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EcoScope
The Economy Observer

Understanding monetary transmission: From policy actions to the real economy

Rate cuts in 2025 set the stage for growth revival

- The 2025 monetary easing cycle in India represents a crucial development in the country's policy framework, highlighting the importance of monetary transmission for credit stimulation and economic growth. The Reserve Bank of India (RBI) reduced the policy repo rate by a total of 100bp, from 6.5% in Feb'25 to 5.5% in Jun'25. This was accompanied by significant liquidity measures, including a 150bp reduction in the Cash Reserve Ratio (CRR), open market purchases totaling INR4.05t, and foreign exchange swap operations amounting to USD25.1b. These actions collectively injected ~INR9.8t of systemic liquidity, fostering a favorable monetary environment.
- Given the scale and breadth of these policy actions, it becomes essential to understand their real economic impacts. This report aims to explore this relationship by detailing the theoretical framework that connects monetary tools—such as interest rates and liquidity operations—to credit expansion and, ultimately, to real GDP growth. We then adopt an empirical perspective, utilizing historical macroeconomic data, easing cycle timelines, and regression models to assess the effectiveness of policy tools (repo rate and liquidity tools) in influencing credit growth and GDP outcomes.
- Drawing from historical easing cycles and aligned with our regression analysis, we observe that monetary policy transmission to the real economy follows a multi-stage lagged pathway. The first leg involves the response of lending rates (WALR) to changes in the policy rate (repo). Our regression results show that the interest rate channel is the most effective means of transmission in monetary policy, with a regression coefficient of 0.87 showing a strong and significant pass-through from the policy rate to the weighted average lending rate (WALR) on outstanding loans. This implies that a 100bp change in the repo rate typically translates into an 87bp movement in WALR. Interestingly, the coefficient on net liquidity balance (as % of NDTL) is positive (0.077) but statistically insignificant ($p \approx 0.10$). This implies that when the system experiences a liquidity surplus, WALR may move slightly higher. This counterintuitive sign can be attributed to several structural and timing-related factors. First, the RBI often injects liquidity after observing tight financial conditions, creating a lagged relationship where higher WALR precedes liquidity injections. Second, even under surplus liquidity, banks may not lower lending rates unless credit demand revives or risk premiums ease.
- The second leg evaluates the relationship between lending rates (WALR) and credit growth. We employ a dynamic regression model using quarterly data spanning from 1QFY13 to 4QFY25, where the dependent variable is credit growth (% YoY). Our best-performing model includes the WALR on outstanding loans, CPI (% YoY), net liquidity balance (as % of NDTL), a positive value denoting surplus liquidity-and lagged values of credit growth (1-period and 2-period lags) as the independent variables. The regression results strongly validate the model's explanatory power, with an R^2 of 0.91, implying that over 91% of the variation in credit growth is accounted for by the included variables. WALR emerged as a key determinant, with a statistically significant negative coefficient of approximately –0.89, affirming that lower lending rates stimulate credit expansion. Net liquidity conditions also played a supportive role, with surplus liquidity associated with increased credit growth. The model also emphasizes the importance of credit inertia, as evidenced by significant coefficients on lagged credit growth, which reflect persistent borrowing behaviors. Furthermore, inflation appears to have a positive effect, suggesting that moderate price increases may correlate with rising credit demand in a growing economy.
- The analysis of the final leg of the transmission mechanism in the macroeconomic context reveals a statistically significant but modest relationship between credit growth and nominal GDP. We perform a two variable regression model using quarterly data spanning from 1QFY02 to 4QFY25 with credit growth (% YoY) as the independent variable and nominal GDP growth (% YoY) as the dependent variable. Our regression results show that, a 1pp increase in credit growth is associated with approximately a 0.24pp rise in nominal GDP growth. However, the low explanatory power of the regression results (R^2 ~8.5%) indicates that GDP is influenced by a broader range of structural and cyclical factors beyond just monetary conditions.
- The analysis of historical monetary easing episodes in India reveals that the effectiveness of monetary policy transmission hinges critically on macroeconomic context and the strength of pass-through across various stages-policy rate to lending rates, to credit, and finally to real output. Empirical results aligned with regression evidence suggest that easing is most

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effective when inflation is low, fiscal deficit is contained, and financial sector conditions are stable enough to allow lending to respond. The 2015 cycle demonstrated this synergy, with a high transmission efficiency ratio (TER) of 78%, benign inflation (averaging 4.4%) and low fiscal deficit (averaged 3.4% of GDP), resulting in strong credit revival (+5.8 percentage points), and a corresponding uplift in GDP growth.

- **In contrast, ineffective easing cycles like 2012-13 and 2019 (NBFC stress period) featured repo cuts of 125 and 135bp respectively, but recorded weak WALR response (only 40bp and 23bp decline), with TERs as low as 32% and 17%. These episodes were accompanied by either elevated inflation (9.7% in 2012) or financial instability, both of which impaired banks' ability and willingness to extend credit. Credit growth actually declined during these cycles (e.g., -0.7 pp in 2012, -4.1 pp in 2019), and GDP either remained flat or fell, highlighting broken transmission chains.**
- **The 2025 monetary easing cycle (Feb'25-Jun'25) stands out as a notably effective phase in India's recent policy history. A combination of well-timed repo rate cuts (100bp between February and June 2025), abundant liquidity and improved transmission to lending rates have created an accommodative monetary environment. Crucially, the macroeconomic backdrop has been conducive to easing. Headline inflation has remained moderate and comfortably within the RBI's target range, reducing the risk of policy reversal. It stood at 2.8% in May'25, averaging only 3.2% during the easing period (Feb'25-May'25). (Exhibit 14). We believe that the overall inflation trajectory is expected to remain benign at 3.8% YoY in FY26 (vs. 4.6% in FY25) as well, further allowing space for efficient monetary transmission. At the same time, fiscal consolidation has progressed, with the fiscal deficit narrowing to 4.8% of GDP in FY25 and budgeted at 4.4% of GDP in FY26, preserving macroeconomic stability and anchoring inflation expectations. On the real side, GDP growth has picked up to 7.4% in 4QFY25 from 6.4% in 3QFY25, signaling that easing is effectively stimulating economic activity.**
- **Given these dynamics, the current monetary policy environment is not only favorable for credit expansion but also likely to support further gains in output. With inflation anchored, fiscal support steady, and private sector balance sheets gradually improving, monetary easing in 2025 is well-aligned with macroeconomic fundamentals and will boost credit growth and real GDP growth in the next few quarters.**

Inside RBI's liquidity playbook: How policy turned to growth mode in 2025?

In 2025, the RBI launched a decisive monetary easing cycle to counteract weakening domestic demand and support continued economic resilience. Between Feb'25 and Jun'25, the RBI reduced the repo rate by a total of 100bp—starting with a 25bp cut in Feb'25, another in Apr'25, followed by a 50bp "material" cut in Jun'25, bringing the policy rate down to 5.5%. Alongside interest rate reductions, the RBI cut the Cash Reserve Ratio by 150bp, bringing it down to 3%, with 50bp cut already done in Dec'24 (releasing INR1.16t) and another 100bp cut announced in four staged tranches starting Sep'25—a move projected to release approximately INR2.5t into the banking system. To underpin the growth push, the RBI conducted INR4.05t worth of open market operations (OMOs) and executed foreign exchange swaps amounting to USD25.1b, injecting INR2.1t of durable liquidity *(Exhibit 1).*

These liquidity-enhancement measures, combined with aggressive rate cuts, reflect the RBI's strategic emphasis on easing financial conditions, bolstering credit flows, and sustaining output growth.

While the repo rate was reduced by 100bp to support monetary transmission, the real boost to credit conditions resulted from a substantial liquidity infusion (via OMOs, FX swaps, and CRR cuts) totaling INR9.8t. These liquidity-enhancement measures, combined with aggressive rate cuts, reflect the RBI's strategic emphasis on easing financial conditions, bolstering credit flows, and sustaining output growth.

Exhibit 1: Substantial liquidity infusion of INR9.8t by the RBI in the current easing cycle

Measure type	Period	Details	Estimated Liquidity Injected (INR t)
CRR cuts	Dec'24, Jun'25	❖ 150bp total (25bp on 6th Dec'24 + 25bp on 8th Dec'24 + 100bp on 6th Jun'25)	3.66
Repo rate cuts	Feb, Apr, Jun'25	❖ 100bp total: from 6.50% to 5.50% (25bp cut on 7th Feb'25, 25bp on 5th Apr, 50bp on 6th Jun)	
OMO purchases	Mar–May'25	❖ INR0.6t in Jan'25 (three tranches), INR1t in Mar (two tranches), INR0.8t in Apr (four tranches), INR0.4t in Apr (separate), INR1.25t in May (four tranches)	4.05
FX swaps	Jan–Mar'25	❖ USD25.1b total: USD5.1b in Jan'25 (6-month), USD10b in Feb (3-year), USD10b in Mar (3-year)	2.10
Total liquidity injected			9.80

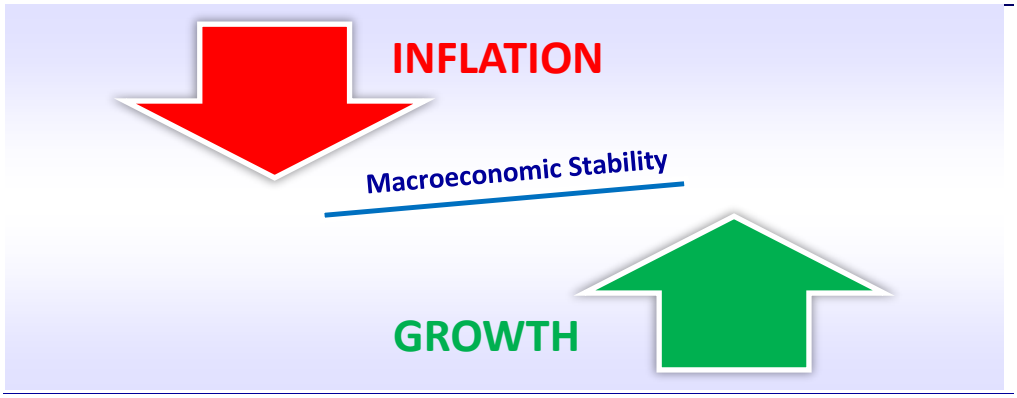
Source: RBI, MOFSL

- CRR cuts provide durable primary liquidity, directly boosting banks' lendable resources.
- Repo rate cuts reduce borrowing costs, thereby indirectly stimulating credit demand.
- OMOs purchase G-Secs from banks, injecting permanent liquidity.
- FX swaps release short-to-medium-term rupee liquidity against foreign exchange, supporting systemic liquidity.

Given the scale and breadth of these policy actions, it becomes essential to understand their real economic impacts. This report aims to explore this relationship by detailing the theoretical framework that connects monetary tools—such as interest rates and liquidity operations—to credit expansion and, ultimately, to real GDP growth. We then adopt an empirical perspective, utilizing historical macroeconomic data, easing cycle timelines, and regression models to assess the effectiveness of policy tools in influencing credit growth and GDP outcomes.

What is monetary policy?

Monetary policy refers to the process by which a country's central bank—such as the **RBI**—controls the money supply, interest rates, and liquidity in the economy to achieve **macroeconomic stability (maintaining price stability and supporting sustainable growth)**.



What are the monetary policy tools used to influence inflation and GDP?

Monetary policy tools are the primary levers used by central banks, such as the RBI, to regulate liquidity, control inflation, and influence economic growth. These tools work through the **monetary transmission mechanism**, affecting interest rates, credit availability, investment, and ultimately aggregate demand in the economy.

- **Policy interest rates** like the **repo** and **reverse repo rates** directly influence the cost of borrowing. A higher repo rate makes credit more expensive, helping reduce inflation but also slowing down credit expansion and GDP growth.
- **Liquidity-related tools**, including the **CRR**, **Statutory Liquidity Ratio (SLR)**, and **OMOs**, influence the volume of funds banks can lend. Tightening liquidity suppresses inflation but often at the cost of lower credit growth and output.
- Instruments such as the **Standing Deposit Facility (SDF)** and **Variable Rate Reverse Repo (VRRR)** have gained prominence post-Covid to fine-tune liquidity more flexibly.
- **Forward guidance** and **targeted tools** such as Targeted Long-Term Repo Operations (**TLTROs)** support market expectations and credit to specific sectors, balancing short-term inflation concerns with long-term growth objectives.

Understanding these interactions is crucial for evaluating the effectiveness of monetary policy, especially during easing or tightening cycles. In this report, we try to understand how these tools collectively influence credit and GDP outcomes, using regression models and historical data to quantify their impact.

The table below (Exhibit 2) categorizes key monetary tools and summarizes their directional impact on three critical macroeconomic variables: **inflation**, **credit growth**, and **GDP growth**.

Exhibit 2: Monetary policy tools used to influence inflation and growth

Monetary policy tool	Mechanism / Description	Impact on inflation	Impact on credit growth	Impact on GDP growth
Repo Rate	❖ The rate at which the RBI lends to commercial banks for short-term funds	**Hike** reduces inflation via demand suppression **A cut** may raise inflation if demand picks up	**Hike** raises borrowing costs → **slows credit** **Cut** boosts credit and investment	**Hike** may reduce investment and consumption →**slows GDP** **Cut** can stimulate GDP in the short run
Reverse Repo Rate	❖ The rate at which the RBI borrows from banks	Higher rate → **banks park funds with the RBI → less money in the market**	Lending reduced → **slows credit**	Reduces the multiplier effect → **slows GDP growth**
CRR	❖ % of deposits banks must park with the RBI	Higher CRR withdraws liquidity → **reduces inflation**	Reduces bank funds for lending	Lowers investment activity → **GDP slows**
SLR	❖ % of deposits to be held in liquid assets like government securities	Higher SLR = less for private lending	Restricts credit availability	Slower credit transmission → **GDP impact is negative**
OMO	❖ RBI buys/sells govt. securities to inject/absorb liquidity	**Sales** absorb liquidity → **dampen inflation**	Reduces excess liquidity → **restricts credit**	Slower monetary transmission → **GDP slows**
		Purchases inject liquidity → **inflation risk**	More funds → **boost credit**	Stimulates demand and investment → **GDP growth ↑**
SDF	❖ Floor rate to absorb liquidity without collateral (new post-2022 tool)	Absorbs excess liquidity → **lowers inflation**	Reduces banks' incentive to lend	Can reduce private sector activity → **GDP impact**
MSF	❖ Emergency borrowing for banks above the LAF limit	Crisis-time support, not regular transmission	Prevents a sudden credit freeze	Helps avoid severe GDP contraction in stress events
Liquidity Adjustment Facility (LAF)	❖ Daily repo/reverse repo operations under the RBI's monetary policy framework	Tight LAF reduces liquidity → **inflation control**	Drains system liquidity → **restricts credit**	Investment and consumption may dip → **GDP slows**
VRRR	❖ Liquidity absorption via auction-based reverse repo	Mops surplus funds efficiently	Liquidity tightens → **credit slows**	Reduces lending → **lowers GDP potential**
Forward Guidance	❖ RBI's communication about future policy stance	Helps anchor inflation expectations	Boosts confidence or caution → **credit changes**	Shapes business sentiment → **GDP response via expectations**
TLTRO	❖ Long-tenor repo funds to banks for sector-specific lending (e.g., Covid-time support)	May lead to sectoral overheating	Ensures liquidity flows to stressed sectors	Keeps growth steady in weak demand periods

Source: RBI, MOFSL

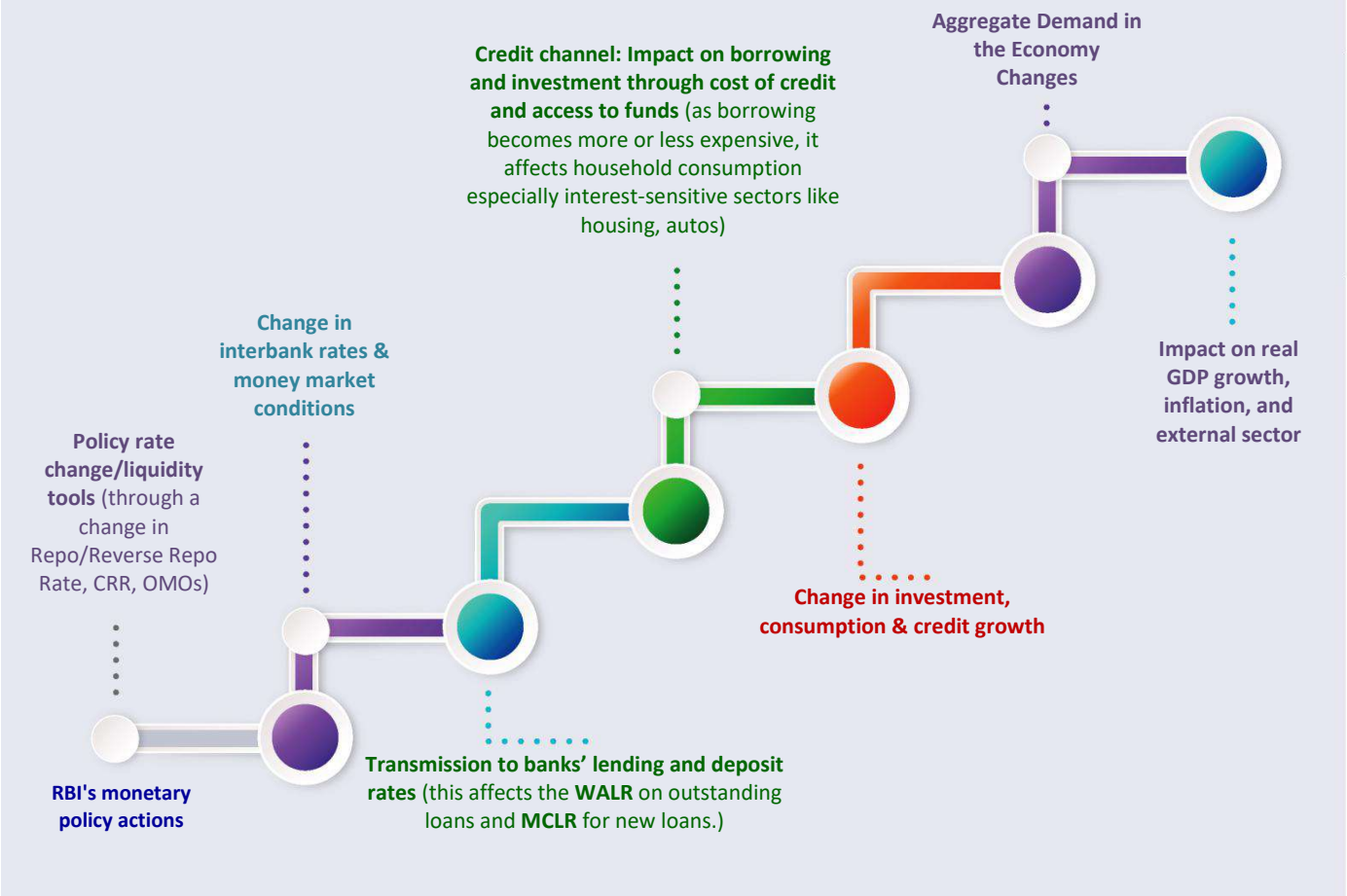
Monetary policy – transmission mechanism

Monetary policy affects the real economy through a series of interconnected channels. When a central bank like the RBI alters its policy stance — tightening or easing — it sets off a causal chain of responses through the financial system and ultimately into the broader macroeconomy. **This is known as the monetary transmission mechanism.**

Monetary policy primarily influences real GDP through its impact on aggregate demand. By adjusting policy rates and liquidity conditions, central banks affect the cost and availability of credit within the economy. Lower interest rates reduce borrowing costs, encouraging households to increase spending and businesses to invest, which in turn stimulates credit growth. As credit flows into productive sectors, both consumption and investment improve, positively contributing to real GDP growth. Conversely, tightening policy measures can curb excess demand and inflation, often resulting in slower GDP expansion. However, the full effect of monetary policy on real GDP typically unfolds with a lag of three to six quarters, and its efficacy depends on the strength of transmission through financial intermediaries and the prevailing macroeconomic conditions.

The following flow chart explains how this transmission works (Exhibit 3):

Exhibit 3: Monetary policy transmission mechanism

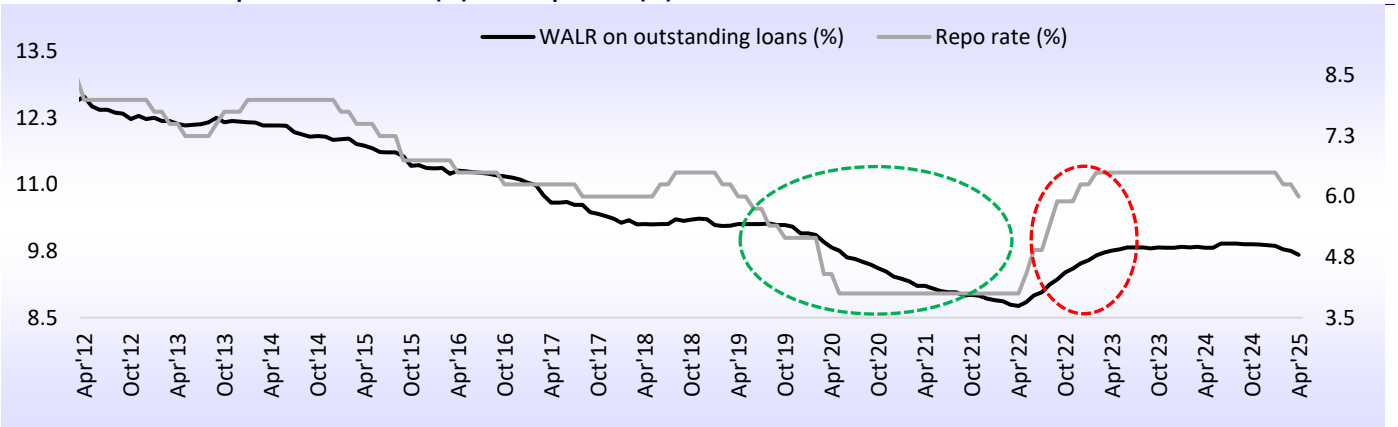


Empirical assessment of monetary transmission: From policy rates to market rates

Having established the theoretical foundations of how monetary policy tools—such as adjustments to the repo rate, liquidity injections via CRR cuts, OMO purchases, and FX swaps—are designed to influence the real economy, we now turn to the empirical aspect of this transmission. Our focus is on the WALR on outstanding loans, which reflects the cost of credit for borrowers and serves as a crucial link between monetary policy and the broader credit channel. We analyze the responsiveness of the WALR to repo rate changes and liquidity actions through regression analysis and visual representation, aiming to evaluate the strength and efficiency of the first leg of monetary transmission. We use monthly data on WALR, repo rate, and net liquidity balance (% of NDTL), spanning from Feb'12 to Apr'25 to perform the regression analysis.

- Exhibit 4 illustrates a clear positive co-movement between the repo rate and the WALR over the period from Apr'12 to Apr'25. As the RBI adjusts the repo rate—its primary policy rate—the WALR tends to move in the same direction, albeit with a lag.
- However, the magnitude and speed of pass-through are not uniform. WALR is sticky downwards, particularly during easing cycles such as in 2020 and again in 2024-25, where repo rate cuts were not immediately mirrored in lower WALR. This stickiness can be attributed to banks' risk pricing, deposit cost rigidity, and credit demand conditions. Conversely, in tightening cycles, WALR tends to respond more swiftly, indicating asymmetry in transmission.

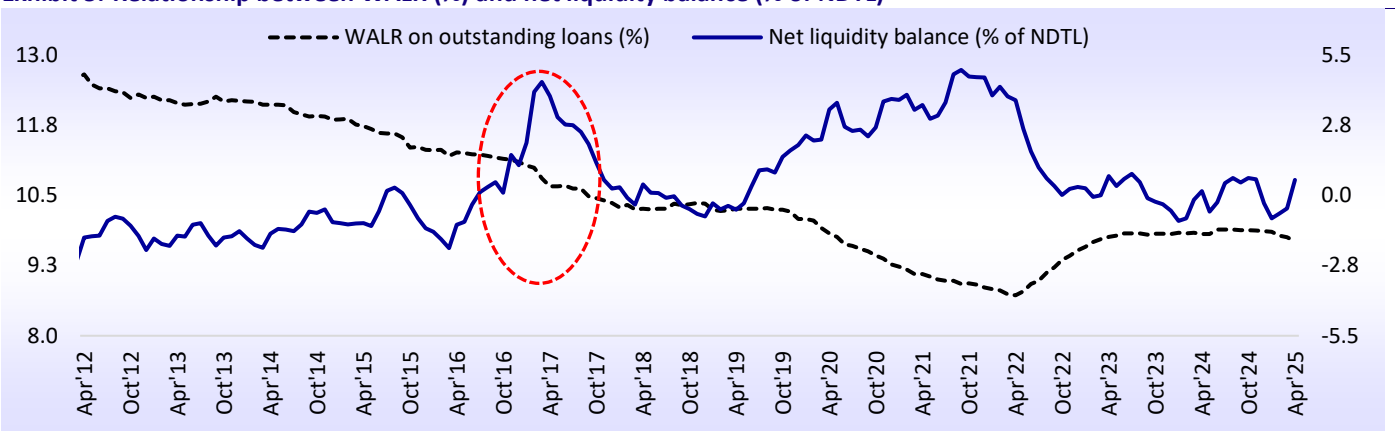
Exhibit 4: Relationship between WALR (%) and Repo rate (%)



Source: RBI, CEIC, MOSPI, MOFSL

- Exhibit 5 depicts that the relationship between liquidity balance and WALR appears less consistent and weaker than that between WALR and the repo rate. During periods of significant liquidity surplus, such as 2020–2022, the WALR continued to decline, suggesting some degree of support for lower lending rates. However, this relationship is not one-to-one: in certain periods (e.g., 2016–17 and 2023–24), increased liquidity coincided with stable or even rising WALR.
- While abundant liquidity can ease financial conditions, it does not automatically lead to lower lending rates unless credit demand is robust and risk perceptions decline. Moreover, the timing of liquidity injections—often reactive—means that surpluses can follow, rather than precede, periods of stress or elevated lending rates.

Exhibit 5: Relationship between WALR (%) and net liquidity balance (% of NDTL)



Source: RBI, CEIC, MOSPI, MOFSL

- We performed a multiple regression analysis with WALR and net liquidity balance (as % of NDTL) as independent variables and repo rate as the dependent variable, using monthly data spanning from Feb'12 to Apr'25. The results of the regression analysis reinforce the importance of the interest rate channel in India's monetary transmission. The coefficient on the repo rate is estimated at 0.87 and is highly statistically significant ($p < 0.01$), indicating that a 100bp change in the repo rate typically results in an 87bp change in the WALR on outstanding loans. This exhibits a strong pass-through from the policy rate to lending rates, affirming the effectiveness of the repo rate as a primary monetary policy tool. *(Exhibits 6 and 7).*

Repo rate cut is the key factor in reducing WALR. Liquidity surplus alone doesn't always reduce WALR unless accompanied by policy rate cuts and stable inflation.

- Interestingly, the coefficient on net liquidity balance (as % of NDTL) is positive (0.077) but statistically insignificant ($p \approx 0.10$). This implies that when the system experiences a liquidity surplus, WALR may move slightly higher, though the relationship lacks statistical strength. This counterintuitive sign can be attributed to several structural and timing-related factors. First, the RBI often injects liquidity after observing tight financial conditions, creating a lagged relationship where higher WALR precedes liquidity injections. Second, even under surplus liquidity, banks may not lower lending rates unless credit demand revives or risk premiums ease. (Exhibits 6 and 7).
- **Overall, the repo rate cut is the key factor in reducing WALR. Liquidity surplus alone doesn't always reduce WALR unless accompanied by policy rate cuts and stable inflation. Thus, while the repo rate clearly drives monetary transmission, liquidity impacts are weaker and potentially delayed, reflecting India's evolving credit markets and policy dynamics.**

Exhibit 6: Regression results: Model fit and summary statistics

Metric	Value	Interpretation
Multiple R	0.87	❖ High correlation between predicted and actual WALR.
R Square	0.76	❖ 75.8% of the variation in WALR is explained by repo rate and liquidity. Strong explanatory power.
Adjusted R Square	0.76	❖ Adjusted for the number of predictors. Still strong – model isn't overfitting.
Standard Error	0.56	❖ The average distance that the observed values fall from the regression line – reasonably low.
F-value	244.4	❖ p-value (≈0) indicates that the model is statistically significant – the predictors jointly explain a significant portion of WALR variation.
Observations	159	❖ Sufficient sample size for reliable inference.

Source: RBI, CEIC, MOSPI, MOFSL

Exhibit 7: Regression results: Interpretation of coefficients

Variable	Coefficient	Std. Error	t-Stat	P-value	Significance
Intercept	5.1	0.46	11.02	2.95E-21	❖ Significant
Repo Rate (%)	0.867	0.07	12.31	9.19E-25	❖ Highly significant
Net Liquidity (% of NDTL)	0.078	0.048	1.63	0.105	❖ Not significant

Source: RBI, CEIC, MOSPI, MOFSL

Credit growth and the second leg of monetary transmission

Having established how monetary policy tools influence lending rates through the first stage of transmission, we now turn to the second leg—how interest rates, liquidity conditions, and macroeconomic factors impact credit growth**.** This step is crucial, as credit growth serves as the primary channel through which monetary actions translate into changes in consumption, investment, and ultimately, real GDP.

- To evaluate the relationship, we employ a dynamic regression model using quarterly data spanning from 1QFY13 to 4QFY25, where the dependent variable is credit growth (% YoY). Our best-performing model includes the WALR on outstanding loans, CPI (% YoY), net liquidity balance (as % of NDTL) – a positive value denoting surplus liquidity – and lagged values of credit growth (1-period and 2-period lags) as the independent variables.
- The regression results strongly validate the model's explanatory power, with an R^2 of 0.91, implying that over 91% of the variation in credit growth is accounted for by the included variables. The model is statistically robust with a highly significant F-statistic ($p < 0.00001$; Exhibit 8).

Exhibit 8: Model summary

Metric	Value	Interpretation
Dependent Variable	Credit Growth (% YoY)	❖ The target variable
Observations	52	❖ Number of time points or data entries
Multiple R	0.955	❖ Very strong correlation between predicted and actual credit growth
R Square (R^2)	0.912	❖ 91.2% of the variation in credit growth is explained by the model
Adjusted R^2	0.902	❖ Very high even after adjusting for the number of predictors (suggests a robust model)
Standard Error	1.335	❖ The average prediction error is 1.34 percentage points
F-statistic	94.84	❖ High value indicates strong overall model significance
Significance F	4.65E-23 (=0)	❖ The model is statistically significant at a much less than 1% level

Source: RBI, CEIC, MOSPI, MOFSL

Credit growth in India is shaped by a complex interplay of monetary conditions, macroeconomic variables, and its own past trajectory, with policy rate changes having a clear and immediate role, while liquidity impacts are more nuanced and possibly lagged.

- Among the monetary variables, WALR exhibits a statistically significant negative coefficient (-0.89, p = 0.0057), reaffirming that higher lending rates restrain credit expansion by increasing the cost of borrowing (Exhibit 9).
- Notably, net liquidity balance enters with a negative coefficient (-0.65, p = 0.0051), which is counterintuitive given that surplus liquidity (positive value) is expected to support credit growth. This negative sign suggests that **the** RBI usually adds liquidity when credit demand is already weak, so the impact shows up with a delay (Exhibit 9).
- Inflation enters with a positive and statistically significant coefficient (0.23, p = 0.028), indicating that moderate inflation expectations could be consistent with stronger nominal credit demand or possibly reflect a pass-through of nominal activity (Exhibit 9).
- Importantly, the first lag of credit growth is strongly positive (1.11, p < 0.00001), highlighting persistence and momentum in credit cycles, whereas the second lag is negative (-0.38, p = 0.003), suggesting some mean reversion. These dynamics imply that credit growth is path-dependent but self-correcting over time (Exhibit 9).
- In sum, the results underscore that credit growth in India is shaped by a complex interplay of monetary conditions, macroeconomic variables, and its own past trajectory, with policy rate changes having a clear and immediate role, while liquidity impacts are more nuanced and possibly lagged.

Exhibit 9: Interpretation of Coefficients

Variable	Coefficient	Std. Error	t-stat	P-value	Significance
Intercept	11.46	3.53	3.2	0.0022	Significant
Net Liquidity Balance (% of NDTL)	-0.65	0.22	-2.9	0.0051	Significant
CPI Inflation (% YoY)	0.23	0.1	2.3	0.028	Significant
WALR (Weighted Average Lending Rate)	-0.89	0.31	-2.9	0.0057	Significant
One-period Lagged Credit Growth	1.11	0.14	7.9	4.56E-10	Highly Significant
Two-period Lagged Credit Growth	-0.38	0.12	-3.1	0.003	Significant

Source: RBI, CEIC, MOSPI, MOFSL

Last leg of transmission: Does credit growth impact GDP growth?

There is a positive and statistically significant relationship between credit growth and nominal GDP growth, but the impact size is moderate. It highlights the role of credit as a contributor, but not a dominant force, in GDP dynamics.

To assess the final leg of the monetary transmission mechanism—how credit growth translates into real economic activity—we examine the relationship between credit growth and nominal GDP growth *(Exhibit 11).* We perform a two variable regression model using quarterly data spanning from 1QFY02 to 4QFY25 with credit growth (% YoY) as the independent variable and nominal GDP growth (% YoY) as the dependent variable.

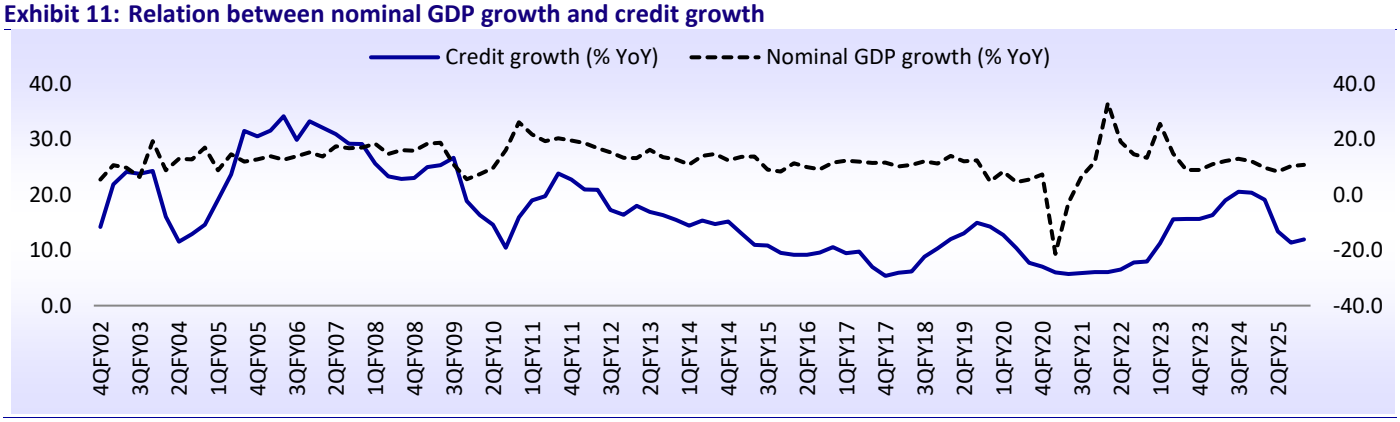
- Our regression results show that a 1pp increase in credit growth associated with a 0.24pp rise in nominal GDP growth ($p \approx 0.0039$). While the impact is meaningful, the relatively low R^2 of 8.5% suggests that credit growth alone cannot fully explain GDP fluctuations. *(Exhibit 10).*
- This indicates that while credit plays a supportive role in driving economic activity, other macroeconomic factors—such as public investment, exports, global conditions, and consumption trends—also play substantial roles.
- There is a positive and statistically significant relationship between credit growth and nominal GDP growth, but the impact size is moderate. It highlights the role of credit as a contributor, but not a dominant force, in GDP dynamics.

Exhibit 10: Regression results

Metric	Value
Dependent Variable	Nominal GDP Growth (% YoY)
Independent Variable	Credit Growth (% YoY)
Observations	96
R-squared	0.085
Adjusted R-squared	0.076
Coefficient (Credit growth)	0.237
Std. Error	0.08
t-Stat	2.96
P-value	0.0039 (highly significant)

Source: RBI, CEIC, MOSPI, MOFSL

Exhibit 11: Relation between nominal GDP growth and credit growth



Source: RBI, CEIC, MOSPI, MOFSL

Monetary easing episodes: Understanding the transmission lag framework

Now that we have conducted an in-depth regression analysis, we shift our focus to the timing and sequencing of monetary transmission—what is commonly referred to as the transmission lag framework. While policy rate changes are announced instantly, their effect on the real economy unfolds gradually and non-uniformly across different channels. Understanding these lags is essential for interpreting the effectiveness of monetary easing and for designing well-timed policy interventions.

- The results of our regression models—along with well-established monetary theory—provide clear evidence of transmission occurring in a structured, lagged manner across different stages. Specifically, changes in the repo rate significantly influence the WALR with a lag of 1–2 quarters, as reflected by a strong pass-through coefficient (~0.87) and a high R^2 in the repo-WALR regression. This lag is consistent with operational realities such as loan rate resets and transmission frictions. WALR, in turn, impacts credit growth with a further delay of 1–2 quarters, supported by our regression where WALR carries a significant negative coefficient, and lagged credit growth is also an important driver. Lastly, the link between credit and GDP growth unfolds over 2–3 quarters, as suggested by a statistically significant positive relationship between credit growth and subsequent nominal GDP growth. These sequential lags reflect the realities of loan repricing, demand-side dynamics, and investment gestation periods.
- Meanwhile, inflation and fiscal deficit influence the monetary policy stance itself and are considered in a contemporaneous context to assess policy space.
- To analyze these effects more systematically, we establish a consistent averaging framework for each leg of the transmission chain, grounded in regression results and supported by macroeconomic intuition. This framework allows us to rigorously assess the effectiveness of monetary easing episodes by comparing pre- and post-easing changes across key variables. The table that follows summarizes the empirical lag structure and averaging windows used in our evaluation *(Exhibit 12).*

Exhibit 12: Monetary transmission lag framework

Transmission Leg	Typical Lag	Pre-easing window	Post-easing window	Rationale
Repo Rate → **WALR**	1–2 quarters	Average WALR over two quarters before the first rate cut	Average WALR over two quarters after the final rate cut	❖ Banks adjust lending rates with a delay; this matches real-world loan pricing behavior
WALR → **Credit Growth**	1–2 quarters	* Average credit growth over two quarters before the final cut	# Credit growth averaged 2nd–4th quarter post final cut#	❖ Credit demand recovers slowly; aligns with lending cycle response time
Credit → **GDP Growth**	2–3 quarters	Average GDP growth over three quarters before the final cut	GDP growth averaged 3rd–5th quarter post final cut	❖ Investments/consumption take time to translate into output
^Inflation & @Fiscal Deficit			Averaged during the easing window and post-cut periods	❖ Reflect macro conditions shaping the easing room and credibility

Notes: *We are taking the average year-on-year credit growth in the two quarters (6 months) immediately preceding the final repo rate cut of a monetary easing cycle.
Averaging the 2nd, 3rd, and 4th quarters after the final cut: e.g., as the last repo rate cut was in Mar'20 (4QFY20), we calculate the average YoY credit growth during 2Q-4QFY21
@Fiscal deficit: Annual average over the easing year and one year after
^Average inflation over the easing window + 2–3 quarters after the last cut

Monetary easing episodes: Transmission effectiveness assessment

Rate cuts alone do not guarantee easing success. Strong pass-through, conducive inflation, manageable fiscal conditions, and a healthy banking system are all essential to ensuring that monetary transmission completes its full journey from policy action to real sector outcomes.

After establishing the transmission lag framework, we now turn to a systematic analysis of historical monetary easing episodes to empirically evaluate each leg of the monetary transmission process. This involves tracing the flow of policy stimulus—from repo rate cuts to changes in the WALR, followed by credit growth responses, and finally, the impact on GDP growth. By applying consistent averaging windows based on regression-backed lags for each transmission stage, we are able to distinguish between episodes where easing translated effectively into real economic outcomes and those where it did not. The TER, defined as the ratio of change in WALR to change in repo rate, is used to assess the strength of interest rate transmission.

We also assess the broader macroeconomic backdrop—particularly inflation and fiscal deficit conditions—to understand how supportive or restrictive the environment was for transmission. This empirical assessment allows us to identify the structural and cyclical factors that shaped the effectiveness of monetary policy across different periods.

- The analysis of historical monetary easing episodes in India reveals that the effectiveness of monetary policy transmission hinges critically on macroeconomic context and the strength of pass-through across various stages—policy rate to lending rates, to credit, and finally to real output. Empirical results aligned with regression evidence suggest that easing is most effective when inflation is low, fiscal deficit is contained, and financial sector conditions are stable enough to allow lending to respond.
- The 2015 cycle demonstrated this synergy, with a high TER of 78%, benign inflation (averaging 4.4%), and low fiscal deficit (averaging 3.4% of GDP), resulting in strong credit revival (+5.8 percentage points) and a corresponding uplift in GDP growth *(Exhibit 13).*
- In contrast, ineffective easing cycles like 2012–13 and 2019 (NBFC stress period) featured repo cuts of 125 and 135bp respectively, but recorded weak WALR response (only 40bp and 23bp decline), with TERs as low as 32% and 17%. These episodes were accompanied by either elevated inflation (9.7% in 2012) or financial instability, both of which impaired banks' ability and willingness to extend credit. Credit growth actually declined during these cycles (e.g., -0.7 pp in 2012, -4.1 pp in 2019), and GDP either remained flat or fell, highlighting broken transmission chains.
- Interestingly, during the COVID easing phase (Mar–May 2020), while credit growth still declined by 1.0pp, GDP growth rebounded sharply by 15.5pp, supported by substantial fiscal stimulus and large base effects, rather than a credit-led transmission. Despite the challenging environment, the TER stood at a strong 89%, with a 102bp fall in WALR following a 115bp repo rate cut—demonstrating that the interest rate channel remained operational, though credit constraints persisted due to risk aversion. *(Exhibit 13).*
- **These findings reinforce that rate cuts alone do not guarantee easing success. Strong pass-through, conducive inflation, manageable fiscal conditions, and a healthy banking system are all essential to ensuring that monetary transmission completes its full journey from policy action to real sector outcomes.**

Exhibit 13: Monetary easing episodes: Transmission effectiveness assessment

Easing Episode	Repo Rate Cut (bp)	Change in WALR (bp)	TER (%)	Change in Credit Growth (pp)	Change in Nominal GDP Growth (pp)	Easing Effective?	Avg. Inflation (YoY, %)	Fiscal Deficit (% of GDP)	Remarks
Oct'08 – Apr'09	425			↓ by 7.6	↑ by 10.7	Partially		5.6	❖ Growth driven more by fiscal stimulus/base effects than by monetary transmission
Mar'12 – May'13	125	-40	32	↓ by 0.7	↓ by 0.9	Ineffective	9.7	4.3	❖ High inflation, tight fiscal space, and risk aversion weakened transmission
Jan'15 – Sep'15	200	-157	78	↑ by 5.8	↑ by 1.7	Effective	4.4	3.4	❖ Low inflation, fiscal prudence, and stable macro helped amplify the easing impact
Feb'19 – Oct'19	135	-23	17	↓ by 4.1	↓ by -0.7	Ineffective	4.7	6.9	❖ Weak demand, NBFC stress, and poor rate pass-through hindered credit revival
Mar'20 – May'20	115	-102	89	↓ by 1.0	↑ by 15.5	Ineffective	6.8	7.9	❖ COVID shock overwhelmed policy; elevated risk perception; credit response is crucial
Feb'25 – Jun'25 (current)*	100					**Effective?**	3.2	4.6	❖ Well-timed easing supported by liquidity, strong pass-through, moderate inflation, and fiscal prudence

Source: RBI, CEIC, MOSPI, MOFSL Research

Evaluating the 2025 Easing Cycle: A Timely Policy in a Conducive Macro Environment

With inflation anchored, fiscal support steady, and private sector balance sheets gradually improving, monetary easing in 2025 is well-aligned with macroeconomic fundamentals.

- The 2025 monetary easing cycle (Feb-Jun'25) stands out as a notably effective phase in India's recent policy history. A combination of well-timed repo rate cuts (100bp between February and June 2025), abundant liquidity, and improved transmission to lending rates has created an accommodative monetary environment.
- Crucially, the macroeconomic backdrop has been conducive to easing. Headline inflation has remained moderate and comfortably within the RBI's target range, reducing the risk of policy reversal. It stood at 2.8% in May'25, averaging only 3.2% during the easing period (Feb-May'25; *Exhibit 14).* We believe that the overall inflation trajectory is expected to remain benign at 3.8% YoY in FY26 (vs. 4.6% in FY25) as well, further allowing space for efficient monetary transmission *(Exhibit 15).*
- At the same time, fiscal consolidation has progressed, with the fiscal deficit narrowing to 4.8% of GDP in FY25 and budgeted at 4.4% of GDP in FY26, preserving macroeconomic stability and anchoring inflation expectations *(Exhibit 16).*

Exhibit 14: India's headline CPI averaged 3.2% during Feb-May'25 (easing period)…

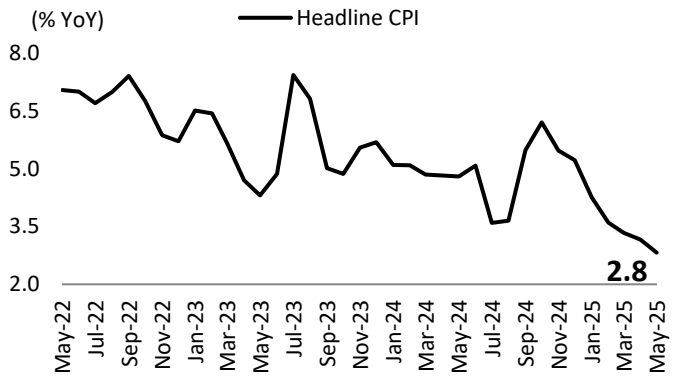
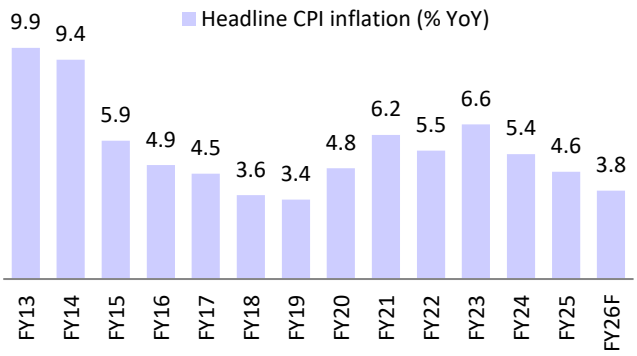
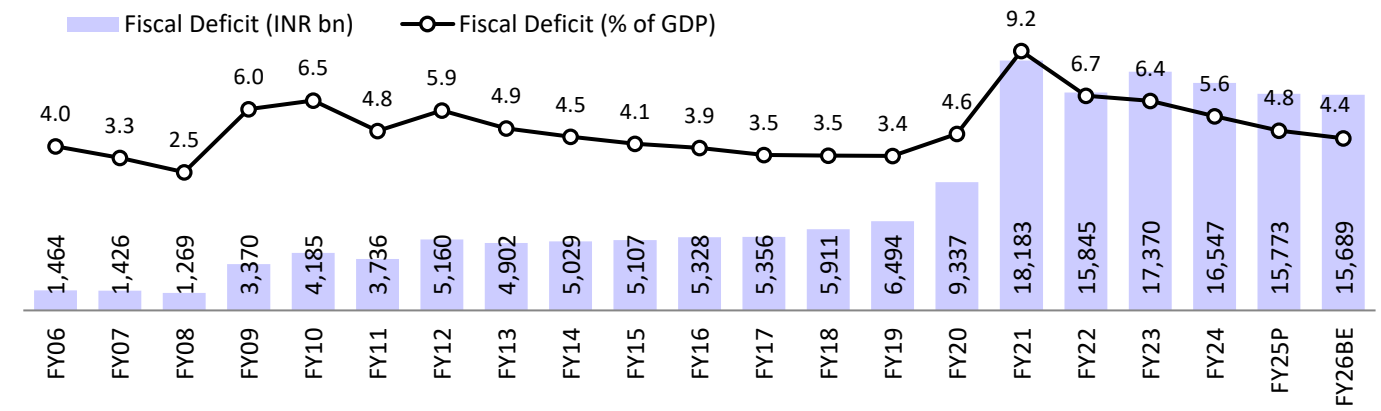


Exhibit 15: …and it is expected to remain benign at 3.8% in FY26 as well



Source: CEIC, MOSPI, MOFSL Research

Exhibit 16: Fiscal deficit narrowed to 4.8% of GDP in FY25 from 5.6% in FY24 and is budgeted at 4.4% of GDP for FY26



Source: CGA, CEIC, MOSPI, MOFSL Research

- On the real side, GDP growth has picked up to 7.4% in 4QFY25 from 6.4% in 3QFY25, signaling that easing is effectively stimulating economic activity.
- Given these dynamics, the current monetary policy environment is not only favorable for credit expansion but also likely to support further gains in output. With inflation anchored, fiscal support steady, and private sector balance sheets gradually improving, monetary easing in 2025 is well-aligned with macroeconomic fundamentals. This episode highlights the importance of a synchronized macro-financial framework—where policy intent, system liquidity, and economic sentiment work in tandem—for monetary policy to deliver its intended growth outcomes.

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