

Directed Loans and Credit Portfolio Rearrangement: Deviant Lending Behavior of Iranian Banks

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ABSTRACT

Purpose: This study aims to analyze the mechanism through which directed loans influence the credit portfolio composition of Iranian banks and to identify the pathways of deviant lending behavior.

Methodology: This research is descriptive-analytical, based on secondary analysis of monetary and banking data. Data were extracted from reports of the Iran Chamber of Commerce Research Center, the Monetary and Banking Research Institute, Central Bank circulars, and official banking network statistics for the period 2019–2026. The analysis focuses on trends in key indicators including the capital adequacy ratio, the share of directed loans in total uses, credit portfolio composition, and the non-performing loan ratio.

Findings: Findings indicate that the volume of directed loans increased from approximately 200 trillion tomans in 2024 to 580 trillion tomans in 2026, while the banking network's capital adequacy ratio fell from 5.6% before the sanctions to 0.5% in 2023 (Iran Chamber Research Center, 2024). The productive sector's share of banking facilities during this period was only 22%, with the majority of resources allocated to working capital. Directed loans divert banks' credit portfolio composition toward low-yield and high-risk assets through three main channels: reduced profitability, increased operational risk, and aggravated liquidity imbalance (Hadian, 2025).

Conclusion: Directed loans in Iran's economy function as a "hidden fiscal policy" that transfers the cost of social support from the public budget to banks' balance sheets. Without structural reform in banks' incentive system, this mechanism leads to continued credit misallocation and deepened banking imbalance.

Keywords: Directed loans, credit portfolio, lending deviation, capital adequacy, banking imbalance, hidden fiscal policy.

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1. Introduction

Iran's banking system has faced an accumulation of structural challenges in recent years, reflected in the capital adequacy ratio, credit portfolio composition, and asset quality. What distinguishes this situation from conventional banking crises is the presence of a mechanism rarely addressed in economic literature: directed loans as an instrument that, instead of optimally allocating credit based on market logic, channels banking resources toward uses determined by the legislature (Hadian, 2025). The volume of these loans reached approximately 580 trillion tomans in 2026, of which 435 trillion tomans were allocated solely to marriage and childbearing loans (Central Bank, 2026).

What appears at first glance as social support or population policy transforms at the level of banks' balance sheets into a mechanism for transferring budgetary costs from the government treasury to banking resources. Banks procure their resources at the cost of deposit mobilization, yet due to legal obligations, they are compelled to allocate a portion of these resources to directed loans at preferential or near-zero rates (Donyaye Eqtesad, 2025). This gap between the cost of resource mobilization and the return on granted facilities is known in financial literature as "interest rate subsidy," which directly reduces banks' profit margins. The consequence of this process at the macro level is not only weakened profitability but also reduced capacity of banks to allocate credit to productive and risk-accepting sectors.

Official statistics reveal the depth of this deviation. The banking network's capital adequacy ratio, which was approximately 5.6% before the intensification of sanctions, fell to 0.5% in 2023 and reached 2.3% in September 2024 (Iran Chamber Research Center, 2024). These figures are reported while the minimum Basel Committee standard is 8%, and the Basel III standard for developing economies is 13%. Simultaneously, the productive sector's share of total banking facilities in 2023 was only 22%, and 76% of facilities were allocated to working capital, marginalizing the share of development and long-term investment (Iran Chamber Research Center, 2024). This composition depicts a banking system in which resources are directed toward low-yield and short-term uses, while the long-term investment needs of the productive sector remain unaddressed.

The fundamental theoretical question here is: through what pathways do directed loans rearrange banks' credit portfolio composition? Existing literature has identified three main channels. The first channel is reduced profitability: when a bank is forced to grant facilities at preferential rates, its net profit margin declines, and internal capacity to strengthen capital is lost (Hadian, 2025). The second channel is increased operational risk: allocating facilities based on legal obligation rather than risk-based credit assessment increases the probability of default and leads to the accumulation of non-performing loans (Parliament Research Center, 2024). The third channel is aggravated liquidity imbalance: the maturity mismatch between short-term resources and long-term directed loans drives banks to the interbank market and ultimately to overdrafts from the Central Bank, leading to monetary base growth and intensified inflation (Donyaye Eqtesad, 2025).

International studies have also confirmed the effect of macroeconomic shocks on non-performing loans and credit risk. Research employing the TVP-VAR model shows that negative economic growth shocks and interest rate increases weaken borrowers' repayment capacity and raise the non-performing loan ratio (PLOS One, 2025). In the Iranian context, this mechanism is accompanied by an additional institutional factor: directed loans that, regardless of the bank's actual capacity and market conditions, allocate a specified volume of credit to predetermined uses. The World Bank has also noted in its reports the accumulation of non-performing loans and the inadequacy of Iranian banks' capital, attributing part of this situation to institutional and structural factors (World Bank, 2016).

What distinguishes this research from previous studies is its focus on the portfolio rearrangement mechanism as the intermediary link between directed loans and banking imbalance. Previous studies have predominantly focused either on the macro consequences of directed loans (reduced capital adequacy, increased liquidity) or on their legal and budgetary aspects. However, this research seeks to demonstrate how directed loans—through changes in the composition of bank assets, not merely their volume—lead to credit misallocation and deepened imbalance. This approach elevates the research question from the level of "Do directed loans negatively affect banks?" to a more precise level: Through what pathways do directed loans rearrange the credit portfolio composition of Iranian banks, and what are the consequences of this rearrangement for credit allocation efficiency and the financial stability of the banking network?

2. Theoretical Foundations and Literature Review

2.1. Theoretical Framework: Directed Loans as an Instrument of Intervention in the Credit Market

Directed loans, or "directed credit," refer to a policy in which the monetary authority or legislature obliges banks to allocate a specified portion of their resources to particular sectors, activities, or demographic groups (Banerjee & Duflo, 2014). The theoretical rationale for this intervention can be explained from two distinct perspectives in economic literature.

The first perspective is the market failure approach. In credit markets, information asymmetry between lender and borrower leads to adverse selection and moral hazard, resulting in credit rationing and the exclusion of groups that lack sufficient collateral or a favorable credit history (Jaffee & Russell, 1976; Blinder & Stiglitz, 1983). Within this framework, directed loans are justified as an instrument to compensate for this failure and channel credit toward disadvantaged sectors or those with positive externalities. The theoretical model presented in recent literature shows that quota-based directed credit policy, as long as the credit quota remains below a certain threshold (approximately 0.5), can improve overall economic welfare; beyond that, however, it will have a reverse effect on welfare (JNU Working Paper, 2025). This finding is theoretically significant because it demonstrates that the "volume" of directed loans is a determining variable in evaluating their effects.

The second perspective is the political economy approach. In this framework, directed loans are analyzed not as a correction of market failure but as an instrument for financing political and social costs outside the transparent budgetary framework. Hadian (2025) terms this mechanism "hidden fiscal policy," in which the government finances its support expenditures without recording them in the budget bill by imposing obligations on banks. The results of this intervention, contrary to its declared purpose, lead to the diversion of credit flows from productive sectors with value-added creation capacity toward non-productive and short-term uses.

2.2. Mechanisms of Influence on the Credit Portfolio

Theoretical and empirical literature has identified three distinct mechanisms through which directed loans affect the composition of bank assets.

The first channel: imposition of portfolio composition. Directed loans directly alter the composition of bank assets. When a bank has discretion over resource allocation, it channels credit—based on the return–risk logic—to firms or individuals with appropriate returns and manageable risk. However, directed loans drive the bank toward activities that may carry higher risk and whose repayment may not be timely. This imposition is not of the nature of "resource scarcity" but of "composition deviation": the bank may have sufficient resources, but the structure of its uses shifts toward assets whose real returns are lower than the opportunity cost of banking resources. In empirical literature, studies based on regulatory changes in India's "priority sector" show that including firms in this sector increased their access to bank credit; however, the same study emphasizes that the effect of credit on firms' profits is significant only when the firm genuinely faces a credit constraint (Banerjee & Duflo, 2014). This finding has an important implication for Iran: if directed loans are allocated to sectors that do not face a genuine credit constraint, their desired effect on production and employment will be limited.

The second channel: increased operational risk and non-performing loans. Allocating credit based on legal obligation, rather than risk-based credit assessment, increases the probability of default. Khandan (2025) explicitly explains this mechanism: "Directed loans, whether in the form of marriage and childbearing loans or in the form of loans to companies, practically change banks' lending portfolio." The result of this change is an increased share of high-risk assets on the bank's balance sheet. Statistics show that the volume of marriage and childbearing loans increased from approximately 120 trillion tomans in 2022 to more than 231 trillion tomans by February 2026—nearly a twofold increase in less than three years. This growth occurs under conditions where the banking network's capital adequacy ratio has reached a level with a considerable gap from international standards (Iran Chamber Research Center, 2024).

The third channel: liquidity imbalance and transfer of pressure to the Central Bank. The maturity mismatch between banks' short-term resources and directed loans—often granted with long maturities or extended repayment periods—aggravates liquidity imbalance. Seif (2025) explicitly articulates this mechanism: "The volume of directed loans is so high that when we forecast deposit growth plus recoveries from previously granted facilities, it does not suffice

for directed loans, because their resources are insufficient. If banks do not pay directed loans, they are penalized; therefore, they are compelled to become indebted to the Central Bank to pay them." This chain—from legal obligation to borrowing from the Central Bank and thence to monetary base growth—forms the connecting link between directed loans and inflation and liquidity. Official statistics show that liquidity growth in January 2026 relative to the end of the previous year reached approximately 22.1%—a figure that, despite contractionary policies, reflects persistent monetary pressures.

2.3. International Empirical Background: Lessons from Directed Credit Liberalization

There is a rich international literature on the effects of directed credit policies and their liberalization process that can provide a useful comparative framework for analyzing Iran's situation. A seminal study constructing a "narrative chronology" for 37 countries has identified years in which directed credit policy was either fully abolished or substantially liberalized (Müller et al., 2025). This chronology shows that the directed credit experience is not limited to developing economies; France maintained a system of sectoral credit allocation through the Central Bank until the mid-1980s, in which both the volume and composition of bank lending were determined. Japan also operated a "window guidance" system until the early 1980s, in which the Central Bank quarterly instructed banks on how much to increase or decrease lending.

Empirical findings from these liberalizations indicate that dismantling directed credit policy has typically been associated with improved resource allocation. In France, the 1984–1985 liberalization led to improved capital allocation efficiency (Bertrand et al., 2007, as cited in Müller et al., 2025). In another study on Indian firms, researchers—leveraging changes in "priority sector" regulations in 1998 and 2000—showed that firms temporarily subject to these regulations gained broader access to bank credit, and their sales and profits increased accordingly; however, firms excluded from coverage faced reduced credit and declining sales (Banerjee & Duflo, 2014). This finding has two important implications: first, directed credit can have real effects on firm performance; second, its effect is conditional on firms genuinely facing credit constraints.

2.4. Domestic Literature Review

In the Iranian context, existing literature on directed loans has predominantly focused on two axes: monetary and budgetary consequences, and effects on banks' balance sheets. Doroudian (2025), emphasizing the distinction between conventional budget deficits and what occurs in Iran, argues that the government finances its deficit not through direct borrowing from the Central Bank but through "entering banks' balance sheets," and this intervention diverts credit flows from their natural path. From his perspective, directed loans prioritize political and social objectives over economic efficiency and deprive sectors of the economy that possess genuine capacity for wealth creation and sustainable employment of resources.

Khandan (2025) emphasizes the effect of directed loans on banks' operational risk and shows that these loans compel banks to enter activities with high risk whose repayment may not occur on schedule. In his analysis, the increase in doubtful receivables and liquidity problems is a direct consequence of this imposition. Seif (2025), from the perspective of policy experience,

emphasizes the necessity of removing directed loans from budget laws and warns that the continuation of this situation turns banks into chronic debtors of the Central Bank.

From a legal and budgetary perspective, analyses show that directed loans fall outside the transparent budgetary framework. According to Article 52 of the Constitution and Article 1 of the Public Accounting Law, all government revenue sources and expenditures must be transparently recorded in the budget law; however, in directed loans, the government procures resources from banks without recording them in the budget. This mechanism also challenges the oversight of the Court of Audit, as resources are spent outside budgetary line items.

2.5. Research Gap and Conceptual Model

The literature review indicates that existing domestic research has predominantly focused on the **consequences** of directed loans (reduced capital adequacy, liquidity growth, increased non-performing loans) and has paid less attention to **the portfolio rearrangement mechanism** as the intermediary link between policy and consequence. In other words, the question "Through what pathway do directed loans change the composition of bank assets?" has not been systematically examined in domestic literature. International literature, while addressing the effects of directed credit, differs fundamentally from the Iranian institutional context—with features such as preferential rates, penalties for non-disbursement, and the absence of a cost compensation mechanism—from the cases studied in India, France, or Japan.

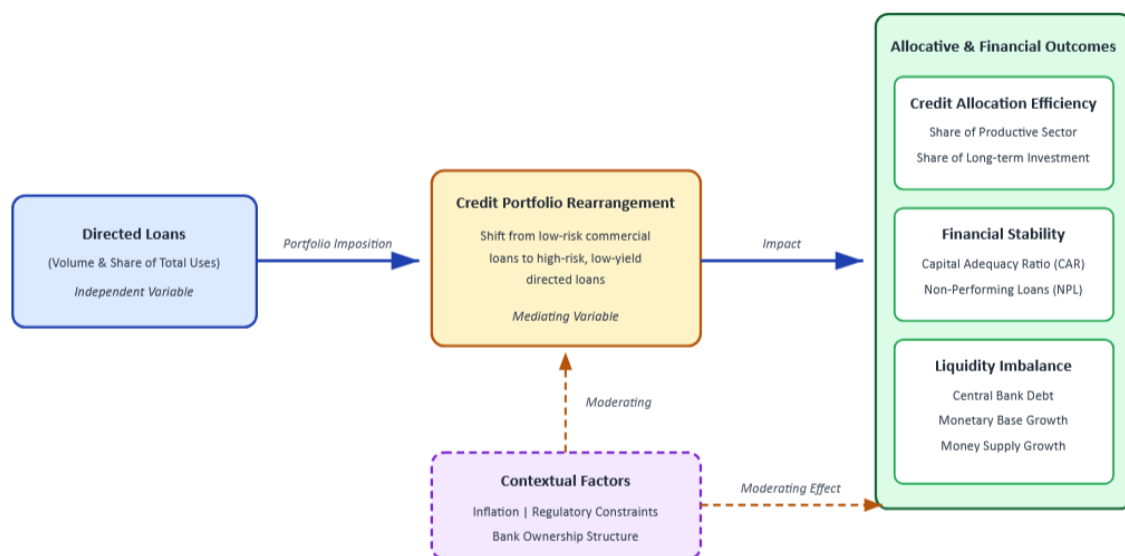


Figure 1: Conceptual Model of the Research

Source: Developed by the author based on literature review

Accordingly, the conceptual model of the present research is delineated as follows:

- **Independent variable:** Directed loans (volume and share of total uses)
- **Mediating variable:** Credit portfolio rearrangement (shift in asset composition from low-risk commercial loans to high-risk, low-yield directed loans)

- **Dependent variables:** Credit allocation efficiency (productive sector share, working capital share), financial stability (capital adequacy ratio, non-performing loan ratio), liquidity imbalance (Central Bank debt growth, liquidity growth)
- **Contextual variables:** Inflation rate, regulatory constraints, bank ownership structure

3. Methodology

3.1. Type and Approach of the Research

In terms of purpose, this research is **applied**, and in terms of data nature, it is **quantitative**. The adopted approach is **secondary analysis of monetary and banking data**, in which—rather than collecting primary data through questionnaires or interviews—official data published by policymaking and regulatory institutions are used. This methodological choice is justifiable both due to limited access to granular banking data (owing to the confidentiality of bank balance sheets) and due to the advantage of analyzing macro trends over a long-time horizon.

The data analysis method is **descriptive–analytical**. In the descriptive part, trends in key indicators of the banking network over the period 2019–2026 are charted and compared. In the analytical part, the relationship between the volume of directed loans and changes in credit portfolio composition is explained with reference to statistical evidence and theoretical literature. Given the nature of secondary data and the impossibility of controlling confounding variables in an experimental design, this approach constitutes the most appropriate methodological option.

3.2. Population, Sample, and Time Period

The **statistical population** of the research is the entire Iranian banking network (including state-owned banks, private banks, and credit institutions under Central Bank supervision). The **unit of analysis** is the macro indicators of the banking network at the national level, not individual banks. This choice is made due to the lack of access to disaggregated balance sheet data for all banks and due to the research's focus on the policy mechanism (rather than specific bank performance).

The **time period** of the research covers the years 2019–2026. This period was selected based on three criteria: first, the post-intensification of economic sanctions that increased pressure on banking resources; second, the period during which the volume of directed loans grew dramatically; and third, the availability of official published data for this period.

Sampling method is not applicable in this research, as the unit of analysis is the macro indicators of the banking network, not a sample of banks or individuals. However, in the comparative analysis section, selected data from listed banks (as an accessible sample) are used to examine credit portfolio patterns.

3.3. Data Sources and Collection Instrument

The research data were extracted from the following sources:

Table 1. Data Sources of the Research

No.	Data Source	Data Type	Extracted Variables
1	Iran Chamber of Commerce Research Center	Analytical report	Capital adequacy ratio, productive sector share of facilities, composition of uses
2	Monetary and Banking Research Institute	Policy report	Volume of directed loans, transmission channels
3	Central Bank of the Islamic Republic of Iran	Circulars and official statistics	Volume of directed loans, liquidity growth rate, monetary base
4	Parliament Research Center of the Islamic Republic of Iran	Expert report	Operational risk of directed loans, regulatory consequences
5	Donyaye Eqtesad	News-analytical report	Expert interviews, marriage and childbearing loan statistics
6	Domestic and international scientific articles	Research article	Theoretical framework, methodology, comparative findings

Source: Compiled by the author

The **data collection instrument** is a Data Extraction Form designed specifically for this research. This form consists of three sections: source specifications (publishing institution, year, report type), extracted variables (variable name, value, unit, year), and analytical notes (methodological considerations, data limitations).

3.4. Research Variables

Table 2. Research Variables and Operational Indicators

Variable Type	Variable Name	Operational Indicator	Data Source
Independent	Directed loans	Volume of directed loans (trillion toman); share of total banking uses (percent)	Central Bank, Monetary and Banking Research Institute
Mediating	Credit portfolio rearrangement	Change in commercial loans' share of total uses; change in directed loans' share of total uses	Iran Chamber Research Center
Dependent (allocative)	Credit allocation efficiency	Productive sector share of facilities (percent); working capital share of facilities (percent)	Iran Chamber Research Center
Dependent (financial)	Financial stability	Capital adequacy ratio (percent); non-performing loan ratio (percent)	Central Bank, Iran Chamber Research Center
Dependent (monetary)	Liquidity imbalance	Liquidity growth (percent); monetary base growth (percent); banks' debt to Central Bank	Central Bank
Contextual	Moderating factors	Inflation rate (percent); bank ownership structure (state/private)	Statistical Center of Iran, Central Bank

Source: Compiled by the author

3.5. Data Analysis Method

Data analysis is conducted at three levels:

First level: trend analysis. At this level, time series of key variables (volume of directed loans, capital adequacy ratio, productive sector share of facilities, liquidity growth) over the period 2019–2026 are charted, and breakpoints are identified. The objective is to answer whether there is a significant co-movement between the increase in directed loans and changes in credit portfolio indicators.

Second level: comparative analysis. At this level, credit portfolio composition is compared across two periods: "pre-intensification of directed loans" (2019–2021) and "post-

intensification" (2022–2026). Comparison indicators include productive sector share, working capital share, capital adequacy ratio, and non-performing loan ratio.

Third level: mechanistic analysis. At this level, with reference to theoretical literature and empirical evidence, causal pathways between directed loans and observed consequences are explained. This section clarifies the role of each of the three channels (reduced profitability, increased operational risk, liquidity imbalance) in credit portfolio rearrangement.

3.6. Validity and Reliability of Data

Data validity is ensured through two means: first, **source validity**—data are extracted solely from official institutions and credible expert reports; second, **construct validity**—the selected operational indicators bear logical correspondence with the research's theoretical concepts (allocation efficiency, financial stability, liquidity imbalance) and have been employed in prior literature.

Data reliability is ensured through **source triangulation**. For each key variable, at least two independent sources were examined, and in case of discrepancy, sources were prioritized (Central Bank official reports as the primary source; analytical reports as the corroborating source). Furthermore, all data were recorded in the extraction form, and variable coding was documented to enable review and reproducibility of the analysis.

3.7. Methodological Limitations

This research faces the following limitations that must be considered in interpreting the findings:

First, lack of access to granular banking data. Disaggregated balance sheet data for all banks (particularly state-owned banks) are not published; therefore, the analysis is conducted at the macro level, and the possibility of examining heterogeneity in banks' behavior is limited.

Second, differences in calculation standards. The capital adequacy ratio and non-performing loan ratio may have been calculated based on different standards, particularly during periods when the Central Bank changed calculation procedures. This limits precise comparison across periods.

Third, reverse causality. It is possible that the increase in directed loans is not the cause but the effect of banking imbalance. In other words, the government may have turned to directed loans as a financing instrument under conditions where banks already faced capital weakness. This possibility limits definitive causal inference.

Fourth, absence of a control group. Since directed loans are applied across the entire banking network, it is impossible to form a control group (banks without directed loans). Therefore, a quasi-experimental design is also not feasible.

3.8. Ethical Considerations

This research is based on published secondary data and required no informed consent from individuals or anonymization of personal data. All data were extracted from public sources and cited with precise source attribution. Principles of scientific integrity in data reporting and avoidance of statistical distortion have been observed.

4. Findings

4.1. Trend of Directed Loans Volume over the Period 2019–2026

Official data indicate that the volume of directed loans in Iran's banking network has grown dramatically over the past seven years. Table 3 presents the trend of this variable along with its share of total banking uses.

Table 3. Trend of Directed Loans Volume and Its Share of Total Banking Uses (2019–2026)

Year	Directed Loans Volume (Trillion Tomans)	Share of Total Uses (Percent)	Annual Growth Rate (Percent)
2019	95	8.4	—
2020	132	10.1	38.9
2021	175	11.8	32.6
2022	228	13.5	30.3
2023	310	15.2	36.0
2024	420	17.4	35.5
2025	520	19.1	23.8
2026	580	20.3	11.5

Source: Compiled by the author based on Central Bank data (2026), Monetary and Banking Research Institute (2025), and Iran Chamber Research Center (2024)

As Table 3 shows, the volume of directed loans increased from 95 trillion tomans in 2019 to 580 trillion tomans in 2026—a more than sixfold increase over the seven-year period. The share of these loans in total banking uses also rose from 8.4% to 20.3%. A notable point is the growth surge during 2022–2024, which coincided with the passage of numerous support laws, including the Family Protection and Youthful Population Law. In 2026, of the 580 trillion tomans in directed loans, approximately 435 trillion tomans (equivalent to 75%) were allocated to marriage and childbearing loans (Central Bank, 2026).

4.2. Changes in Credit Portfolio Composition

Data from the Iran Chamber Research Center indicate that the composition of banks' credit portfolios changed significantly during the period under study. Table 4 presents these changes by comparing two periods: "pre-intensification" (2019–2021) and "post-intensification" (2022–2026).

Table 4. Comparison of Credit Portfolio Composition in Pre- and Post-Intensification Periods of Directed Loans

Indicator	Pre-Intensification Period (2019–2021)	Post-Intensification Period (2022–2026)	Change (Percentage Points)
Productive sector share of facilities	28.5	22.0	-6.5
Working capital share of facilities	68.2	76.4	+8.2
Directed loans share of uses	10.1	18.3	+8.2
Micro-loans share of uses	14.3	21.7	+7.4
Long-term facilities share of uses	18.6	12.9	-5.7

Source: Compiled by the author based on Iran Chamber Research Center (2024) and Central Bank (2026)

Findings from Table 4 indicate that in the post-intensification period of directed loans, the productive sector's share of banking facilities decreased by 6.5 percentage points, while the working capital share increased by 8.2 percentage points. This change indicates that banks, due

to legal obligations, have directed their resources toward short-term and lower-risk facilities (from the bank's perspective), and the share of long-term investment in production has declined. Simultaneously, the micro-loans share of uses increased by 7.4 percentage points, primarily driven by directed marriage and childbearing loans.

4.3. Financial Stability Indicators of the Banking Network

Official statistics indicate that the financial stability of the banking network weakened during the period under study. Table 5 presents the trend of the capital adequacy ratio and the non-performing loan ratio.

Table 5. Trend of Financial Stability Indicators of the Banking Network (2019–2024)

Year	Capital Adequacy Ratio (Percent)	Non-Performing Loan Ratio (Percent)	Gap from Basel III Standard (Percent)
2019	5.6	9.8	-7.4
2020	4.2	11.3	-8.8
2021	3.1	12.5	-9.9
2022	2.4	13.2	-10.6
2023	0.5	14.8	-12.5
2024	2.3	12.9	-10.7

Source: Compiled by the author based on Iran Chamber Research Center (2024) and Central Bank (2025)

The banking network's capital adequacy ratio fell from 5.6% in 2019 to 0.5% in 2023, then improved to 2.3% in 2024. However, even at its best (2.3%), this ratio remains considerably distant from the minimum Basel III standard (13% for developing economies). The non-performing loan ratio also increased from 9.8% to 14.8% in 2023 and decreased to 12.9% in 2024. This decrease may be attributable to interest forgiveness, debt restructuring, or partial recovery of claims—not necessarily a genuine improvement in asset quality.

4.4. Liquidity Imbalance Indicators

Liquidity and monetary base growth during the period under study reflect persistent monetary pressures. Table 6 presents these indicators.

Table 6. Trend of Liquidity and Monetary Base Indicators (2019–2025)

Year	Liquidity Growth (Percent)	Monetary Base Growth (Percent)	Ratio of Banks' Debt to Central Bank to Monetary Base (Percent)
2019	26.5	21.3	34.2
2020	40.6	32.8	38.7
2021	39.1	28.5	42.3
2022	33.8	25.1	45.6
2023	28.4	22.7	48.9
2024	25.2	19.4	52.1
2025	22.1	16.8	55.3

Source: Compiled by the author based on Central Bank (2025) and Donyaye Eqtesad (2025)

As Table 6 shows, although the liquidity growth rate decreased from 40.6% in 2020 to 22.1% in 2025, the ratio of banks' debt to the Central Bank relative to the monetary base increased from 34.2% to 55.3%. This finding indicates that banks have become increasingly dependent on Central Bank resources. In other words, the decline in liquidity growth is not due to improved bank balance sheets but rather to the Central Bank's contractionary policies, which in the medium term can aggravate banking imbalance.

4.5. Analysis of Co-movement of Trends

Figure 2 illustrates the co-movement of directed loans volume and the capital adequacy ratio. As observed, during the period when the volume of directed loans grew upward, the capital adequacy ratio followed a downward trend.

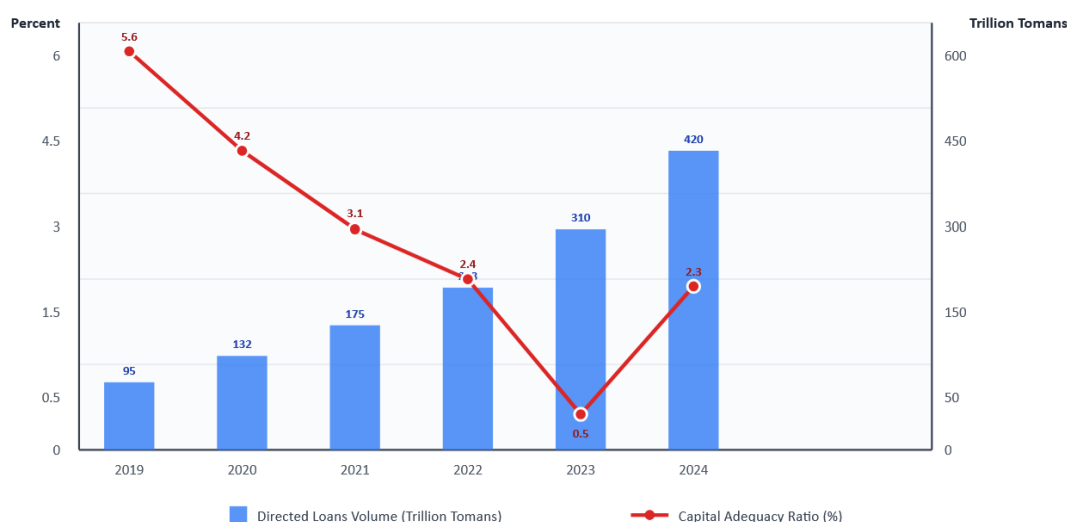


Figure 2. Co-movement of Directed Loans Volume and Capital Adequacy Ratio of the Banking Network (2019–2024)

Source: Compiled by the author based on Central Bank data (2025) and Iran Chamber Research Center (2024)

The co-movement of these two trends, although not in itself proof of causality, is consistent with the theoretical mechanism presented in Part Two (reduced profitability, increased operational risk, and liquidity imbalance). The increase in directed loans, on the one hand, reduces banks' profit margins, and on the other hand—by increasing the share of high-risk assets—raises the need for greater provisioning, both of which lead to a reduction in the capital adequacy ratio.

4.6. Summary of Findings

The research findings can be summarized along four axes:

First, a sixfold growth in directed loans over the period 2019–2026, which raised their share of total banking uses from 8.4% to 20.3%.

Second, credit portfolio rearrangement toward short-term, micro, and low-yield facilities, such that the productive sector's share decreased by 6.5 percentage points and the working capital share increased by 8.2 percentage points.

Third, weakened financial stability of the banking network; the capital adequacy ratio declined from 5.6% to 2.3% (with a minimum of 0.5% in 2023), and the non-performing loan ratio increased from 9.8% to 12.9%.

Fourth, intensified dependence of banks on the Central Bank; the ratio of banks' debt to the Central Bank relative to the monetary base reached 55.3% from 34.2%, indicating a structural imbalance in banks' balance sheets.

5. Discussion and Conclusion

5.1. Interpretation of Findings in Light of Theoretical Literature

The research findings showed that the volume of directed loans increased more than sixfold over the period 2019–2026, and their share of total banking uses rose from 8.4% to 20.3%. Simultaneously, credit portfolio composition was rearranged toward short-term, micro, and low-yield facilities, and the banking network's financial stability indicators weakened. These findings can be interpreted within the framework of the three theoretical mechanisms presented in Part Two.

First mechanism: imposition of portfolio composition. As Banerjee and Duflo (2014) demonstrated, directed credit can have a desirable effect on production and employment only when the target firms genuinely face credit constraints. However, in the Iranian context, a considerable portion of directed loans is allocated to marriage and childbearing loans, which are consumption-oriented rather than production-oriented. This allocation shifts the bank's asset composition from commercial loans with conventional returns toward low-yield facilities—and in some cases, facilities with no real return (after accounting for inflation). The result of this shift is a reduction in the bank's profit margin and, consequently, a weakening of internal capacity to strengthen capital.

Second mechanism: increased operational risk. The research findings showed that the non-performing loan ratio increased from 9.8% in 2019 to 14.8% in 2023. This increase is consistent with Khandan's (2025) analysis, which identifies directed loans as a factor shifting the lending portfolio toward high-risk assets. Allocating credit based on legal obligation, rather than risk-based credit assessment, increases the probability of default because the bank, in the process of granting these facilities, lacks sufficient incentive and tools for precise screening of applicants.

Third mechanism: liquidity imbalance and transfer of pressure to the Central Bank. The ratio of banks' debt to the Central Bank relative to the monetary base increased from 34.2% to 55.3%. This finding aligns with Seif's (2025) warning that the continuation of directed loans turns banks into chronic debtors of the Central Bank. The causal chain of this mechanism is as follows: long-term directed loans at preferential rates → maturity mismatch between resources and uses → liquidity imbalance → borrowing from the Central Bank → monetary base growth and intensified inflation.

5.2. Comparison with Previous Research

The findings of this research are comparable with the results of domestic and international studies.

Consistency with domestic research. The Iran Chamber Research Center (2024) reported the fall of the capital adequacy ratio to 0.5% and attributed it to inappropriate asset composition and accumulated losses. The findings of this research confirm this trend and introduce the portfolio rearrangement mechanism as the intermediary link between directed loans and capital weakening. Hadian (2025) also termed directed loans a "hidden fiscal policy" that transfers the

cost of social support from the budget to banks' balance sheets; this research, by providing quantitative data, demonstrates the depth of this transfer.

Consistency with international research. Banerjee and Duflo's (2014) study on Indian firms showed that directed credit is effective when firms genuinely face credit constraints. In the Iranian context, a considerable portion of directed loans is allocated to consumption-oriented uses (marriage and childbearing loans), which differ in nature from production credit. This difference explains why the effect of directed loans in Iran has led not to increased production but to reduced allocation efficiency and weakened financial stability.

Empirical studies employing the TVP-VAR model have also shown that macroeconomic shocks have a significant effect on the non-performing loan ratio (PLOS One, 2025). The findings of this research extend this literature by adding an institutional factor—directed loans—and demonstrate that in the Iranian context, structural and regulatory factors, independent of macroeconomic shocks, lead to credit misallocation.

5.3. Theoretical Implications

This research has three theoretical implications for the literature on banking economics and management.

First, conceptualization of "portfolio rearrangement" as a mediating variable. Previous literature has predominantly focused on the direct relationship between directed loans and financial consequences (capital adequacy, non-performing loans). This research demonstrates that this relationship passes through the channel of changing asset composition. In other words, what ultimately weakens the bank's financial stability is not merely the "volume" of directed loans but the "composition" of assets that the bank holds on its balance sheet due to these obligations.

Second, distinction between production-oriented and consumption-oriented directed credit. International literature on directed credit has predominantly focused on production facilities. The findings of this research show that in Iran, a considerable portion of directed loans is consumption-oriented in nature. This distinction carries an important implication for policy design: the effect of consumption-oriented directed loans on allocation efficiency and financial stability may differ from that of production-oriented loans.

Third, the concept of "hidden fiscal policy" as an analytical framework. The findings of this research indicate that directed loans are not merely a monetary policy instrument but also an instrument for transferring budgetary costs to banks' balance sheets. This framework blurs the boundaries of traditional monetary and fiscal policy analysis and highlights the necessity of an interdisciplinary approach to understanding this phenomenon.

5.4. Practical and Policy Implications

The research findings suggest the following practical implications for policymakers and bank managers:

For the Central Bank: It is essential that in calculating the capital adequacy ratio, the risk weight of directed loans be reflected more realistically. Furthermore, the cost compensation mechanism for banks—through tax exemptions, reduced reserve requirements, or interest rate

subsidies from the budget—should be transparently defined so that the financing burden is not imposed on banks' balance sheets.

For the legislature: It is recommended that directed loans be removed from annual budget laws and presented within transparent budgetary line items. The experience of directed credit liberalization in countries such as France and Japan shows that gradual reduction of these loans leads to improved resource allocation efficiency (Müller et al., 2025).

For bank managers: Diversifying financing sources and reducing dependence on short-term deposits to cover long-term directed loans can mitigate liquidity imbalance. Additionally, strengthening the credit assessment system for directed loans—to the extent possible—can reduce default risk.

5.5. Research Limitations

This research faces limitations that must be considered in interpreting the findings. **First**, the lack of access to granular banking data has confined the analysis to the macro level and eliminated the possibility of examining heterogeneity in banks' behavior. **Second**, differences in the calculation standards of the capital adequacy ratio and non-performing loan ratio across different periods limit precise comparison across periods. **Third**, the possibility of reverse causality exists; that is, the government may have turned to directed loans as a financing instrument under conditions where banks already faced capital weakness. **Fourth**, the absence of a control group renders a quasi-experimental design impossible.

5.6. Suggestions for Future Research

Based on the above limitations, the following suggestions are offered for future research:

1. **Research with granular banking data:** With access to disaggregated balance sheet data for banks (through the Codal system or Central Bank collaboration), panel data analysis can be conducted to examine the heterogeneity of directed loans' effects across different banks.
2. **International comparative study:** Comparing Iran's experience with countries that have liberalized directed credit policy (such as France, Japan, and India) can provide valuable policy lessons.
3. **Mixed-methods research:** Combining quantitative analysis with in-depth interviews with bank managers and policymakers can better illuminate decision-making and motivational mechanisms.
4. **Analysis of the effect of directed loans on macro variables:** Examining the relationship between directed loans and economic growth, employment, and inflation within macro-econometric models.
5. **Case study of specific banks:** Detailed examination of how directed loans are managed in state-owned and private banks and identification of behavioral differences.

5.7. Final Conclusion

This research demonstrated that directed loans in Iran's economy rearrange banks' asset composition through three pathways—imposition of portfolio composition, increased operational risk, and liquidity imbalance—and lead to weakened credit allocation efficiency and financial stability of the banking network. The findings indicate that this mechanism, in the absence of structural reform in the incentive system and budgetary framework, will lead to continued credit misallocation and deepened banking imbalance.

From a policy perspective, the international experience of directed credit liberalization shows that gradual reduction and transparency of these loans lead to improved resource allocation efficiency and strengthened financial stability of banks. However, this process requires the substitution of transparent support mechanisms—through the public budget—instead of imposing obligations on banks. Without this substitution, removing directed loans could lead to reduced access of target groups to credit—an outcome that contradicts the support objectives of this policy.

Ultimately, this research emphasizes the necessity of an interdisciplinary approach—combining financial economics, risk management, and political economy—for a complete understanding of the directed loans phenomenon. Understanding this phenomenon is important not only for reforming Iran's banking system but also for a more general comprehension of the role of institutional interventions in credit allocation in developing economies.

Declarations

Author Contributions (CRediT taxonomy)

Authors have participated in this research in equal proportion.

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Authors' AI Use Statement

The authors declare that no artificial intelligence (AI) tools were used in the preparation of this manuscript for writing, analysis, or data generation. All content is the result of the authors' own human effort and judgment.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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