

EVALUATING THE NEED FOR BAD BANKS AMID EXISTING ARCS

AUTHOR – MS. KAJAL KAMALKISHORE BANG, STUDENT AT JINDAL GLOBAL LAW SCHOOL.

BEST CITATION – MS. KAJAL KAMALKISHORE BANG, EVALUATING THE NEED FOR BAD BANKS AMID EXISTING ARCS, INDIAN JOURNAL OF LEGAL REVIEW (IJLR), 4 (4) OF 2024, PG. 1012-1019, APIS – 3920 – 0001 & ISSN – 2583-2344.

ABSTRACT

This paper critically examines the need and effectiveness of establishing new government-backed bad banks in India, especially in the context of the existing private-sector-funded Asset Reconstruction Companies (ARCs). The surge in Non-Performing Assets (NPAs) in Indian banks underscores the urgency of finding effective solutions to financial instability. While bad banks might seem like a viable solution to current gaps in NPA management, it is important to note that this concept is not new to India's asset management landscape. The study finds that ARCs already play a significant role in asset recovery, but they are hindered by challenges such as limited turnaround capacity, insufficient capital, and reliance on private funding, which diminishes their effectiveness. Although bad banks could help address some of these challenges, such as providing government support and facilitating the acquisition of larger NPAs, they do not tackle the root causes of the issues within the banking system. Concerns arise regarding accountability, the use of taxpayer funds, and the potential complacency of commercial banks, which could weaken lending standards. Without strong oversight, including mandatory forensic audits, the creation of bad banks could repeat past mistakes and perpetuate systemic inefficiencies. Therefore, this paper advocates for strengthening the capabilities of existing ARCs rather than creating new institutions. The study suggests exploring alternative solutions focused on comprehensive auditing, risk management, and operational efficiency. By addressing the core causes of NPAs and fostering a culture of accountability and proactive credit assessment, India can achieve long-term financial stability without burdening taxpayers or compromising the integrity of its banking system.

“If a painkiller fails, don't reach for another of the same kind – sometimes, the solution lies beyond doubling up.”

This means that if one remedy is failing and not performing to its full potential, trying something similar but with some variation may not be the best option.

I. Introduction

In any country, the economic progress depends on the smooth functioning of financial institution. Banks are the backbone of every economy ensuring financial stability, credit flow and effective utilization of funds. One such hurdle faced in the process is when the bank faces the problem of “Non-Performing Assets” (NPA). When a loan given by the bank remains

unpaid for either its principal or interest or both beyond a specified period of time, it is labelled as an NPA. This presence of NPA causes operational inefficiency ultimately affecting the overall functioning, liquidity and profitability of the bank. It affects the banks competitiveness as it increases the liability of the bank and efforts are diverted from expanding the business to recovery mechanisms for the unpaid amount. It further affects the credibility of the bank and makes the depositors question whether the bank has enough liquidity due to increased NPAs of the bank. Therefore, NPAs not only affects the customers of the bank but ends up hampering the financial stability overall.¹⁵⁴⁷

¹⁵⁴⁷ Gitika Wadhvani, Non-Performing Assets: An Overview, 6 INT'L J.L. MGMT. & HUMAN. 2610 (2023).

When banks face the problem of non-performing assets, the RBI has undertaken a variety of measures to address the stressed asset situation during the previous few years. Flexible Infrastructure Refinancing (5/25 scheme), Strategic Debt Restructuring (SDR), Asset Reconstruction (ARC), Sustainable Structuring of Stressed Assets (S4A), and Asset Quality Review are among the most important (AQR).¹⁵⁴⁸ Initially, the programs focused on deferring amortisations to give firms more time to repay loans. The banks financial situation, however, deteriorated further. Such efforts to reform were unsuccessful in settling loans, which were concentrated in large firms. In light of the same, Mrs. Nirmala Sitharaman, the Union Finance Minister in her budget statement on February 1, 2021, unveiled the idea of a Bad Bank as an “Asset Reconstruction Company” (ARC) as a strategy to clean up the bank’s books, citing the current stress environment in the Indian economy.

This paper discusses in great detail one such solution of setting up of National Asset Reconstruction Company Limited (NARCL) for aggregation and resolution of NPAs in the banking industry. NARCL is registered with the Reserve Bank of India as an ARC under Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002.¹⁵⁴⁹ The given institutional arrangement is aimed to handle the stressed financial assets of banks and other financial institutions. A bad bank is an institution specifically established to receive bad loans or NPA from a regular bank to clear up their balance sheet, thereby fostering the public confidence in the bank’s health to attract new investment.¹⁵⁵⁰ The stressed funds are transferred to the bad bank from a conventional bank or financial institution, or a group of banks or financial institutions. The

overarching goal is to boost the value of core activities while reducing NPAs and thus improving the stability of the financial system.¹⁵⁵¹

II. Thesis Statement

This paper will critically assess whether establishing new government-backed bad banks is a necessary or effective strategy, given that India already had private-sector-funded ARCs fulfilling a similar role. The study will argue that the concept of a bad bank is neither new nor isolated within the Indian asset management landscape, therefore, this paper examines whether India should introduce a government-funded bad bank, strengthen the capabilities of existing ARCs, or explore alternative solutions to address persistent non-performing assets and improve financial stability.

III. NPA Crisis

Indian banks non-performing assets have risen sharply, from Rs. 40,452 crores in 2007–2008 to Rs. 895,601 crores in 2017–2018, and an estimated Rs. 428,197 crores in 2022–2023. For public-sector banks (PSBs), NPAs have become particularly concerning, totalling Rs. 616,616 crores in 2020–2021, which accounted for 9.1 percent of total outstanding advances (gross NPA ratio).¹⁵⁵²

A. Understanding NPAs and their Economic Implications

NPAs refer to loans or advances issued by a bank for which the borrower has not repaid the principal or interest for more than ninety days.¹⁵⁵³ The NPA crisis has stemmed from a substantial accumulation of bad loans or non-performing assets, which impact banks significantly, as highlighted in the Reserve Bank of India’s 2015 Asset Quality Review. When a borrower fails to repay the loan or interest, banks attempt to recover the funds by confiscating the borrower’s assets, which are

¹⁵⁴⁸ Akash Dixit, Shubham Saini & Abhishek Bhatt, IBC and Bad Banks: The Roadmap Ahead, 3

INDIAN J.L. & LEGAL RSCH. 1 (December 2021 - January 2022).

¹⁵⁴⁹ About Us, NATIONAL ASSET RECONSTRUCTION CO. LTD., <https://www.narcl.co.in/about-us/> (last visited Oct. 30, 2024).

¹⁵⁵⁰ Dr. Vijaya kumar, An outline of bad bank in India, 44 UGC CARE J. 36,36 (2021).

¹⁵⁵¹ Akhila D. V., An Indian Bad Bank: A Path to Choose from Starting Anew and Resurrecting Existing Arcs, 4 INT’L J.L. MGMT. & HUMAN. 1520 (2021).

¹⁵⁵² Gross and Net Non-Performing Assets (NPAs) of Foreign Banks in India (1996-1997 to 2022-2023) by Indiastat focused on facts.

¹⁵⁵³ Wadhvani, supra note 1, at 2610.

then sold through auction. NPAs negatively affect banks' financial health, as banks lose the revenue generated from interest on these accounts, thus shifting the burden of losses onto the banks themselves. They also attract severe repercussions from the RBI, damaging the banks' brand image, and affecting stock market performance and share prices. NPAs have a significant impact on banks, resulting in a number of critical consequences. First, they reduce profitability, as banks must set aside provisions for bad loans, which directly affects their earnings. Furthermore, NPAs cause capital erosion, reducing a bank's capital base and thus limiting its ability to lend and expand. This leads to a credit crunch, in which banks become more risk-averse, reducing credit availability for both businesses and individuals. Furthermore, high levels of NPAs contribute to an economic downturn by discouraging investment, resulting in job losses, and impeding overall growth. High NPAs jeopardise the banking sector's stability and trust, causing instability within the system. Recognising these causes and effects is critical for developing effective strategies to manage and reduce NPAs, thereby contributing to the financial health of banks and the larger economy.¹⁵⁵⁴

B. Key Causes of NPAs in the Banking Sector

One of the main drivers behind the increase in NPAs has been relaxed lending norms for corporate houses. Due to inadequate assessment of their creditworthiness and financial position, many defaults occurred. The COVID-19 pandemic also contributed significantly to the rise in NPAs, as the economic slowdown affected businesses globally. With extended lockdowns and financial strain, many businesses suffered losses, and individuals faced income instability and job loss, causing loan defaults and adding to the NPA crisis. Additionally, failure by banks to properly appraise borrowers before granting loans and

lack of follow-up on credit usage and repayment further exacerbated the problem. Tackling NPAs is crucial to maintaining the financial health of banks, preventing revenue loss, and ensuring economic stability. Addressing this issue involves strengthening lending norms, thorough creditworthiness assessments, and continuous monitoring to minimize future NPAs.¹⁵⁵⁵ Understanding NPAs and their underlying causes is essential to tackling this challenge and helping reduce their numbers. Moving forward, we will explore how ARCs and bad banks aim to address these issues, why managing NPAs is crucial, and what steps can be taken to prevent their recurrence.

IV. Establishing the Need for Functionality of ARC and Bad Bank

To understand the potential function and challenges of a bad bank, we must first consider the role of ARCs, which are similar in structure. An ARC allows banks and financial institutions to sell distressed assets, freeing up capital and management for core lending activities. This reallocation enables banks to focus on productive activities rather than recovery efforts. Furthermore, where lenders hold security receipts (SRs), ARCs manage distressed assets on their behalf, thereby facilitating recovery. Furthermore, they play a role in business revival, which is critical for maintaining productive assets within the economy and ensuring a better return for lenders on distressed assets.¹⁵⁵⁶ Other objectives of forming an ARC include: (1) asset management to generate cash flows for debt and interest repayment, (2) achieving operational efficiency and economies of scale, (3) fostering financial innovation, (4) creating new risk management and credit enhancement instruments, (5) advancing a securitisation market for high-quality financial assets, (6) strengthening project evaluation, monitoring,

¹⁵⁵⁴ Neha Saini, Non-Performing Assets (NPAs) Issue and Challenges in India, 9 EPRA Int'l J. of Multidisciplinary Rsch. (IJMR), 2455-3662 (Oct. 2023).

¹⁵⁵⁵ Wadhvani, supra note 1, at 2610.

¹⁵⁵⁶ Shreshtha Menon, Analysis into the National Asset Reconstruction Company Ltd, 3 INDIAN J.L. & LEGAL RSCH. 1 (October-November 2021).

and implementation capabilities, and (7) building infrastructure.¹⁵⁵⁷

V. Similarities and Differences in the Operations of Existing ARCs and Bad Banks

The ARCs in India function similarly to global Asset Management Companies, operating under the Securitisation and Reconstruction of Financial Assets and Enforcement of Securities Interest Act, 2002. As private entities, ARCs are funded solely by qualified institutional buyers. Over time, ARCs support secured creditors in realizing long-term assets, addressing liquidity issues, and recovering dues on NPAs without court or tribunal intervention. They accomplish this by taking possession of collateral and selling it. ARCs have a thorough process for assessing asset value and disposing of stressed assets. When a loan turns bad, the ARC acquires it through auction or bilateral negotiation, making an indicative offer to the seller bank or financial institution at a discounted price. This offer considers security value, promoter profile, asset status, and NPAs age, thus limiting the chance of realizing high value. Upon acceptance, the ARC executes an assignment of debt with the seller bank, allowing it to take steps to resolve the NPA. ARCs initially provide 15% of the asset's value, with the remainder paid via SRs. In such cases, ARCs may act as agents for the seller bank or as owners of the asset post-purchase. Subsequently, the ARC establishes a trust, raises funds from Qualified Institutional Buyers, and disposes of the asset. Under the SARFAESI Act, ARCs have expanded capabilities beyond asset sales, including the authority to 1) take over or change borrower management, 2) sell or lease the borrower's business, 3) enter settlements, 4) restructure or reschedule debt, and 5) enforce security interests through asset sale, restructuring, or leasing. This approach positions ARCs as

effective mechanisms for asset reconstruction and NPA resolution.¹⁵⁵⁸

In contrast, the proposed government-backed bad banks will feature a distinct structure from existing ARCs. This structure is two-layered, comprising an asset reconstruction company named the NARCL and a step-down asset management company called the India Debt Management Company Limited (IDMCL).¹⁵⁵⁹ NARCL will be responsible for purchasing and consolidating bad loans from various banks, primarily public sector banks (PSBs), while the AMC will manage the restructuring, turnaround, and resolution efforts. Ownership of NARCL will be split, with PSBs holding 51% of NARCL and up to 49% of AMC. NARCL will acquire bad loans from banks and delegate them to the AMC for resolution and restructuring. NARCL will purchase NPAs by paying banks 15% in cash up front, with the remaining 85% in "security receipts" (SRs), which will be government-guaranteed for five years to instil confidence in the security of these SRs.¹⁵⁶⁰

A major differentiator lies in the scale and scope of assets targeted. Unlike private ARCs, which primarily acquire small to medium-sized loans, NARCL will focus on large-ticket assets with the support of government-backed SRs, which are projected to be essential for the next five years.¹⁵⁶¹

VI. Are Bad Banks Equipped to Address the Shortcomings of ARCs?

The primary difference between the functions of ARCs and bad banks is the ownership of SRs and all other kinds of financial backing, which, in the case of bad banks, is backed by government ownership. This government support expands the pool of available funds because the sovereign guarantee increases

¹⁵⁵⁷ S. M. D. Azash & S. V. Pulla Reddy, Role of Asset Reconstruction Companies (ARCs) in Handling Non-Performing Assets (NPA) in Banking, 5 INT'L J.L. MGMT. & HUMAN. 1294 (2022).

¹⁵⁵⁸ Akhila D. V., supra note 5, at 1520.

¹⁵⁵⁹ Shankar, Anirudh, India's Bad Bank: Two Years On, STRUCTURED FINANCE IN BRIEF (Mar. 1, 2024), <https://www.structuredfinanceinbrief.com/2024/03/indias-bad-bank-two-years-on/>.

¹⁵⁶⁰ Menon, supra note 10, at 1.

¹⁵⁶¹ Anand Adhikari, Govt-backed 'Bad Bank' Yet to Tie Up Some Loose Ends; Here's a List, Business Today (Sept. 16, 2021, 6:50 PM), <https://www.businesstoday.in/latest/corporate/story/govt-backed-bad-bank-yet-to-tie-up-some-loose-ends-heres-a-list-306876-2021-09-16>.

confidence in the possibility of a successful bank revival. This sovereign support can instil greater confidence in investors and stakeholders, allowing the bad bank to handle larger volumes of non-performing assets. Moving forward, it is critical to consider two factors: first, the challenges that ARCs are currently facing, and second, whether these challenges are addressed by bad banks, or if similar issues will arise in the bad bank model as well.

A. Need for Change in ARC Capital Sources.

Most ARCs in India operate as private entities funded by domestic individuals and organizations. To sustain their operations, these ARCs frequently borrow from various sources, with borrowings increasing annually. Some inherent issues are aged NPAs, before transfer to ARCs, which complicate recovery. Furthermore, debt aggregation is limited, and older non-performing assets frequently lack access to the additional funding required for business recovery. Capital regulations limit how much money ARCs can raise through securitisation. This, combined with an observed lack of turnaround skills among ARCs, limits their ability to effectively revive distressed borrowers.¹⁵⁶² Notably, there was over a 50% spike in borrowings by March 2019. The trend shows a significant rise in the issuance of debentures and bonds, which increased from 16.7% of total borrowings in March 2016 to 85.1% in March 2020. Conversely, the share of commercial papers has declined due to increased uncertainty in India's money market post-IL&FS crisis.¹⁵⁶³ India's reliance on foreign and private funding for ARCs has limited their capacity to manage NPAs. In contrast, bad banks are government-backed, with majority ownership by public sector banks and partial private bank involvement. This restructuring addresses two significant drawbacks of the bad

bank model, as noted by Schäfer and Zimmermann¹⁵⁶⁴: the high capital required and potential balance sheet losses. Private ARCs often struggle due to capital constraints, but a public-backed model, like the NARCL, benefits from bank contributions, supported by government policy but not direct government capital.

Research by Yadav & Chavan¹⁵⁶⁵ demonstrates that successful international bad banks typically receive government capital support, which India's ARCs did not receive. However, a shift in shareholder composition and public sector dominance can help to stabilise capital flows while addressing India's significant NPA volume. This change was brought about in bad banks, putting them in a better position than ARCs. With significant public sector involvement, India's bad bank is well-positioned to efficiently acquire and resolve larger NPA volumes, assisting banks in addressing capital erosion while relieving the system of excessive provisions for NPAs.

B. Lack of Turnaround Skills among ARCs

The other concern faced by ARC is the lack of turnaround skills among ARCs, this refers to an ARC's poor capacity to efficiently resuscitate and reorganise distressed assets in order to make them profitable again. Unlike trained turnaround experts who can execute operational or financial improvements to improve a company's health, ARCs sometimes lack the skills required to reorganise problematic enterprises, negotiate with stakeholders, or offer the additional capital required for resurrection.¹⁵⁶⁶ As a result, they may struggle to recover the full value of assets, particularly older NPAs whose company has deteriorated over time. This can be cured by bad banks because the new bad bank is a government initiative, the RBI is likely to extend certain rule relaxations when it begins

¹⁵⁶² Azash & Reddy, supra note 11, at 1294.

¹⁵⁶³ Dixit Yadav, Evolution of the Resolution Framework for NPAs in India: A Study of Assets Reconstruction Companies and Bad Bank Proposal, 42 Business Analyst 141 (2021).

¹⁵⁶⁴ Dorothea Schäfer & Klaus F. Zimmermann, Bad Bank(s) and Recapitalization of the Banking Sector, June 2009.

¹⁵⁶⁵ Yadav, A. & Chavan, P. (2021). ARCs in India: A Study of their Business Operations and Role in NPA Resolution. <https://rbidocs.rbi.org.in>

¹⁵⁶⁶ Azash & Reddy, supra note 11, at 1294.

operations. While ARCs rely primarily on private-sector mechanisms and restructuring tools, bad banks, which are backed by the government and public-sector banks, are better equipped for higher-value asset aggregation, leveraging legal and policy support to accelerate recovery. Bad banks may also hire specialised teams to handle complex, large-scale NPAs, with expertise in forensic analysis, asset valuation, and strategic recovery approaches tailored to high-value distressed assets. Relaxations can be related to banks' provisioning norms for assets sold to an ARC, as well as the requirement for a 15% capital payment.¹⁵⁶⁷ Therefore, bad banks are likely to have a distinct skill set from ARCs, focussing on large-scale financial restructuring and policy-driven asset recovery.

C. Concerns about Using Taxpayers Money to Bail-Out Bad Loans.

The change in shareholder composition and public sector dominance, however, raises concerns regarding taxpayers' money being used to recover loans resulting from multiple factors, including lax banking practices and non-compliance with regulations. If banks fail to conduct thorough background checks that could prevent loans from becoming non-performing, it is unfair for taxpayers to bear the consequences. Justice Rajiv Shakhder recently emphasized the public's right to know how taxpayer money is being used in bailouts for public sector banks managing bad loans. In response to a State Bank of India case challenging an order for transparency on NPAs, the court indicated that disclosing these details aligns with public interest, suggesting that substantial write-offs justify taxpayer scrutiny. The court requested further examination, noting that disclosure could enhance accountability in loan practices, potentially deterring future defaults.¹⁵⁶⁸ This demonstrates unequivocally

that while bad banks might be advantageous in writing off large amounts of non-performing assets (NPA) due to their government backing, they can also prove to be detrimental because they use taxpayer funds that are unrelated to the bad loan. The taxpayers are also not the banks that did not perform a thorough check and balance. Additionally, they are not the clients who have fallen behind on their payments. Therefore, it would be unjust for them to bear the brunt and be unaware of how their funds are being used for the cause.

D. Concerns about Commercial Banks becoming Laxer.

The establishment of bad banks can further unintentionally weaken commercial banks by creating a sense of complacency in managing loans. Commercial banks may become less proactive in credit assessment and recovery efforts, knowing they can offload bad loans to ARCs or bad banks and expect partial value recovery. This practice leads to reduced revenue from interest, as the transferred NPAs often recover less than their principal amounts. Over time, with the support of bad banks, commercial banks might prioritize offloading bad assets rather than focusing on efficient loan practices. This shift risks deteriorating lending standards and erodes market confidence, as banks rely increasingly on resolution mechanisms rather than responsible credit management.

E. Need for Forensic Audit

Furthermore, establishing these banks without any appropriate checks and balances would be stepping on the same toes as the ARCs without changing the timing of when ARCs can use this mechanism. As was already mentioned, bad banks adversely affected commercial banks. Additionally, if forensic audits are not made mandatory, they will only work like ARCs for loan recovery and fail to learn from their shortcomings. Implementing forensic audits could be a proactive measure, as it is often

¹⁵⁶⁷ How Is the Proposed Bad Bank Different from Existing ARC?, Moneycontrol (Feb. 3, 2021),

<https://www.moneycontrol.com/news/business/how-is-the-proposed-bad-bank-different-from-existing-arc-6436601.html>.

¹⁵⁶⁸ Public Sector Banks Should Disclose Details of Bad Debts: HC, Business Today (June 24, 2015),

<https://www.businesstoday.in/industry/banks/story/public-sector-banks-should-disclose-details-of-bad-debts-hc-47930-2015-06-24>.

better to prevent issues than to cure them later. Forensic audits play a crucial role in preventing the generation of non-performing assets (NPAs) in banks by identifying discrepancies in financial statements and verifying actual cash flows through bank statements. Banks often cite inefficiencies in credit assessment and management as primary reasons for NPAs, compounded by political interference in loan approvals. The ineffectiveness of banks in conducting thorough credit assessments have led to the proliferation of NPAs. Forensic audits can detect issues such as fund diversion, inflated project costs, and the establishment of shell companies—problems that could be identified early through rigorous cash flow verification.¹⁵⁶⁹ Therefore, simply creating bad banks that focus on acquiring bad loans without addressing the root causes—such as inadequate loan assessment practices—will not resolve these issues. Unless there is a shift towards comprehensive auditing and risk management, the establishment of bad banks may only serve as a temporary fix rather than a long-term solution to the NPA crisis.

In conclusion, while bad banks can provide solutions to certain deficiencies in existing ARCs, such as capital shortages and skill gaps, they do not address deeper issues. ARCs contribute to complacency among commercial banks, leading to unrealized economic losses not only in interest but also in principal recovery. This structural weakness raises concerns about taxpayer funding and whether it serves the greater good. Although bad banks may help manage NPAs, they are unlikely to eliminate the root problems plaguing the financial system in the long term.

VII. Conclusion

This paper critically assesses the need and effectiveness of establishing new government-backed bad banks in India, particularly in light of the existing private-sector-funded ARCs. The sharp increase in NPAs in Indian banks

highlights the critical need for effective solutions to financial instability. While the establishment of bad banks may appear to be a viable solution to current deficiencies in managing NPAs, it is critical to recognise that this concept is not novel in the Indian asset management landscape. The investigation reveals that ARCs already play an important role in asset recovery and management; however, they face significant challenges, such as limited turnaround skills, insufficient capital, and reliance on private funding, which reduce their effectiveness.

Bad banks help in addressing some of these shortcomings, such as providing government support and facilitating the acquisition of larger NPAs, they do not fundamentally address the underlying issues in the banking system. They raise concerns about accountability, the use of taxpayer funds, and the risk of complacency among commercial banks, which could lead to deteriorating lending standards. Without strict oversight, such as mandatory forensic audits, the formation of bad banks risks repeating previous mistakes and allowing systemic inefficiencies to persist. Therefore, rather than establishing new institutions, this study proposes that India focus on strengthening the capabilities of existing ARCs while investigating alternative solutions that emphasise comprehensive auditing, risk management, and increased operational efficiency. By addressing the root causes of NPAs and cultivating a culture of accountability and proactive credit assessment, India can achieve long-term financial stability without burdening taxpayers or jeopardising the integrity of its banking system.

As illustrated by the painkiller analogy, if one remedy fails, seeking a similar alternative may not suffice; rather, a fundamentally different approach is essential for true recovery in the banking sector. While an alternative painkiller might alleviate symptoms due to its different composition, it does not address the underlying issues until the core deficiencies in the structure

¹⁵⁶⁹ Kalikant Mishra, Importance of Forensic Audit in Controlling Non-Performing Assets in Banks, 3 LIBERAL STUD. 223 (July-December 2018).



are resolved. Similarly, introducing bad banks may provide temporary relief from the challenges faced by ARCs, but it will not rectify the foundational problems inherent in the existing system. A comprehensive approach is essential to effectively address these issues and ensure long-term stability in the banking sector.

