

Critical Evaluation of Management of NPA/NPL in Emerging and Advanced Economies: a Study in Context of India

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Research Paper

Abstract

Introduction- In a financial system-based economy, the banking system's performance and sound health are vital for developing the economy as financial intermediaries. After the global economic crisis, the financial system of advanced and emerging economies has suffered a growing volume of Nonperforming Assets (NPA) or Nonperforming Loans (NPL). Purpose- This paper explores the present status and management of NPA/NPL in advanced and emerging economies. In line with the international level in different nations of NPA/NPL's the performance of the Indian banking system was evaluated. Research Methodology- Yearly time series data from 2011 to 2018 has been employed of 21 diverse nations, eleven are developed, and ten are developing. For picking the countries to compare and discover the measures to lower down the NPL, Malaysia, the US and Canada are chosen based on average performance and Compound Annual Growth Rate (CAGR). Findings- India's performance in NPA of the Banks has been very critical, which creates an urge for other financial sector reforms. Originality/Value- Data is has been mainly collected from the official websites of the Central Banks of various nations, thus it covers a wide countries group.

Keywords

NPA, NPL, Banking, Developed Nations, Developing Nations, Financial management.

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Gelişen ve Gelişmiş Ekonomilerde NPA/NPL Yönetiminin Eleştirel Değerlendirmesi: Hindistan Bağlamında Bir Çalışma

Araştırma Makalesi

Öz

Giriş- Finansal sistem temelli bir ekonomide, bankacılık sisteminin performansı ve sağlıklı olması, ekonominin gelişmesi için hayati önem taşımaktadır. Küresel ekonomik krizden sonra, gelişmiş ve gelişmekte olan ekonomilerin finansal sistemi, artan miktarda donuk varlıklar (NPA) veya donuk krediler (NPL) den zarar görmüştür. Amaç- Bu makale, gelişmiş ve gelişmekte olan ekonomilerde NPA/NPL'nin mevcut durumunu ve yönetimini araştırmaktadır. NPA / NPL'lerin farklı ülkelerdeki uluslararası seviyeye uygun olarak Hindistan bankacılık sisteminin performansı değerlendirilmiştir. Araştırma Metodolojisi – Çalışmada 2011'den 2018'e kadar on biri gelişmiş, on tanesi gelişmekte olan 21 farklı ülkeye ait yıllık zaman serisi verileri kullanılmıştır. Karşılaştırılacak ülkeleri seçmek ve takipteki kredileri düşürmeye yönelik önlemleri keşfetmek için Malezya, ABD ve Kanada ortalama performans ve kümülatif yıllık büyüme oranına göre seçilmiştir. Bulgular- Hindistan bankalarının NPA performansı diğer finansal sektör reformları için önemli baskı yaratmaktadır. Özgünlük/Değer- Veriler ağırlıklı olarak çeşitli ülkelerin Merkez Bankalarının resmi web sitelerinden toplanmıştır, dolayısıyla çalışma geniş bir ülke grubunu kapsamaktadır.

Anahtar Kelimeler

NPA, NPL, Bankacılık, Gelişmiş Ülkeler, Gelişmekte Olan Ülkeler, Finansal yönetim.

Makale Hakkında

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Introduction

India's banking structure is the principal constituent of the economic system and is recognized as the primary monetary policy channel, credit service, moreover payment system. The banking system's absolute well-being in asset quality is a crucial prerequisite for the economy's stability and development. The NPA/NPL's is a critical indicator to evaluate the banking sector's performance and productivity. The management of NPA s explores asset quality, management of credit risks, and practical financial resources utilization. The global marketplace has been scattering force in a depression that begins from the 1st quarter of 2018 in an atmosphere degraded by the acceleration in business stress, high economic vulnerabilities, geopolitical contingencies, and allied policy uncertainties.

Throughout the world advanced and emerging market economies worldwide and across developed and evolving market financial system equally, the monetary system has become accommodative to mitigate the depression and prevent this from further slowdown. Accessible fiscal space is being used to maintain demand, but with the stark acknowledgment, space for policy is either limited or exhausted (IMF 2019).

Debt levels were raised with financial fragility in advanced and emerging-market economies as bank lending was moderated. In addition to declining demand, it has provided risk aversion. Banks and financial institutions, however, remained well-funded, and their performance remained subdued. While growth depression is synchronized in over 90 percent of the global economy and advanced economies, it is more pronounced. The increasing slackness has been compounded by institutional vulnerabilities in the systemic economies, natural disasters, and country-specific causes. When excessive capital uncertainty and asset values have marred the macro-economic scenario in emerging-market economies, international spill overs interfere with nation-specific causes. Some include unsustainable macro-balances, strong inflationary government debt pressure due to currency depreciation amid weak commodity prices. After all, IMF's 2019 global growth forecast has declined to 3 percent in October 2019, the slower rate since the global financial crisis. The WTO further decreases the projection of the amount of foreign trade in 2019 to 1.2%, from 2.6% previously predicted.

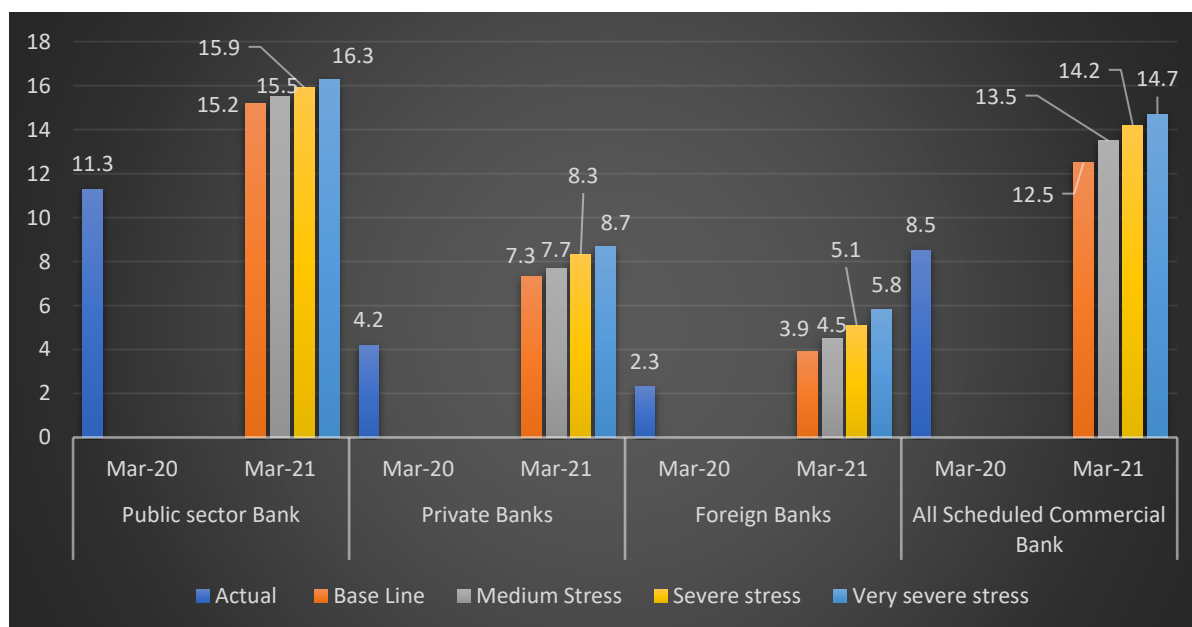


Figure 1- NPA (%), Source: News Indian Express

Reserve Bank of India (RBI) governor Shaktikanta Das admitted that the lending moratorium system suppressed the real stress on Indian banks. In his forerunner to the FSR report, which paints a very dim picture of the Indian banking sector, he warned that banks would remain extraordinarily vigilant and focused, at least for the immediate future. The study said that after a stress test of 53 scheduled commercial banks, the total non-performing assets of the banking sector would grow to 14.7 percent of all loans by March 2021, in a "very bad stress scenario. He added that the total NPA ratio could increase

to 12.5%, also under the baseline scenario. Through March 2020, the full NPA figure had peaked at 8.5%.

1. Literature Review

The problem of NPAs was an important field in which borrowers and policymakers were involved. Several studies have been undertaken to pinpoint the dynamics that lead to the growth of NPAs, steps to address the issue in its early stages, and changes to condense the crutch of NPAs. Many of the experiments in question are chronologically organised. Karunakar et al. (2008) confer the several aspects that raise NPAs, the scale, their impact on Indian banking and proposed actions to regulate curses in the banking industry (2008). Appropriate approaches for credit evaluation and risk control are the secret to addressing NPA development issues. Rajeev and Mahesh (2010) address the topic of NPLs after the international financial crisis in their paper. They propose that a basic understanding of the problem and self-monitoring can contribute significantly to the management of the NPA problem. Autonomous assistance organizations can also play a significant role in loan recovery.

Barge (2012) explores the need for an hour to follow up early on and handle loan funds. The report recommends some measures, such as closer control of the end-use of reserves, report on the borrower's financial background, and helping lenders grow creativity so as not to turn the asset into a non-performing asset. The status of the NPAs of State Bank of India (SBI) and associates and other public sector banks, is being studied in the same manner in 2012. The researcher argues that each bank will create a distinct credit rating agency to determine the solvency of lenders. It also proposes that a group of financial experts will track the NPA issue and supervise it. Shalini (2013) premeditated the roots of NPAs in Indian public sector banks with particular respect to the agrarian segment and proposed solutions for their reduction. Analysis of the numerous problems that Indian farmers are facing shows that banks will take a certain action before the loan is loaned. Many of the steps recommended include prior coverage on farmers' confidence, post-post-sanction review, reminding farmers about the impact of default and the consequences.

Singh (2013) found that such weak loans are a big issue for banks in the public sector, showing a steady increase over the years in the situation of Indian commercial banks with respect concerning is partly attributed to loans to the micro sector and projects to reduce poverty. In his paper, Bhaskaran et al. (2016) compared over ten years (2004-2013), the NPAs of private banks and public sector banks. From their report, it is clear that the private sector banks do more to the amount oAs than those in the public sector. The authors propose that banks will take steps to enforce formal management schemes on NPAs where NPAs are priority prevention. Thomas and Vyas (2016) recommended two steps, preventive and correction, in a recent review of Indian banks' loan recovery strategy. The report further addresses different steps to address non-performing loans – constitutionally, regulatory, and lawfully. Singh (2016) also found that the issue for public banks is more serious than private sector banks in another recent NPA and recovery status report.

Singh (2016) and Komoni et al (2022) analysis highlights the need for robust credit policies for accelerated loan recovery. Meher (2017) analyzed the effect of the Government decision Notebandi on the NPA of Indian banks in the post-demonetization period. The scientist found the incident in the banking industry, both positive and negative. The two bank-crash incidents since liberalization – one after the last 1990s and the other after the 2008 monetary crisis, which brought in the NPA problem – have been contrasted by Sengupta and Vardhan (2017). The authors agree that good governance, constructive banking laws, and a sound legal system for NPAs will solve the NPAs problem. On the other hand, the financial situation will be exacerbated by regulatory forbearance. The rate of NPA in the banking segment in India and the reasons for the increase in NPAs were investigated by Mittal and Suneja (2017). While the government has taken a range of measures to mitigate the NPAs problem, bankers should also be vigilant in enforcing well-structured NPAs management policies. Upon evaluating the return on investment of a new project and the credit interest of buyers, the credit will be approved.

The factors responsible for rising NPAs and their implications for bank operations are discussed by Sahni and Seth (2017). The scientists have listed many preventive and curative management of NPAs.

They indicated that the borrower's creditworthiness should be carefully checked to ensure that the debts are easily repaid. To stop NPAs, Mishra and Pawaskar (2017) proposed that banks have strong credit appraisal systems. They suggest that if a clear regulatory mechanism is in place to help banks in debt restructuring, the question of NPAs may be resolved. The position of the gross NPAs and net NPAs in private sector banks and public sector banks have been examined in Banerjee et al. (2018) to analyze their impact on banks' asset quality. The key causes for NPAs are intentional defaults on loans, weak credit management systems, and loan authorization without considering the borrowers' risk-bearing capability. The banks will stress the policy is best conceived and efficiently executed. The government could contribute to raising the amount of NPAs by strict regularising his post, Mukhopadhyay (2018) discussed finding solutions to the NPA problems in India. To order to address the NPA issues, RBI should not be consistent with a common model; rather, it is appropriate to follow a versatile approach on a case-by-case basis for each bank to question. Kumar (2018) found that the income and liquidity of the Banking Sector banking sector's n her analysis were the issue of NPAs is successfully handled, other microeconomic issues can be decreased such as inflation, unemployment, the balance of payments imbalances, the capital the market, and so the reputation of Indian banks on the foreign market can be strengthened.

The importance of the bank sector has been highlighted by Sharma (2018). This paper addresses the pressure on banks, in particular for public sector banks due to rising NPAs. The Analyst carries forth a sequence of proactive steps to reduce NPAs. Viable and timely enforcement of regulatory requirements could overlay the way in India for a thriving financial sector. Dey (2018) thriving urn around the side of Indian commercial banks' bad loans in a very recent research report. In contrast to the recovery by locomotive adults and SARFASEI, the author finds the function of DRTs much better. In an insightful review, Kumar et al. (2018) investigate the key causes of NPAs. The key explanations for this are factory illness, shifts in political policy, bad credit performance, intentional defaults, and defaults. This also noted that the total NPA ratio could increase to 12.5 percent, even under the simple scenario. In March 2020, the full NPA figure was 8.5%.

2. Data and Methodology

2.1 Application of tools

1. Average
2. ANOVA
3. Tukey's Honest Significant Difference test- A post-hoc test

2.2 Objectives of the Study

1. To study the exposure of risk of NPA in Indian banking sector.
2. To analyse the risk measurement and management of Indian banks NPA,s with developing (China and Malaysia) and developed nations (Canada).
3. To study the mechanism to mitigate the non-performing loans.

2.3 Hypothesis of the Study

Null Hypothesis

H₀₁- There is no significant relation between India and China (Developing) in context of NPL percentage.

H₀₂- There is no significant relation between performance of India and (Developed nation) Canada in terms of NPL percentage.

H₀₃- There is no significant relation between performance of India and Malaysia (Developing) in terms of NPL percentage.

Alternate Hypothesis

H_{A1}- There is a significant relation between India and China (Developing) in context of NPL percentage.

H_{A2}- There is a significant relation between performance of India and (Developed nation) Canada in terms of NPL percentage.

H_{A3}- There is a significant relation between performance of India and Malaysia (Developing) in terms of NPL percentage.

2.4 Data Analytics

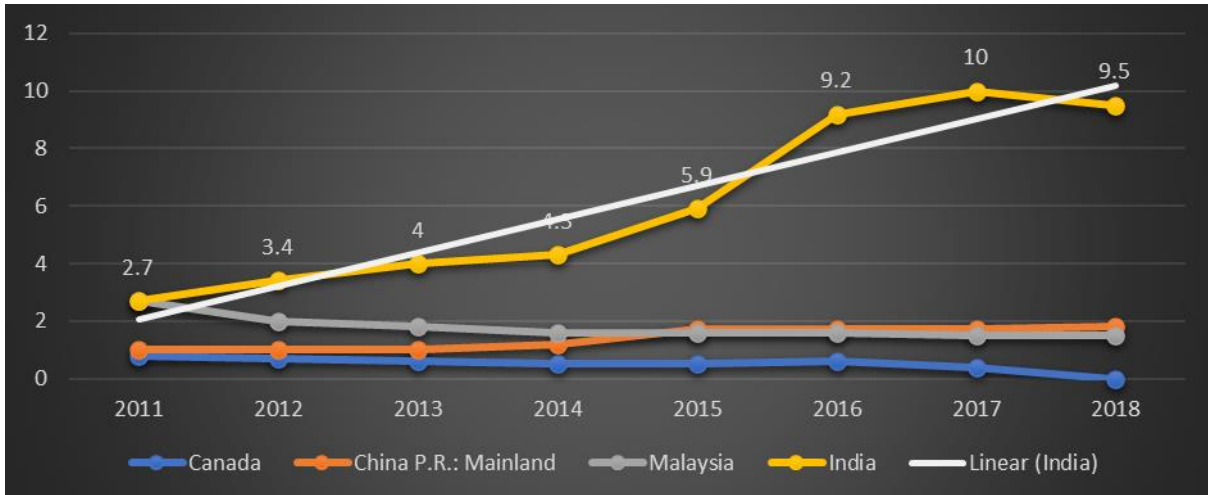


Figure 2- Comparing India in NPL (%), Source: Financial Soundness Indicators, IMF and Supervisory Returns (global operations), RBI.

Figure 2 gives the comparative analysis of India with different countries which shows the scope of improvement in Indian banking sector by reducing the level of nonperforming assets. From the linear line which represents an upward trend in non performing assets of India, interpretation of rise in bad loans in Indian economies can be made. This data creates and urge for reforms in banking sector for the betterment of nation as a whole.

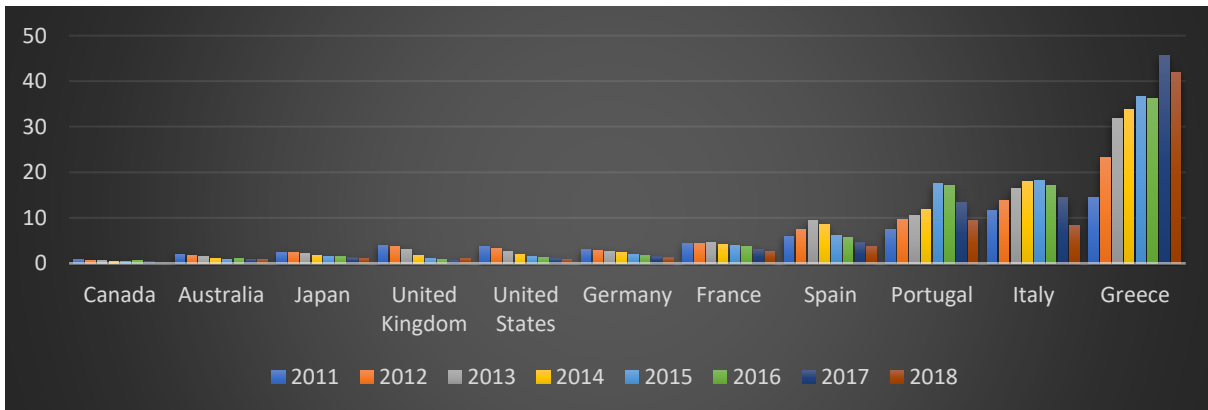


Figure 3- NPL (%) in Developed Nation, Source: Financial Soundness Indicators, IMF and Supervisory Returns (global operations), RBI.

Figure 3 portrays a comparative analysis of prominent advanced economies of the world in connection to NPA from the year 2011 to 2018. It is evident from the figure that Canada is being able to watch the NPA most efficiently as compared to other nations. In contrast, Greece is the country that shows a higher percentage of NPA amongst advanced economies. Therefore, for extracting learnings from any country, we must see what Canada is doing for keeping it's NPA to the minimum level. The forthcoming segments of the research will settle by reaping learnings out of the policy implementation of Canada to dwindle NPA.

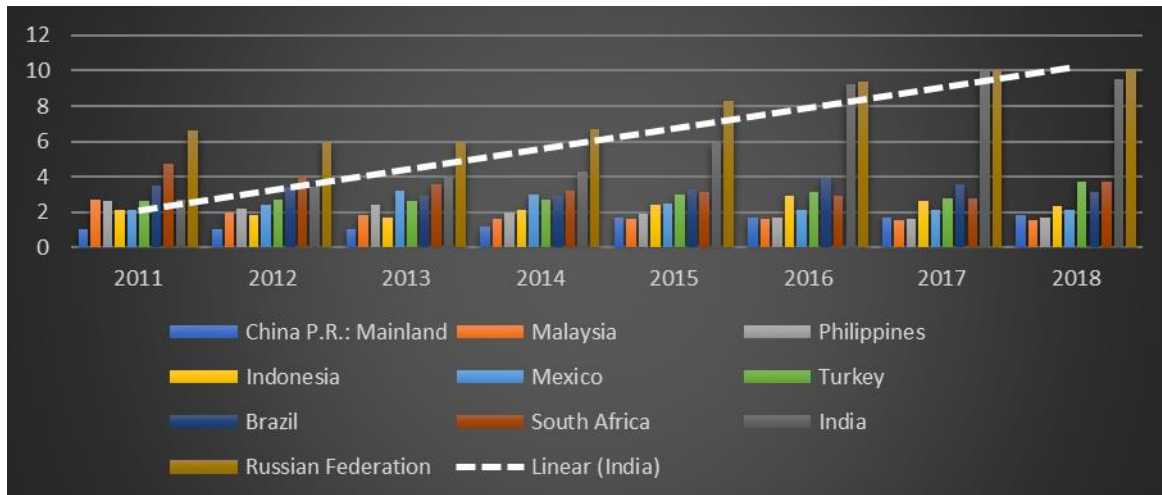


Figure 4- NPL (%) in Developing Nation, Source: Financial Soundness Indicators, IMF and Supervisory Returns (global operations), RBI.

Figure 4 shows the time-series data from the year 2011 to 2018 of major developing economies of NPL. The linear line in the diagram shows that India's NPA has been showing an increasing trend with time. It is a situation of significant concern because NPL does impact banks' performance and the whole nation's functioning. It creates an urge for other Banking sector reforms in India, which act as a solution for this problem.

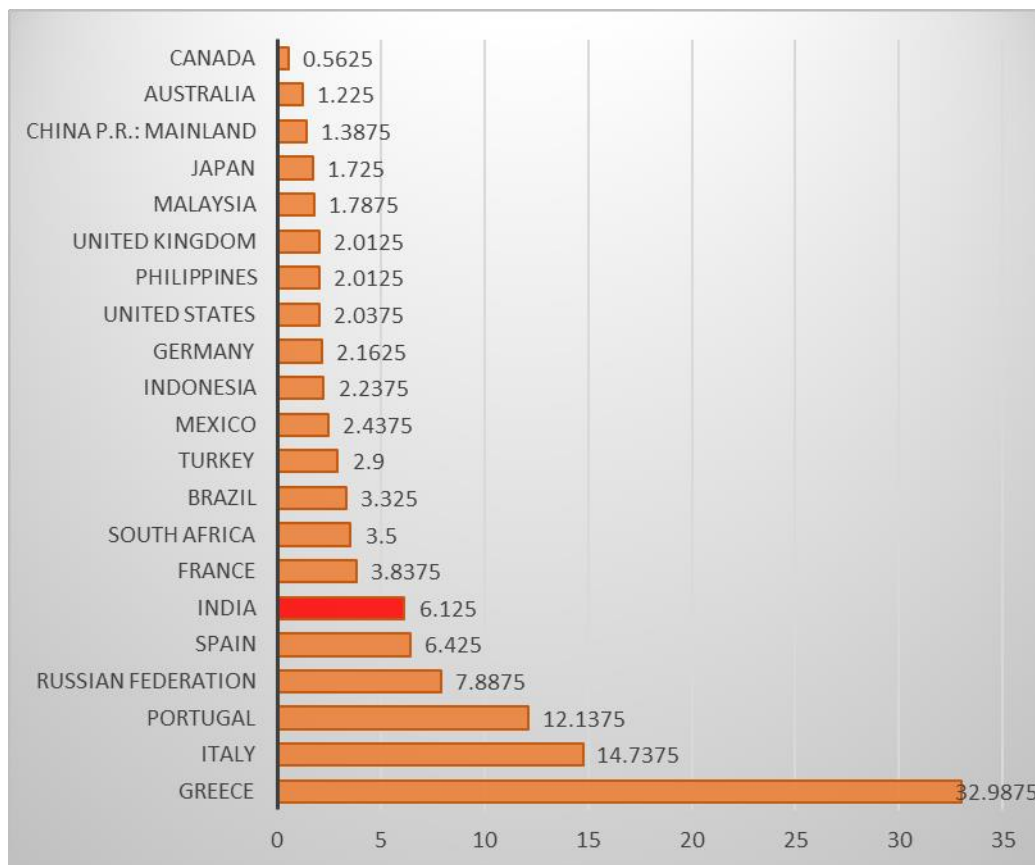


Figure 5- Average NPL (%) of major nations of world, Source: Author's Calculation

Figure-5 clearly shows India's position as far as non-performing loans are concerned. The figures mentioned in the above infographic are of average of non-performing loans in the past eight years. India can be seen as a lousy performer, as far as the recovery of loans is concerned. This is a

serious issue because we can observe that many countries are performing better than India. So it wouldn't be wrong to say that we can learn many things from the banking policies of the nations whose performance is better than India's.

The government of India announced that bad loans owned by India's banks rose to 10.36 billion rupees (USD 150.21 billion), comprising more than 86 percent of the overall non-existent development by government lenders. The above diagram clearly shows India's position as far as non-performing loans are concerned. The figures mentioned in the above infographic are off average of non-performing loans in the past eight years. India can be seen as a lousy performer, as far as the recovery of loans is concerned. This is a serious issue because we can observe that many countries are performing better than India. So it would be wrong to say that we can learn many things from the banking policies of the nations whose performance is better than India's.

Presently, twenty-one of the most owned banks by the Government of India, Finance Minister Piyush Goyal, said that there were 8,96 trillion gross nonperforming loans, citing central bank data from the lenders' global activity.

Table 1: Summary of Data

		N	$\sum X$	Mean	$\sum X^2$	Std.Dev.
Treatments	CANADA	7	4.1	0.5857	2.51	0.1345
	CHINA	8	11.1	1.3875	16.35	0.3682
	MALAYSIA	8	14.3	1.7875	26.71	0.4051
	INDIA	8	49	6.125	363.04	2.998
Total		31	78.5	2.532	408.61	2.6447

Source -Author's Calculation

Table 2- F-value calculation

		Source	Between-treatments	Within-treatments	Total
Result Details	SS		144.7067	65.1211	209.8277
	df		3	27	30
	MS		48.2356	2.4119	
			F = 19.99906	p-value= 0	

Source -Author's Calculation

Table 3- Tukey's Honest Significant Difference test- A post-hoc test.

Pairwise Comparisons		$HSD_{.05} = 2.1626$	$Q_{.05} = 3.8701$	$Q_{.01} = 4.8466$
		$HSD_{.01} = 2.7083$		
T₁:T₂	M ₁ = 0.59 M ₂ = 1.39	0.8	Q = 1.43 (p = .74239)	
T₁:T₃	M ₁ = 0.59 M ₃ = 1.79	1.2	Q = 2.15 (p = .43952)	
T₁:T₄	M ₁ = 0.59 M ₄ = 6.13	5.54	Q = 9.91 (p = .00000)	
T₂:T₃	M ₂ = 1.39 M ₃ = 1.79	0.4	Q = 0.72 (p = .95692)	
T₂:T₄	M ₂ = 1.39 M ₄ = 6.13	4.74	Q = 8.48 (p = .00001)	
T₃:T₄	M ₃ = 1.79 M ₄ = 6.13	4.34	Q = 7.76 (p = .00005)	

Source -Author's Calculation

The magnitude of the f-ratio is 19.99906. The p-value is less than .00001. The outcome is considerable at p<.05.

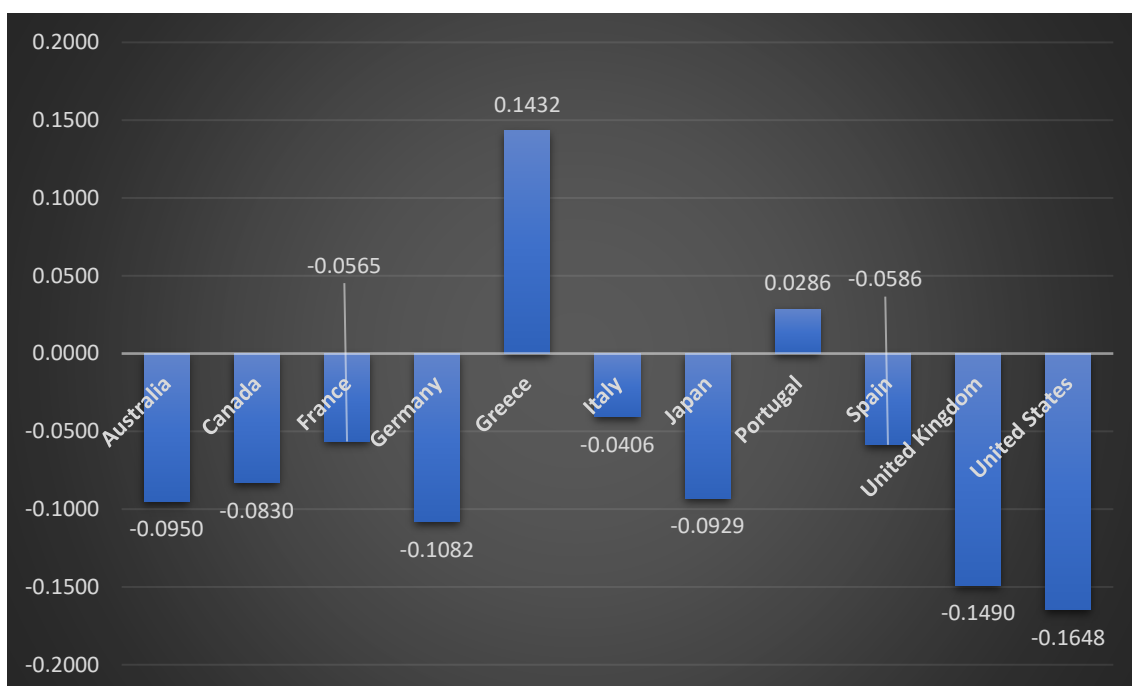


Figure 6- CAGR of NPL(%) of Advanced Nations, Source- Author's Calculation

Figure-6 displays the most prominent advanced nations' compound annual growth rate in terms of NPL(%). The CAGR has been calculated to measure the jump in NPL by the banks of the given nations. It was found that the United States has been most efficient in controlling its NPL, whereas the worst performance has been of Greece.

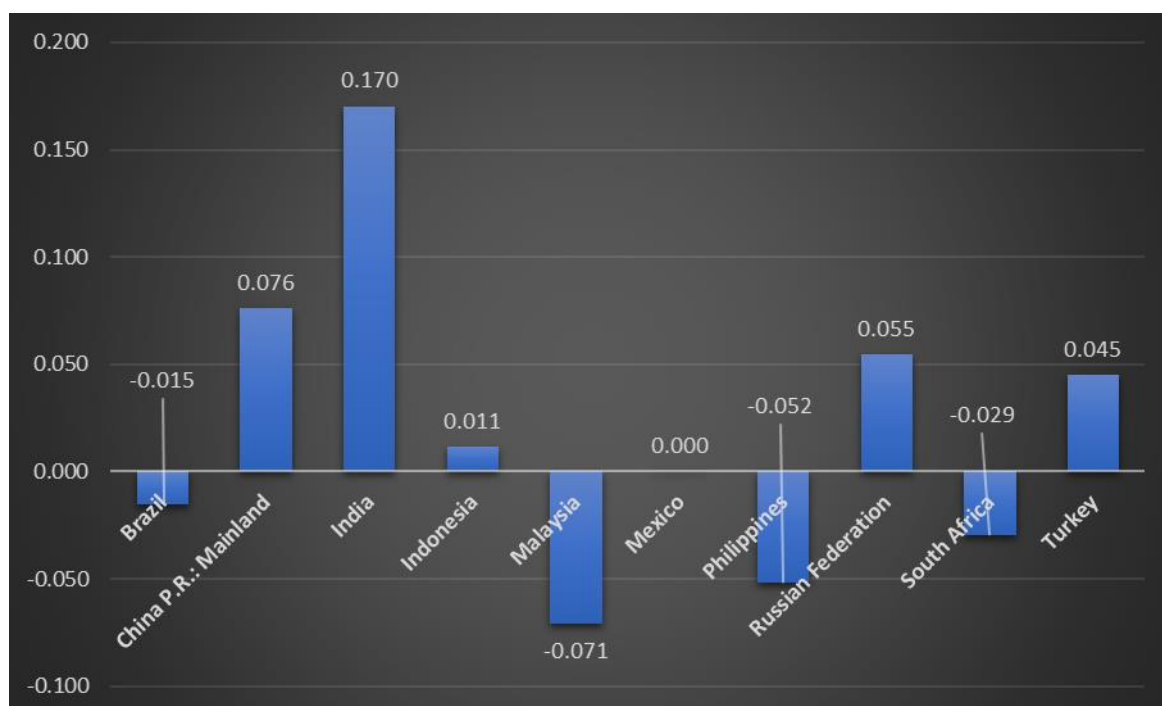


Figure 7- CAGR of NPL(%) of Developing Nations, Source- Author's Calculation

Figure-7 showcases the most notable developing countries' compound annual growth rate in NPL expressions (%). The CAGR has been determined to mark the ascent in NPL by the banks of the

given countries. After the calculations, it was affirmed that Malaysia has been most efficient in checking its NPL, whereas India has the most critical performance.

3. Suggestions

From figure-8, it can be clearly observed that US is doing well in managing its NPA. So it becomes necessary that what US' policies are, which can be a learning for India. Hence in the direction it has been observed that US banks focuses on outsourcing the risk of the organisation and Federal Reserve System also issues regular guidelines for managing the outsourcing risk. There is a tool with the name UITRS, i.e.

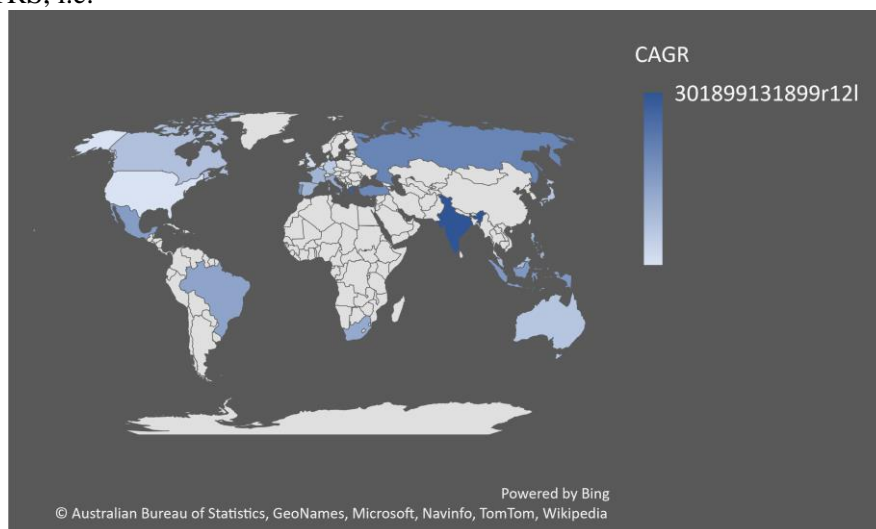


Figure 8- CAGR of NPL(%), Comparative Display of India as a Worst Performing Nation
Source- Author's Calculation

Uniform Interagency Trust Rating System, to consistently assess financial institutions' fiduciary activities' soundness moreover distinguish those needing exceptional supervisory observation. To control the NPA China has brought financial reforms into the economy. Mr. Zhou Xiaochuan, (Governor of the People's Bank of China at the High-level Forum on China's Reform, July 13, 2005) said the aim of the reforms is and strengthen financial institutions to provide quality financial services. It makes sense to dispose of the assets left over from the past, mainly during which corporate management was not independent of governmental administration. Otherwise, disposing of underperforming properties will only shift the liabilities from a "wrong pocket" to the Government's "correct pocket," which would invite public criticism. Secondly, asset management firms were formed for the technical management of non-performing assets. The properties they work with are not healthy assets, nor those listed as questionable or failure. Various strategies for managing non-performing assets and sound assets are needed in terms of preserving and enhancing values. To retrieve the destructive properties, we must find an acceptable balance between quantity and speed. Steps should then be engaged to grow the economy and empower assets to be disposed of at fair rates. This calls for market players to have a substantial budget, a solid financial framework, well-defined ownership and a well-established compensation mechanism. Concerning stimulus, the Government should create a vibrant framework for the retrieval of non-performing assets and set up an appropriate incentive scheme to enable the companies of asset management to make the most effort to recover the assets. Problems will emerge when non-performing assets are disposed of market-based unless one of the above-listed steps is appropriately done.

According to Bill, J. (2019). Smart Collection Strategies That Can Lessen NPA should be adopted. The Indian financial sector is funded by funds not performing (NPAs). Every month, 5-30% (depending on the category) of loan servicing defaults bring hundreds of trillions of dollars at risk. This amounts to 11% NPA at the regional level. The technical collection mechanism will help banks and

NBFCs in reducing anomalies in unsecured and regulated personal loans and improving borrowers' overall experience. According to an E&Y report, 56 percent of Indian banks thought that red flags and early warning signs need to be detected by technology and data analytics. A smart, cognitive software framework can coordinate criminals with agencies across regions automatically. This will boost efficiency and security and assist borrowers with live Dashboards, data interpretation and feedback to track collection activity in real-time. It will also actively track consumer knowledge to create a more robust grain market segmentation, to apply advanced data analytics steps, for example, opinion analysis, and to provide prompt and appropriate customer feedback to the viewer base or recommend a proactive solution for an officer or client.

4. Conclusion and Future Research

After conducting the research and doing relevant data analysis, it was found that the conditions of Indian banks are very critical in terms of NPA. It is a severe issue because NPA is not only a bad sign for the banks, but it also reflects an opposing side of the economy. The linear line in figure-4 is sufficient to reveal that India's NPA is showing a positive trend. Hence it creates an urge for the banking sector reforms. Since India has failed to cope with the rise in NPL, it would be desirable that India derives learnings from the nations' policy implementation that can limit their NPA. This research is an endeavour to do the same. Also, from the review of literature, the seriousness of issue of NPA/NPL can be assessed and India went to same problem before the introduction of IBC- Insolvency Bankruptcy Code. Hence India government after developing learnings through better performing nations in context of controlled NPA has framed a successful policy to address the issue.

NPL is a serious issue because it impacts the profitability of banks and the economic performance of the nation. Future research may look into associating other variables with NPL so that learnings to improve other parameters can be considered. These variables may be ROA, CAR, leverage ratio, etc.

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