denmark/Estonia	- Money laundering scandal	- Leadership changes
			- €200 billion illicit funds	- Regulatory scrutiny
			- Significant reputational damage	
2020	Wirecard	Germany	- Massive accounting fraud	- Insolvency
			- Weak regulatory oversight	- Legal investigations
2021	Greensill Capital	Australia/UK	- Overreliance on supply chain financing	- Loss of thousands of jobs
			- Risky lending practices	- Substantial financial losses for investors
			- Weak financial management	
2022	Silicon Valley Bank	USA	- Mismatch between investments and liabilities	- Second-largest bank failure in U.S. history
			- Liquidity issues	- Federal protection for depositors
2023	Credit Suisse	Switzerland	- Scandals and risky investments	- Forced merger with UBS

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			- Poor risk management	- Avoided financial catastrophe
2023	Silvergate Bank	USA	- Reliance on volatile cryptocurrency sector	- Bank run and wind down operations
			- Collapse of major crypto players	- Highlighted banking risks

National Banking Crisis

The Table lists some of the notable banking crises in India during 2010-2024, with the corresponding banks and the causes and effects of the crisis

Year	Bank Name	Causes	Effects
2013	Punjab National Bank	- High NPAs due to poor lending practices	- Government intervention
		- Economic slowdown	- Loss of public confidence
			- Increased regulatory scrutiny
2015	Syndicate Bank	- Poor management	- Restructuring measures initiated
		- High levels of bad debts	- Loss of customer deposits
		- Aggressive lending	- Increased provisioning for bad loans
2016	Bank of Maharashtra	- High levels of bad debts	- Capital infusion from the government
		- Poor management	- Decline in stock prices
		- High NPAs	- Workforce restructuring
2018	ICICI Bank	- Corporate governance issues	- Leadership changes
		- Misreporting of NPAs	- Significant loss of investor trust
		- High exposure to stressed assets	- Increased regulatory oversight
2019	Yes Bank	- Heavy exposure to real estate	- Moratorium imposed
		- Corporate defaults	- SBI-led bailout
		- Inadequate risk assessment	- Loss of depositor confidence
			- Restructuring of operations

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2020	Lakshmi Vilas Bank	- Poor financial health	- Merger with DBS Bank India
		- Poor management	- Job losses
		- High NPAs	- Reduction in branch network
			- Regulatory scrutiny
2020	Reliance Capital	- High levels of debt	- Insolvency proceedings
		- Poor asset management	- Asset sales
		- Failure of subsidiaries	- Loss of market confidence
2021	CRED (Non-Banking Finance Co.)	- Aggressive lending	- Regulatory scrutiny
		- Lack of regulation	- Loss of investor confidence
		- Exposure to risky sectors	- Tighter lending norms introduced
2022	Karur Vysya Bank	- Rising NPAs due to economic downturn	- Increased provisioning for bad loans
		- Inefficient recovery processes	- Decline in profitability
			- Restructuring efforts
2022	Indian Overseas Bank	- Legacy issues	- Re-capitalization by the government
		- Slow asset recovery	- Restructuring of operations
		- Ineffective credit risk management	- Decline in market share
2023	Axis Bank	- Increasing levels of bad debts	- Focus on improving asset quality
		- Market volatility	- Restructuring plans
		- High exposure to corporate debt	- Change in credit policies
2023	Central Bank of India	- Poor credit management	- Calls for government support
		- High levels of NPAs	- Decline in stock performance
		- Inefficiencies in operations	- Regulatory intervention
2024	State Bank of India	- Global economic downturn affecting loan recovery	- Strategic planning for crisis management

2024	HDFC Bank	- Rising inflation	- Increased focus on risk management
			- Operational adjustments
		- Technical issues	- Temporary reputational damage
		- Rapid growth in loans without adequate assessment	- Increased regulatory scrutiny
			- Operational adjustments

The identification of these crises provides a comprehensive overview of the banking sector's vulnerabilities both internationally and nationally. The data reveals a pattern of crises that underscores systemic risks and highlights the importance of understanding the underlying causes.

Furthermore, the year-wise distribution of notable Banking crises taken for the study can be visually represented through a bar chart, showcasing trends and frequency over the years.

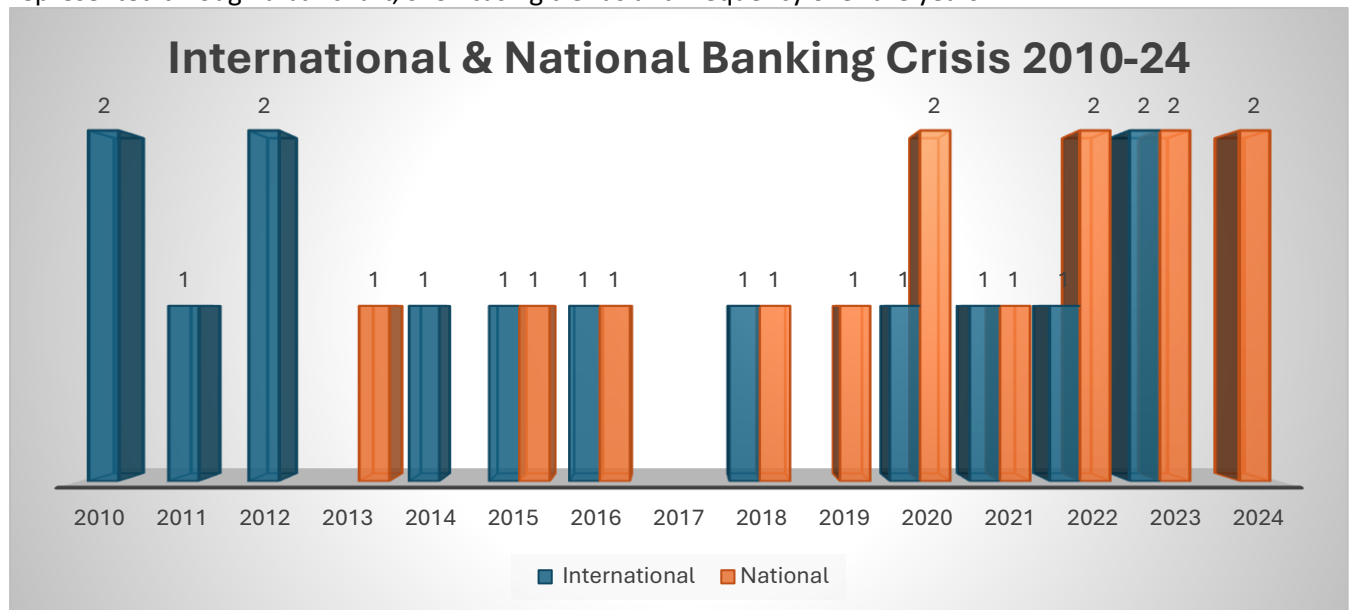


Fig.1: International and National Banking Crisis over the time frame 2010-2024

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Homogeneity in Causes of International and National Banking Crises (2010-2024)

Cause	International Occurrence	National Occurrence	Total Frequency
Poor management and governance	6	6	12
High Non-Performing Assets (NPAs)	3	9	12
Excessive risk-taking/expansion	5	4	9
Weak financial management	2	6	8
Economic downturn/recession	3	3	6
Aggressive lending	2	3	5
Exposure to property/real estate	3	2	5
Political influence	1	3	4
Liquidity issues	3	1	4

The Table reflects a significant overlap in the causes of international and national banking crises from 2010 to 2024, with both categories highlighting poor management and governance, high levels of Non-Performing Assets (NPAs), and excessive risk-taking as key issues. Additionally, weak financial management, aggressive lending practices, and political influence are critical factors, particularly in national contexts. Liquidity issues are also noted as a concern globally. This synthesis highlights the multifaceted nature of banking crises and emphasizes the necessity for robust governance and prudent financial practices to mitigate risks in both international and national settings.

Heterogeneity in the causes

<i>National</i>	<i>International</i>
Rising inflation	Excessive property lending
Rising NPAs due to economic impact of COVID-19	Bubble collapse
Technical glitches	Reliance on short-term borrowing.
Economic slowdown	Investments in risky foreign ventures.
	Mismatch between long-term investments in government bonds and short-term deposit liabilities
	Money laundering scandal

The heterogeneity in the causes of international and national banking crises reveals distinct factors that contribute to each type of crisis. International banking crises often stem from broader systemic issues, such as money laundering scandals, excessive property lending, speculative bubbles, and risky foreign investments showcasing the complexities of global finance. In contrast, national banking crises

frequently arise from domestic factors like high NPAs, rising inflation, poor credit management, technical glitches, and economic slowdowns reflecting the unique economic and regulatory landscapes of individual countries. This divergence underscores the importance of tailored regulatory frameworks and intervention strategies to address the specific vulnerabilities in each banking environment.

Homogeneity in the impact of International and National Banking Crises (2010-2024)

<i>Impact</i>	<i>International Occurrence</i>	<i>National Occurrence</i>	<i>Total Frequency</i>
Leadership changes	7	8	15
Regulatory oversight	7	8	15
Reputation damage	6	6	12
Government intervention	6	7	13
Merger and restructuring	5	6	11
Financial losses	6	7	13

The Table presents a comprehensive overview of the impacts of national and international banking crises, with leadership changes and regulatory oversight being the most common outcomes. This indicates that effective management and governance are crucial during crises. Additionally, government intervention and financial losses highlight the serious repercussions on national economies and international financial systems. The consistency of these impacts underscores the interconnectedness of global banking, emphasizing the need for strong regulatory frameworks and collaborative strategies to mitigate risks and enhance resilience in the banking sector.

Heterogeneity in the impact

<i>National Impact</i>	<i>International Impact</i>
Public unrest	Loss of public confidence
Insolvency proceedings	Multiple legal investigations
National capital infusion	International bailout
Loss of market confidence	Investor losses and shutdown
	Decline in consumer trust
	Reputational damage

The Table outlines the distinct impacts of national and international banking crises. International crises often lead to public confidence loss, legal investigations, and bailouts, reflecting the complexities of global financial interdependencies. In contrast, national crises result in public unrest, insolvency proceedings, and market confidence loss, affecting local economies. Recognizing these differences is essential for creating targeted strategies to mitigate the effects in each context.

The analysis of homogeneity and heterogeneity in banking crises reveals key insights into the dynamics of national and international banking systems. While some causes overlap, significant differences exist between the international and national institutions, highlighting the interconnected nature of banking crises, offering valuable perspectives for future risk management and regulatory frameworks. Recognizing shared vulnerabilities and distinct triggers aids in developing better risk management and regulatory strategies, equipping policymakers, and institutions to effectively mitigate future crises.

Impact on Industrial Growth and Overall, Economy

This research synthesizes evidence from key studies to examine how disruptions in the banking sector influence credit availability, customer trust, and the functioning of critical industries, affecting industrial growth and the overall economy.

Impact of the Yes Bank Crisis:

(Barik, 2022) noted that the crisis fostered mistrust in digital payments, adversely affecting industries dependent on digital transactions. It led to a decline in investor confidence, limiting access to capital for credit-dependent businesses. The mutual fund sector experienced substantial losses from exposure to Yes Bank's debt instruments, constraining industrial financing. Additionally, the Reserve Bank of India's increased regulatory oversight resulted in stricter regulations and reduced credit availability. This crisis also damaged India's global reputation, impacting foreign investment inflows and hindering economic recovery and industrial growth.

Impact of the PNB Scam:

(Gayathri & Mangaiyarkarasi, 2018) analysed the Punjab National Bank (PNB) scam and its broader consequences. The scam caused a significant downturn in the stock market, particularly impacting public sector banks, and resulted in a credit rating downgrade for PNB. LIC faced substantial financial losses, while jewellery stocks plummeted due to their involvement in the fraud. The scam exposed governance failures and eroded public trust and investor confidence in the banking sector.

Capital Frictions and Industrial Productivity:

(Chava & Purnanandam, 2011) demonstrated that during banking crises, firms face significant challenges in raising external capital, which adversely affects firm operations and industrial productivity. The restricted access to credit in crisis periods propagates economic shocks, particularly in industries heavily dependent on external financing

Customer Trust and Lending Capacity:

The impact of banking crises on industrial growth can also be observed through shifts in customer behavior. (Skowron & Kristensen, 2012) highlighted that banking crises shift focus from traditional customer service to maintaining a positive institutional image. The erosion of customer trust during crises leads to reduced deposits and diminished lending capacity, particularly affecting credit-dependent sectors, thereby slowing down industrial growth as banks tighten lending.

Interconnected Nature of Financial Crises and Industrial Output:

(Claessens & Kose, 2013) identified that banking crises often overlap with other financial crises, resulting in prolonged recessions and severe disruptions in industrial output and economic recovery. The interconnectedness of these crises amplifies their impact on industries, especially in emerging economies.

Summarize, the Yes Bank crisis and the PNB scam exemplify how banking crises can significantly affect national financial stability, leading to a loss of trust in digital payments and a downturn in the stock market. Furthermore, the effects of banking crises extend beyond the financial sector, impacting customer satisfaction, borrower confidence, and institutional reputation, all of which collectively influence industrial growth and the broader economy.

Findings

Based on the analysis on banking crises and its macroeconomic impact, the following findings emerge:

Identification of Causes of Global Banking Crises

Bank crisis and the Punjab National Bank (PNB) scam are key examples of how inadequate oversight and systemic governance issues destabilized banking institutions.

Homogeneity and Heterogeneity in Causes

While certain causes of banking crises, such as regulatory weaknesses and economic shocks, were found to be common across different regions, the study also noted heterogeneity in the specific triggers and impacts of these crises. For instance, the Indian banking sector faced unique challenges, such as rising interest rates and specific governance issues, which differed from those observed in Western banking systems.

The literature review indicated that the interconnectedness of global financial markets means that crises in one region can have far-reaching effects, demonstrating both homogeneity in underlying vulnerabilities and heterogeneity in regional responses.

Impact on Industrial Growth and Overall, Economy

The study reveals that banking crises exert significant adverse effects on economic growth, particularly through their impact on customer trust and business financing. The literature highlighted that crises often lead to reduced access to external capital for firms, which can exacerbate economic downturns.

The findings underscore that banking crises disrupt financial systems and precipitate extended recessions, affecting macroeconomic stability and industrial growth. The analysis of case studies, such as the Yes Bank crisis, illustrated how governance failures can hinder economic recovery and growth.

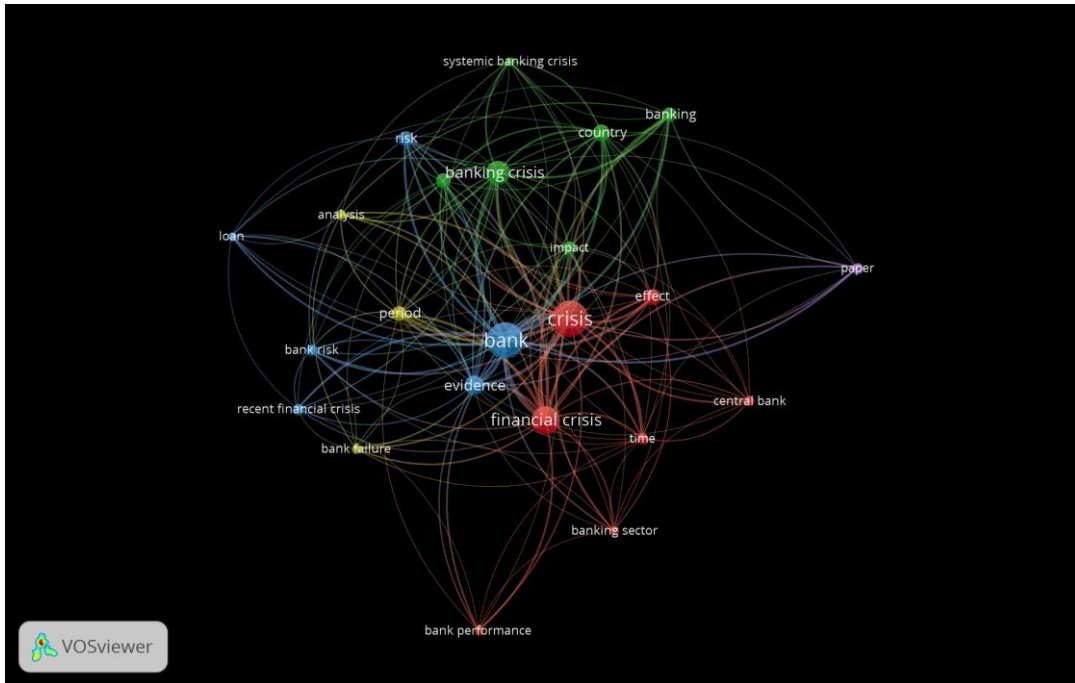
Regulatory Failures and Recommendations

Both global and Indian banking crises reveal critical regulatory failures, particularly in terms of inadequate risk oversight, governance failures, and insufficient macroprudential measures.

Policy Recommendations: Mitigate future crises, robust governance structures, stricter regulatory oversight, and enhanced macroprudential policies are essential. The analysis recommends focusing on improving transparency, reducing NPAs, and strengthening financial supervision.

Future Research Scope

The VOSviewer network diagram visualizes the relationship and connections among key themes and concepts derived from a bibliometric analysis of 150 research papers on 'banking crises', highlighting the intricate interplay between factors such as financial performance, systemic risk, and the roles of banks and central banks in shaping crisis outcomes.



The analysis of homogeneity and heterogeneity in the causes and impacts of banking crises has illuminated various critical insights. However, numerous avenues remain for future exploration that can further enrich our understanding of this complex field. Below are ten potential research directions:

Systemic Risk Assessment: Research could focus on developing advanced metrics for assessing systemic risk within banking systems, considering interconnectedness and vulnerabilities highlighted in the network diagram.

Role of Central Banks: Examine the evolving roles of central banks during banking crises, particularly in crisis management and monetary policy responses, to inform future regulatory frameworks.

Impact of Regulatory Changes: Assess the effectiveness of recent regulatory changes on bank stability and risk management practices to understand their long-term implications on the banking sector and identifying gaps that require reforms or new approaches.

Cross-Country Comparisons: Conduct comparative studies of banking crises across different countries to identify unique vulnerabilities and resilience factors that influence crisis outcomes.

Technological Influences: Investigate the impact of fintech and digital banking on traditional banking stability and the potential risks introduced by technological innovations.

These points represent a diverse array of potential research avenues, reflecting the interconnected nature of the banking crisis themes evident in the network diagram.

Conclusion

In conclusion, this study has provided a comprehensive analysis of the causes and impacts of banking crises, contributing valuable insights to the discourse on financial stability. The findings underscore the importance of robust regulatory frameworks and proactive policy measures to mitigate the risks associated with banking crises.

The identification of both universal and region-specific causes of banking crises across different regions highlights the need for tailored approaches to regulatory oversight and crisis management. Furthermore, the significant impact of banking crises on economic growth and stability emphasizes the urgency for policymakers to prioritize financial resilience.

Future research should prioritize the development of advanced metrics to assess systemic risk and exploring the intricate relationships between banking stability and macroeconomic performance. By addressing these areas, a more comprehensive understanding of banking crises and better prepare for future challenges in the global financial landscape.

Limitations

The research is constrained by the availability of recent data, relying heavily on secondary sources such as public reports and academic literature. It may not fully capture external factors influencing individual banking failures, and the rapidly evolving banking sector could lead to certain post-2024 events being overlooked. Future research could expand by incorporating more recent case studies and deeper analysis of emerging risks such as digital currencies and climate-related financial risks.

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