

The Evolution of India's Exchange Rate Regimes: A Historical Analysis of the Indian Rupee and United states Dollar Dynamics from 1947 to 2024.

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Abstract: This This paper presents a comprehensive analysis of India's evolving exchange rate strategies from 1947 to 2024, emphasizing the strategic interplay between the Indian Rupee (INR) and the US Dollar (USD). It segments the historical progression into distinct regimes—ranging from a fixed peg and crawling peg to dual exchange rates, managed float, and finally, a market-oriented system—each reflecting changing macroeconomic priorities and external pressures. Grounded in empirical research and key macroeconomic metrics, the study investigates how India's domestic policy choices, global financial shifts, and geopolitical developments have influenced the valuation and volatility of the rupee against the dollar. It also evaluates the broader effects of these transitions on trade competitiveness, inflation control, foreign investment flows, and monetary policy independence. By distilling insights from over seven decades of exchange rate experimentation, the paper offers forward-looking perspectives for policymakers navigating today's increasingly integrated and unpredictable global economy.

Keywords: India Exchange Rate Regimes, Indian Rupee and US Dollar Dynamics, Currency Management, Dual Exchange Rates, Fixed Peg System, Crawling Peg, Managed Float, Capital Flows, Economic Liberlisation, Foreign Exchange Policy, Historical Exchange Rate Anaalysis And India And Us Economic Relations.

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I. INTRODUCTION

Exchange rate regimes are a cornerstone of a nation's economic strategy, significantly influencing its global trade competitiveness, monetary stability, and ability to attract foreign capital. In the context of emerging economies like India, the management of exchange rates plays a crucial role in shaping inflation trends, guiding capital movements, and supporting overall economic development. Understanding the historical evolution of exchange rate policies is therefore essential for analyzing a country's economic trajectory. Post-independence, India has witnessed a fundamental shift from a centrally planned economic model to a more open and market-oriented system. These structural changes have necessitated corresponding adaptations in the country's exchange rate framework. This paper offers an in-depth historical examination of India's exchange rate regimes from 1947 to 2024, with a focus on the changing dynamics between the Indian Rupee (INR) and the United States Dollar (USD). The analysis outlines India's progression from a fixed exchange rate system to a managed float and eventually to a market-driven regime, shaped by domestic economic conditions, global financial developments, and critical policy

decisions. Special attention is given to the role of the Reserve Bank of India (RBI) in managing exchange rate transitions during periods of economic reform, balance of payments pressures, and increasing global integration. This study aims to provide a comprehensive understanding of the INR–USD exchange rate path and its implications for India's economic sovereignty and policy autonomy.

II. CONCEPTUAL FRAMEWORK OF EXCHANGE RATE REGIMES

➤ Definitions and Classifications:

An exchange rate regime outlines how a nation governs the valuation of its currency relative to others. These regimes are generally categorized into three primary types:

• Fixed Exchange Rate Systems:

In a fixed (or pegged) regime, a country's monetary authority sets and upholds a constant value of its currency against another currency (such as the US dollar), a currency basket, or a commodity like gold. To maintain this parity, central banks intervene in the foreign exchange market by buying or selling foreign currency.

✓ *Hard Pegs:*

These are the most inflexible forms of fixed regimes. Examples include full dollarization, where a nation adopts another country's currency, and currency board arrangements that legally require the central bank to back every unit of domestic currency with foreign reserves. Such systems eliminate independent monetary policy, as domestic interest rates must mirror those of the anchor currency.

✓ *Soft Pegs:*

These systems aim to stabilize the currency within a specific band relative to an anchor currency or basket (e.g., $\pm 1\%$ to $\pm 30\%$). While they offer a nominal anchor for inflation expectations, they also allow limited monetary policy flexibility. However, soft pegs are often vulnerable to speculative attacks and can lead to abrupt devaluations or regime abandonment during crises.

• *Floating Exchange Rate Systems:*

In floating regimes, currency values are primarily dictated by market forces of supply and demand, with little to no direct intervention from the central bank. These systems are considered self-correcting, as exchange rate adjustments help rectify trade imbalances over time.

Managed Float (Dirty Float): This hybrid model blends characteristics of fixed and floating systems. While the market largely determines the exchange rate, central banks occasionally intervene to prevent excessive volatility or to achieve policy goals, such as curbing sudden currency appreciation or depreciation that could harm economic stability.

Theoretical Perspectives and Policy Dilemmas for Developing Countries:

For developing economies, the choice of exchange rate regime entails complex policy trade-offs and theoretical considerations.

✓ *Fixed Regimes:*

These can provide stability, boost investor confidence, and encourage trade by offering predictable exchange rates—crucial for countries lacking robust monetary policy frameworks. However, this comes at the cost of monetary policy independence. The central bank cannot adjust interest rates freely, which can lead to misaligned exchange rates, overvaluation, and susceptibility to speculative attacks if the peg becomes unsustainable.

✓ *Floating Regimes:*

These allow countries to retain full control over domestic monetary policy, enabling them to target inflation, employment, or growth. They also offer a mechanism for automatic correction of trade imbalances through currency adjustments. Yet, for emerging markets with shallow financial systems, high volatility under floating regimes poses significant risks—known as the "fear of floating." Exchange rate swings can disrupt inflation targets, erode competitiveness, and cause severe balance sheet mismatches in foreign currency-denominated debt.

➤ *Central Banks and Their Role in Exchange Rate Management:*

Central banks are pivotal in executing exchange rate policies. Their interventions include the purchase and sale of foreign currencies (commonly USD in India's case) to influence exchange rate movements, build foreign reserves, and reduce volatility. In addition to direct intervention, central banks adjust interest rates to influence capital flows and inflation. Higher interest rates, for instance, attract foreign investment, raising demand for the domestic currency.

Such interventions are most effective when:

- Sterilized to prevent unwanted changes in money supply.
- Credible, influencing market expectations through clear policy signals.

➤ *The IMF's "Hollowing Out of the Middle" and India's Strategic Approach:*

In the 1990s, the International Monetary Fund (IMF) identified a global trend known as the "hollowing out of the middle," where countries moved away from intermediate regimes like soft pegs, instead adopting either hard pegs or fully floating rates. This shift was driven by the instability associated with soft pegs during times of financial stress. However, by 2001, this trend began to reverse, with many emerging markets turning to managed float systems or reintroducing soft pegs. This reversal reflected the reality that most countries lacked the institutional capacity for hard pegs and the economic resilience for fully floating regimes.

India's path reflects this nuanced global shift. After maintaining a strict peg, India adopted a basket peg in 1975, offering more flexibility. Post-1991 economic reforms led to the adoption of a managed float. While India officially maintains a managed float, several analyses suggest that in practice, it operates as a de facto peg to the US dollar, marked by low volatility and consistent central bank interventions.

This strategy underscores India's pragmatic and adaptive approach, balancing monetary autonomy with exchange rate stability. It reflects an understanding that rigid adherence to theoretical models may not suit real-world complexities—especially in economies facing volatile capital flows, inflationary pressures, and shallow forex markets. India's approach exemplifies "pragmatic interventionism," where exchange rate policies are crafted not from ideology but from practical necessity, ensuring a delicate equilibrium between policy independence and financial stability.

➤ *The Era of Fixed Exchange Rates (1947–1975)*

- *The Bretton Woods Framework and Sterling Peg (1947–1971):*

After gaining independence in 1947, India entered the global monetary system by adopting the par value mechanism under the Bretton Woods Agreement, established in 1944. This global arrangement aimed to ensure exchange rate stability, prevent competitive currency devaluations, and promote coordinated economic growth. Under this system,

currencies were fixed to the U.S. dollar within a 1% margin, while the dollar itself was pegged to gold at \$35 per ounce. Member nations were expected to uphold their exchange rate parities through active interventions in currency markets.

India fixed the rupee's par value in terms of gold, using the British Pound Sterling as its intervention currency—largely due to its colonial and economic ties with the UK. Contrary to a widespread misconception, the rupee was not at parity with the U.S. dollar in 1947; historical data shows that the exchange rate was approximately ₹3.30 per USD.

During this era, India pursued an inward-oriented economic model characterized by import substitution industrialization (ISI). This approach emphasized reducing foreign dependency by boosting domestic industries, especially in sectors like steel, electronics, and textiles. However, this model, enforced through high tariff walls and the infamous License Raj, created persistent foreign exchange shortages. Indian exports, mainly consisting of jute, tea, and cotton, fetched low prices in global markets and faced numerous barriers, limiting foreign currency earnings. These policies and structural imbalances set the stage for recurring vulnerabilities in India's external sector.

- *The 1966 Currency Devaluation:*

By the mid-1960s, India was grappling with its first major balance of payments (BOP) crisis. A combination of factors triggered this crisis: heavy reliance on foreign aid, consistently weak export performance, and a growing trade deficit. The economic strain intensified due to wars with China (1962) and Pakistan (1965), which depleted India's already scarce foreign exchange reserves.

The situation worsened when the United States suspended food aid under the PL-480 program in June 1965, a move that left India in a precarious position. In response, international institutions like the IMF and World Bank offered financial assistance—but only on the condition of a significant rupee devaluation and liberalization of trade.

Despite staunch internal resistance from socialist elements within the ruling Congress party and opposition from Finance Minister T.T. Krishnamachari, the government, under Prime Minister Indira Gandhi, had little choice. On June 6, 1966, the rupee was devalued by 57%, shifting the exchange rate from ₹4.76 to ₹7.50 per USD. In return, India received assurances of financial support from global partners.

However, the move sparked a political backlash. Within months, India reinstated many of its trade restrictions and export subsidies, reversing the initial liberalization. This episode reflected the conflict between national policy autonomy and external economic dependence.

The 1966 devaluation marked a critical turning point. It exposed India's vulnerability to international pressure and deep-rooted reluctance toward market-based reforms. The political and ideological resistance to externally imposed policies was strong, and the reversal of liberalization efforts demonstrated a lasting skepticism toward economic openness. The trauma of this experience influenced Indian

policymakers' conservative stance for decades, notably shaping their cautious approach during the 1991 economic crisis. The 1966 devaluation thus stands as a historical lesson in how economic sovereignty, political ideology, and global pressures interact in shaping policy decisions.

- *Transition After Bretton Woods (1971–1975):*

The global monetary system saw a dramatic shift in 1971 with the breakdown of the Bretton Woods system, following the "Nixon Shock"—a unilateral U.S. decision to end dollar convertibility into gold. This move effectively led to the floating of major global currencies, bringing an end to the fixed exchange rate era that had been in place since World War II.

Initially, India pegged the rupee to the U.S. dollar in August 1971. However, by December 1971, the rupee was re-pegged to the British Pound Sterling, reflecting historical ties. Interestingly, this strategic shift proved advantageous. The Pound Sterling was undergoing a phase of depreciation in the global market. As a result, India experienced a gradual depreciation of the rupee, achieving a real effective devaluation without having to implement another politically contentious devaluation, like that of 1966.

This timeframe also coincided with the first global oil crisis, which sent shockwaves through the world economy. Despite its reliance on oil imports, India weathered the crisis with relative resilience. The sterling peg enabled the rupee to depreciate in line with global inflation and commodity price hikes. By 1975, the INR-USD exchange rate had adjusted to approximately ₹8.39 per USD.

The decision to return to a sterling peg, rather than remain with the dollar, offered India a subtle but significant policy cushion. The automatic depreciation helped improve India's export competitiveness and ease the impact of imported inflation without overt policy action. This episode illustrates how external currency trends can sometimes provide unintended but beneficial economic outcomes, particularly for countries facing internal political resistance to reform. It also emphasizes the ongoing challenge for emerging economies to maintain exchange rate stability while navigating shifting global monetary dynamics—often reacting to international events rather than proactively setting their currency agenda.

- *Transition to a Basket-Peg and Gradual Reforms (1975–1991):*

- *Adoption of a Currency Basket Peg (1975):*

In a bid to strengthen the stability of the Indian Rupee and reduce its dependence on the volatile Pound Sterling, India undertook a pivotal change in its exchange rate policy in September 1975. The rupee was no longer tied to a single currency but instead was pegged to a basket of currencies. Initially, this basket included 14 different currencies, later streamlined to five, representing India's key trading partners. The Reserve Bank of India (RBI) retained full discretion over the composition and weighting of this basket, which remained confidential, thereby allowing more operational flexibility in managing the rupee's value.

This new regime functioned as an adjustable nominal peg. The RBI maintained the rupee within a limited, undisclosed band—generally about $\pm 5\%$ of the calculated value of the basket. Achieving this required the central bank's frequent and active intervention in the foreign exchange market. A modest step toward liberalization came in 1978 when Indian banks were permitted to conduct intra-day foreign exchange transactions. Despite these measures, the rupee continued a steady path of depreciation against the US dollar, averaging between ₹7.91 and ₹8.19 during the fiscal year 1980–81.

• *Mounting External Pressures During the 1980s:*

Although the shift to a currency basket was designed to provide greater resilience, India's external sector faced increasing vulnerabilities throughout the 1980s. Until the early part of the decade, the current account had generally remained balanced or in surplus. However, during the latter half of the 1980s, the current account deficit expanded significantly. Unlike earlier periods where concessional foreign aid played a central role in financing these gaps, the 1980s saw a growing reliance on costlier sources such as commercial borrowings and deposits from non-resident Indians. Consequently, India's external debt surged sharply—from approximately \$35 billion in 1984–85 to about \$69 billion by 1990–91. The debt service ratio also deteriorated, with repayments consuming nearly 30% of current receipts.

During this decade, India embarked on limited and fragmented economic reforms, often referred to as “reforms by stealth.” These included measures to boost exports, allow easier import access for exporters, and loosen some industrial licensing norms. While these policies generated incremental growth and led to a real depreciation of the rupee, they lacked strategic coherence. Much of the economic momentum during this period was driven by expansive fiscal policy funded through borrowing—both external and domestic—which rendered the growth trajectory unstable. The rupee's exchange rate reflected this stress, weakening from ₹7.86 in 1980 to ₹17.01 by the end of the decade in 1990.

The basket-peg system, while initially seen as a stabilizing mechanism, was ultimately insufficient to shield the Indian economy from deeper structural imbalances. Although the peg allowed for a controlled depreciation, the rupee's decline was more a reflection of rising macroeconomic distress than of deliberate policy calibration. The increasing reliance on market-based debt, instead of concessional flows, magnified India's vulnerability to shifts in international investor sentiment. This phase illustrated a fundamental limitation: even a diversified exchange rate mechanism cannot offer protection when domestic economic policies—especially fiscal discipline—are misaligned. The persistent depreciation of the rupee throughout the 1980s served as a forewarning of the severe balance of payments crisis that would emerge in 1991, highlighting the urgent need for a comprehensive economic overhaul.

➤ *The 1991 Crisis and Exchange Rate Liberalization:*

• *The Balance of Payments Crisis:*

In 1991, India encountered a severe economic emergency, precipitated by a critical balance of payments (Bop) shortfall. This crisis was the result of both external shocks and internal structural imbalances. The Gulf War (1990–91) led to a dramatic surge in global oil prices and a sharp decline in remittances from Indian workers in the Middle East, severely straining India's trade account. Simultaneously, chronic fiscal deficits—exceeding 12% of GDP—and unchecked monetary expansion compounded the economy's fragility.

By late 1990, India's foreign exchange reserves had dwindled to levels sufficient to cover less than three weeks of imports. Facing the imminent risk of sovereign default, the government resorted to pledging gold reserves to secure emergency funding from international lenders.

To avert collapse, India sought assistance from the International Monetary Fund (IMF) and the World Bank. These institutions conditioned their support on the implementation of wide-ranging structural reforms. Thus began the Liberalization, Privatization, and Globalization (LPG) program—a transformative policy shift that turned crisis into opportunity for systemic economic overhaul.

• *Exchange Rate Reform and Liberalization:*

A central pillar of the 1991 reform agenda was the overhaul of India's exchange rate regime. On March 1, 1992, the government introduced the Liberalized Exchange Rate Management System (LERMS), marking a decisive move away from rigid administrative controls. Under LERMS, foreign exchange earnings from current account transactions were split: 40% was surrendered at an official RBI-determined rate, while the remaining 60% was exchanged at market rates. The RBI used its share to finance essential imports such as petroleum products and fertilizers, as outlined in the Foreign Exchange Budget.

This dual-rate system was transitional. By March 1, 1993, it was unified into a single, market-determined exchange rate under the Modified LERMS framework. In August 1994, India formally adopted full current account convertibility by accepting the obligations under Article VIII of the IMF's Articles of Agreement. This allowed the rupee to be freely exchanged for foreign currencies in transactions involving trade, services, and income flows.

The liberalization led to a sharp depreciation of the rupee. From ₹17.01 per USD in 1990, the exchange rate shifted to ₹25–35 per USD in the years following the reform. By 1997, the rupee had depreciated by roughly 25% in real terms compared to its 1990 value—a level broadly aligned with macroeconomic fundamentals. The move also catalyzed a surge in foreign exchange market activity.

The 1991 crisis was not merely a trigger for temporary adjustments but a turning point in India's economic philosophy. The collapse of the Soviet Union—India's key trading partner—added to the urgency for reform. Unlike the

hesitant and partial liberalization attempt of 1966, the 1991 reforms were comprehensive and irreversible. The shift from a managed peg to a market-driven exchange rate regime reflected India's strategic embrace of global integration and monetary autonomy.

This transition laid the foundation for future capital account liberalization and significantly enhanced India's attractiveness to foreign investors. The liberalized exchange rate regime became a cornerstone of India's broader economic transformation, enabling sustained growth and deeper engagement with global financial markets.

➤ *The Managed Float Regime (1993–2024):*

- *RBI's Strategic Evolution Under a Managed Float:*

Following the economic liberalization between 1991 and 1993, India formally adopted a managed floating exchange rate system. In this framework, while market forces primarily determine the rupee's value, the Reserve Bank of India (RBI) intervenes selectively to curb undue volatility. The RBI's objectives under this regime have been multifaceted: facilitating cross-border transactions, maintaining orderly currency markets, controlling inflation, mitigating speculative pressures, and strengthening foreign exchange reserves.

To meet these objectives, the RBI engages in various foreign exchange operations—spot market trades, forward contracts, and currency swaps—primarily involving the US dollar. Reserve accumulation has become a cornerstone of this strategy, serving as a buffer against external shocks, enhancing sovereign creditworthiness, and boosting market confidence. These actions are complemented by monetary policy measures such as interest rate changes and capital flow management tools.

While India's system is officially classified as a managed float, empirical evidence suggests frequent behaviour akin to a soft peg, especially towards the US dollar. The RBI's pattern of intervening more aggressively during phases of rupee appreciation points to a "fear of floating" often observed in emerging economies. These asymmetric interventions tend to prioritize export competitiveness and reserve accumulation rather than allowing full exchange rate flexibility.

India's approach reflects its careful balancing of the "impossible trinity"—maintaining a stable exchange rate, ensuring monetary policy autonomy, and managing open capital flows. This calibrated exchange rate framework has enhanced resilience against global financial disturbances. However, it also raises concerns regarding long-term competitiveness and the cost of maintaining large reserve buffers. In acknowledgment of this strategic shift, the IMF reclassified India's exchange rate regime in 2024 from "floating" to a "stabilized arrangement."

- *INR–USD Dynamics Amid Global Financial Shocks (2000–2024):*

India's deeper integration with global capital markets since the early 2000s has significantly influenced INR–USD

exchange rate movements. Post-reforms, there was a marked increase in capital inflows—especially through foreign direct investment (FDI) and portfolio investment (FII)—placing upward pressure on the rupee.

Global financial disruptions, including the 2008 crisis, the US Fed's tapering episodes, and emerging market sell-offs, have continuously tested the robustness of India's exchange rate framework. In navigating these episodes, the RBI has focused on minimizing volatility rather than defending specific exchange rate levels. US monetary policy shifts, particularly interest rate hikes, often lead to capital outflows from India, exerting downward pressure on the rupee.

India's heavy reliance on crude oil imports—priced in US dollars—makes its exchange rate highly sensitive to oil price fluctuations. A depreciating rupee increases import costs, intensifying inflationary pressures. Under the managed float, the RBI actively intervenes to dampen these effects and strike a balance among price stability, economic growth, and currency stability.

From ₹44.31/USD in 2000, the rupee depreciated gradually to a range of ₹83.28–₹85.81/USD by 2024. However, exchange rate volatility has declined significantly—from an annual average of 5% during 2000–2022 to just 1.8% in 2023–24, the lowest in decades. This remarkable stability is largely attributed to the RBI's consistent intervention, including active USD sales from its reserves, which surpassed USD 700 billion by September 2024.

India's evolving strategy—from passive volatility management to active exchange rate targeting—has enhanced financial stability but introduces new trade-offs. The IMF's reclassification highlights India's pivot toward tighter exchange rate controls, with ongoing debates about whether greater flexibility might reduce reserve buildup costs and improve long-term competitiveness.

- *Macroeconomic Impacts of INR–USD Exchange Rate Management:*

India's exchange rate policy has profound macroeconomic implications, influencing inflation, trade competitiveness, capital flows, and sectoral performance.

- ✓ *Export Competitiveness:*

Depreciation of the rupee generally makes Indian exports more competitive. However, prolonged appreciation in real effective terms can erode this advantage. The subdued performance of non-oil exports since 2018–19 partially reflects this concern.

- ✓ *Inflation Dynamics:*

As a major importer of crude oil and essential commodities, rupee depreciation raises import bills and feeds domestic inflation. To manage this, the RBI deploys interventions aimed at curbing sharp declines in the currency, especially during global price surges.

✓ *Foreign Exchange Reserves and Stability:*

The RBI's active exchange rate management has led to sustained accumulation of foreign reserves. These reserves improve India's ability to absorb external shocks, boost investor confidence, and maintain macroeconomic stability.

✓ *J-Curve Effects and Trade Balance:*

Initially, a depreciating currency may worsen the trade deficit due to higher import costs. Over time, however, improved export volumes can lead to a favourable shift in the trade balance, provided supporting structural reforms enhance competitiveness.

➤ *Evolution of the USD to INR Exchange Rate (1947–2024):*

The value of the Indian Rupee (INR) against the US Dollar (USD) has witnessed significant fluctuations since India's independence in 1947. Over the decades, the exchange rate has been shaped by various economic policies, global financial developments, and shifts in India's

✓ *Capital Flow Sensitivity:*

A weaker rupee may make Indian assets more attractive, spurring foreign investment. But it also heightens repayment risks on foreign-currency liabilities, affecting both corporate and sovereign balance sheets.

✓ *Sectoral Profitability:*

Exchange rate movements affect industries unevenly. Export-oriented sectors benefit from a depreciated rupee, while import-intensive industries face rising costs, influencing margins and broader competitiveness.

macroeconomic landscape. From being a tightly controlled rate under a fixed regime to moving towards a market-driven system, the INR has experienced considerable depreciation against the USD. To understand this transformation, the following table presents a year-wise historical overview of the 1 USD to INR exchange rate from 1947 to 2024, reflecting the changing dynamics of India's foreign exchange policy and economic conditions.

Table 1 Evolution of the USD to INR Exchange Rate (1947–2024):

YEA R	Value of 1 US Dollar in Indian Rupee	YEA R	Value of 1 US Dollar in Indian Rupee	YEA R	Value of 1 US Dollar in Indian Rupee
1913	0.09	1972	7.59	1999	43.06
1925	0.1	1973	7.74	2000	44.94
1947	3.3	1974	8.1	2001	47.19
1948	3.31	1975	8.38	2002	48.61
1949	3.67	1976	8.96	2003	46.58
1950	4.76	1977	8.74	2004	45.32
1951	4.76	1978	8.19	2005	44.1
1952	4.76	1979	8.13	2006	45.31
1953	4.76	1980	7.86	2007	41.35
1954	4.76	1981	8.66	2008	43.51
1955	4.76	1982	9.46	2009	48.41
1956	4.76	1983	10.1	2010	45.73
1957	4.76	1984	11.36	2011	46.67
1958	4.76	1985	12.37	2012	53.44
1959	4.76	1986	12.61	2013	56.57
1960	4.76	1987	12.96	2014	62.33
1961	4.76	1988	13.92	2015	62.97
1962	4.76	1989	16.23	2016	66.46
1963	4.76	1990	17.5	2017	67.79
1964	4.76	1991	22.74	2018	70.09
1965	4.76	1992	25.92	2019	70.39
1966	6.36	1993	30.49	2020	76.38
1967	7.5	1994	31.37	2021	74.57
1968	7.5	1995	32.43	2022	81.35
1969	7.5	1996	35.43	2023	81.94
1970	7.5	1997	36.31	2024	84.83
1971	7.5	1998	41.26		

Source: Book My Forex

III. LITERATURE REVIEW

The transformation of India's exchange rate regime has been a subject of enduring academic and policy debate due to its crucial role in ensuring macroeconomic stability, enhancing export competitiveness, and managing capital flows. Researchers have approached this evolution through historical, theoretical, empirical, and comparative lenses,

highlighting the interplay between domestic policy priorities and global monetary dynamics. The literature can be broadly categorized into three phases: the fixed exchange rate era (1947–1971), the transitional and managed float period (1971–1993), and the market-determined regime (1993–2024).

➤ *Fixed Exchange Rate Era (1947–1971):*

In the immediate aftermath of independence, India adopted a fixed exchange rate regime, initially linking the rupee to the British pound, and indirectly to the US dollar through the Bretton Woods framework. Early analyses by Rangarajan (1970s) and Bhagwati and Srinivasan (1975) emphasized the influence of colonial monetary structures and the rationale for maintaining currency stability to support state-led industrialization and planned economic development.

Joshi and Little (1994) critically examined this phase, observing that while the fixed peg brought nominal exchange rate stability, it often diverged from underlying macroeconomic fundamentals. The 1966-rupee devaluation, triggered by persistent trade imbalances and dwindling reserves, exposed the limitations of the rigid system. Their research pointed to the adverse effects of an overvalued rupee on export performance and monetary flexibility in the absence of sufficient foreign exchange reserves.

➤ *Transitional and Managed Float Period (1971–1993):*

With the dissolution of the Bretton Woods system in the early 1970s, India adopted a basket peg, tying the rupee to a mix of major currencies. This phase saw heightened administrative controls over trade and foreign exchange. Patel (1980s) and contemporaneous RBI reports documented the conservative stance of India's exchange rate policy, which emphasized control over market-driven mechanisms.

The 1991 balance of payments crisis was a turning point, prompting critical reforms. Rangarajan (1993) and Ahluwalia (1993) detailed the implementation of the Liberalized Exchange Rate Management System (LERMS) in 1992, and its subsequent unification into a market-determined regime in 1993. This marked the beginning of India's shift toward a more liberal exchange rate framework, aimed at restoring external viability and investor confidence.

Patnaik and Vasudevan (2000) analyzed this shift, highlighting the resulting improvement in India's external position. Similarly, Bery (2003) emphasized that exchange rate flexibility helped absorb global shocks more effectively in a liberalized environment.

➤ *Market-Determined Regime (1993–2024):*

Since 1993, India has officially maintained a market-determined exchange rate, though in practice, the system operates as a managed float. Reddy (2002) characterized this hybrid model as a pragmatic solution for a developing economy—balancing exchange rate flexibility with central bank intervention during episodes of excessive market volatility.

Using the Exchange Market Pressure (EMP) framework, Patnaik and Sengupta (2021) identified patterns of RBI interventions during major global disruptions, such as the 2008 financial crisis and the 2013 taper tantrum. Their findings pointed to the RBI's asymmetric intervention strategy—actively purchasing USD to prevent appreciation while allowing gradual depreciation during external stress periods.

Studies by Goyal (2011) and Patra and Kapur (2012) explored how exchange rate management intersects with monetary policy tools, including inflation targeting and interest rate adjustments. These works underscore that while managed flexibility provides resilience to global volatility, it also demands a sound macroeconomic framework.

Mohanty and Klau (2004) analyzed inflation targeting in emerging economies, concluding that while floating exchange rates serve as shock absorbers, their effectiveness hinges on credible and disciplined monetary governance.

➤ *External Shocks and Macroeconomic Drivers:*

A broad body of empirical research has used time-series models—such as ARIMA, GARCH, and VAR—to understand INR-USD fluctuations. Dahal and Raju (2023) examined the influence of global shocks—from the East Asian financial crisis to the COVID-19 pandemic—on rupee volatility. Their study concluded that while external shocks significantly affect the exchange rate, their impact has been mitigated by strong foreign exchange reserves and credible policy responses.

Forecasting-oriented studies by Gupta (2022) and Devi (2023) revealed that while short-term rupee movements are driven by investor sentiment and capital flows, long-term exchange rate trends reflect deeper structural variables such as inflation differentials, FDI inflows, and trade balances.

➤ *Theoretical Frameworks and Comparative Perspectives:*

India's exchange rate regime presents an intriguing case of divergence between de jure classification and de facto practice. While officially labeled as market-determined, the regime often operates as a managed float. Reinhart and Rogoff (2004) and Obstfeld and Rogoff (1995) have explored similar discrepancies in emerging markets, coining the concept of “fear of floating” to describe countries reluctant to allow free currency fluctuations due to financial vulnerabilities.

In their foundational work, Krugman and Obstfeld (2003) argued that fixed exchange rate regimes are typically unsustainable in the absence of fiscal discipline and adequate reserves. Their analysis reinforces India's eventual transition toward a more flexible regime. The “impossible trinity” or monetary trilemma—which highlights the trade-offs between exchange rate stability, independent monetary policy, and open capital accounts—offers a useful theoretical lens to interpret India's phased liberalization.

Comparative analyses such as Kumar and Reddy (2024) place India's exchange rate evolution alongside other Asian emerging economies, emphasizing India's cautious and sequenced liberalization as a means of balancing volatility management with long-term macroeconomic resilience.

➤ *Contemporary Challenges and Digital Era Dynamics (2020–2024):*

Recent academic and policy literature—drawing from RBI Annual Reports, IMF Article IV Consultations, and think tank insights like Anveshana India—highlights a new set of challenges in the post-COVID exchange rate

environment. These include higher capital mobility, the emergence of cryptocurrencies, digital payment system disruptions, and geopolitical tensions that influence capital flow patterns.

While India has preserved currency stability through reserve buffers and prudent policy decisions, scholars argue that emerging risks may demand an updated policy toolkit. These include reevaluating the effectiveness of current interventions, increasing reliance on macroprudential measures, and strengthening institutional frameworks for digital finance.

IV. RESEARCH GAP

Although there is a substantial body of literature exploring India's exchange rate policy, several significant gaps remain that hinder a comprehensive understanding of the INR-USD exchange rate regime over time. Much of the existing scholarship tends to concentrate on specific events or limited time frames—particularly focusing on landmark moments such as the 1966 devaluation, the 1991 balance of payments crisis, or the economic liberalization of the early 1990s. While these events are crucial, they are often analyzed in isolation, lacking integration into a continuous historical narrative that connects exchange rate regime shifts with broader economic and policy transformations.

First, there is an evident lack of a detailed, chronological study that traces the complete evolution of the INR-USD exchange rate regime from 1947 to 2024. Most existing research is fragmented either by period or by theme, often overlooking pivotal transitions such as the move from the sterling peg to a currency basket, the implementation and unification of the dual exchange rate system, and the gradual development of the managed float regime.

Second, many policy changes are portrayed as reactive, stand-alone measures to economic crises, without adequately exploring the underlying continuity or causal links between successive regimes. Few studies adopt an integrated framework that connects domestic economic reforms, institutional developments, and shifts in the global monetary landscape to explain the rationale behind India's evolving exchange rate policies.

Third, despite the U.S. dollar being India's dominant trade and reserve currency, limited research has specifically analyzed the bilateral INR-USD exchange rate. Most studies focus on multilateral or basket exchange rate systems, which can obscure the unique strategic and economic relevance of the rupee-dollar relationship.

Fourth, the impact of recent global financial developments—such as the COVID-19 pandemic, geopolitical tensions like the Russia-Ukraine war, and monetary tightening in advanced economies—on the INR-USD exchange rate remains underexplored. Emerging factors such as digital capital flows, inflationary pressures, and global financial volatility have not been adequately analyzed within a historical context.

Fifth, existing literature often treats macroeconomic outcomes (e.g., inflation, trade balance, capital flows) separately from the institutional and policy frameworks that govern exchange rate management. Few studies take an interdisciplinary approach that systematically links changes in exchange rate regimes to long-term macroeconomic performance indicators.

V. RESEARCH METHODOLOGY

This study adopts a historical-analytical and descriptive research design, incorporating both qualitative and quantitative methods to comprehensively examine the evolution of India's exchange rate regime vis-à-vis the US Dollar. The primary objective is to chronologically trace key transitions in exchange rate policy and assess their macroeconomic implications within a broader institutional and policy context. The analysis is structured around major regime shifts to capture long-term patterns, institutional responses, and critical turning points in policy. The methodology includes four core components: a historical perspective to document and contextualize changes in policy frameworks; a descriptive analysis to highlight the defining features and timelines of successive regimes; a quantitative evaluation to assess macroeconomic trends such as inflation, GDP growth, and capital flows; and a qualitative interpretation to explore the rationale behind policy decisions, the influence of external factors, and the institutional narratives that shaped India's exchange rate trajectory.

The nature of this research is predominantly qualitative, focusing on descriptive and analytical insights into the evolution of India's exchange rate regimes. However, it is supported by quantitative analysis derived from secondary data sources. The study is descriptive in its documentation of the structural features and chronological progression of the exchange rate systems and analytical in interpreting the causes, motivations, and economic outcomes of major regime changes.

The empirical dimension of the study relies on a wide range of credible secondary data sources. Quantitative data on exchange rates, inflation, interest rates, trade performance, foreign exchange reserves, capital flows, and GDP growth are drawn from institutions such as the Reserve Bank of India (RBI), International Monetary Fund (IMF), World Bank, National Statistical Office (NSO), Bloomberg, Refinitiv, CEIC, the Ministry of Commerce, and the Bank for International Settlements (BIS). Crude oil prices and global macroeconomic indicators are sourced from the World Bank, International Energy Agency (IEA), U.S. Energy Information Administration (EIA), and IMF's World Economic Outlook.

Qualitative data are drawn from a range of institutional and scholarly sources. These include official policy documents such as RBI annual reports, monetary policy statements, and speeches by governors; Economic Surveys and Union Budgets issued by the Ministry of Finance; IMF Article IV Consultation reports on India; and reports by NITI Aayog and the former Planning Commission. Academic literature includes peer-reviewed journal articles, working

papers, and influential books by economists such as C. Rangarajan, Vijay Joshi, I.M.D. Little, Devesh Kapur, Montek Singh Ahluwalia, and Michael Patra. Historical context is supplemented through archival media sources such as The Hindu, Economic Times, Financial Express, and The Wall Street Journal, which provide real-time reporting on key policy events. In addition, memoirs and autobiographical accounts of prominent policymakers—such as those of C. Rangarajan, Y.V. Reddy, and Montek Singh Ahluwalia—offer valuable insights into the institutional deliberations and policy decisions that influenced India’s major exchange rate transformations, including the 1966 devaluation, the 1991 balance of payments crisis, and the transition to a market-determined exchange rate regime in 1993.

VI. OBJECTIVES OF THE RESEARCH

The primary objective of this research is to conduct a comprehensive historical analysis of the evolution of India’s INR-USD exchange rate regime from 1947 to 2024. This central aim is addressed through the following specific goals:

- To chronologically trace and categorize the key phases of India’s exchange rate policy, from the fixed peg system to the dual exchange rate regime, the managed float, and finally to a market-determined system. This includes

examining the policy rationale, institutional frameworks, and monetary instruments used during each phase.

- To analyse the impact of critical macroeconomic and global factors—such as inflation trends, current account deficits, capital flow dynamics, oil price volatility, and shifts in the international monetary system—on the evolution of India’s exchange rate regime.
- To evaluate the macroeconomic outcomes of different exchange rate regimes, focusing on their effects on inflation control, trade competitiveness, foreign exchange reserves, capital inflows, and overall monetary and financial stability.
- To assess the changing role of the Reserve Bank of India (RBI) in managing the rupee-dollar exchange rate, with an emphasis on its intervention strategies, degree of autonomy, and institutional responses—particularly in the post-liberalization era since 1991.
- To compare and contrast the INR-USD exchange rate behaviour before and after the 1991 New Industrial Policy, highlighting changes in exchange rate management, monetary policy orientation, and currency valuation patterns.
- To integrate and interpret both qualitative and quantitative data to generate meaningful insights into the long-term transformation of India’s exchange rate regime and its broader macroeconomic implications.

VII. DATA ANALYSIS AND INTERPRETATION

Table 1 Key INR–USD Exchange Rate Milestones and Values (1947–2024)

Year / Period	INR per 1 USD	Exchange Rate Regime / Major Event
1947	3.3	Fixed Peg under Bretton Woods
1950–1965	4.76	Continued Fixed Peg; Import Substitution Phase
1966	6.36	Major Devaluation due to Trade Deficits and IMF Pressure
1967–1971	7.5	Peg Maintained Post-Devaluation
1974	8.1	Post-1973 Oil Shock Depreciation
Early 1990s	17.5	Rising Imbalances; Increasing Pressure on External Sector
1991	22.74	BoP Crisis; First Major Rupee Devaluation
1992	25.92	Introduction of LERMS (Dual Exchange Rate System)
1993	30.49	Unified Market-Based Rate; Start of Managed Float
1997	36.31	Asian Financial Crisis; RBI Intervention Period
2008	43.51	Global Financial Crisis Impact
2020	76.38	COVID-19 Pandemic; Record Depreciation
2023	81.94	Volatile Capital Flows; RBI Stabilization Strategy
2024	84.83	Continued Managed Float; Post-Pandemic Recovery Measures

Source: Book My Forex

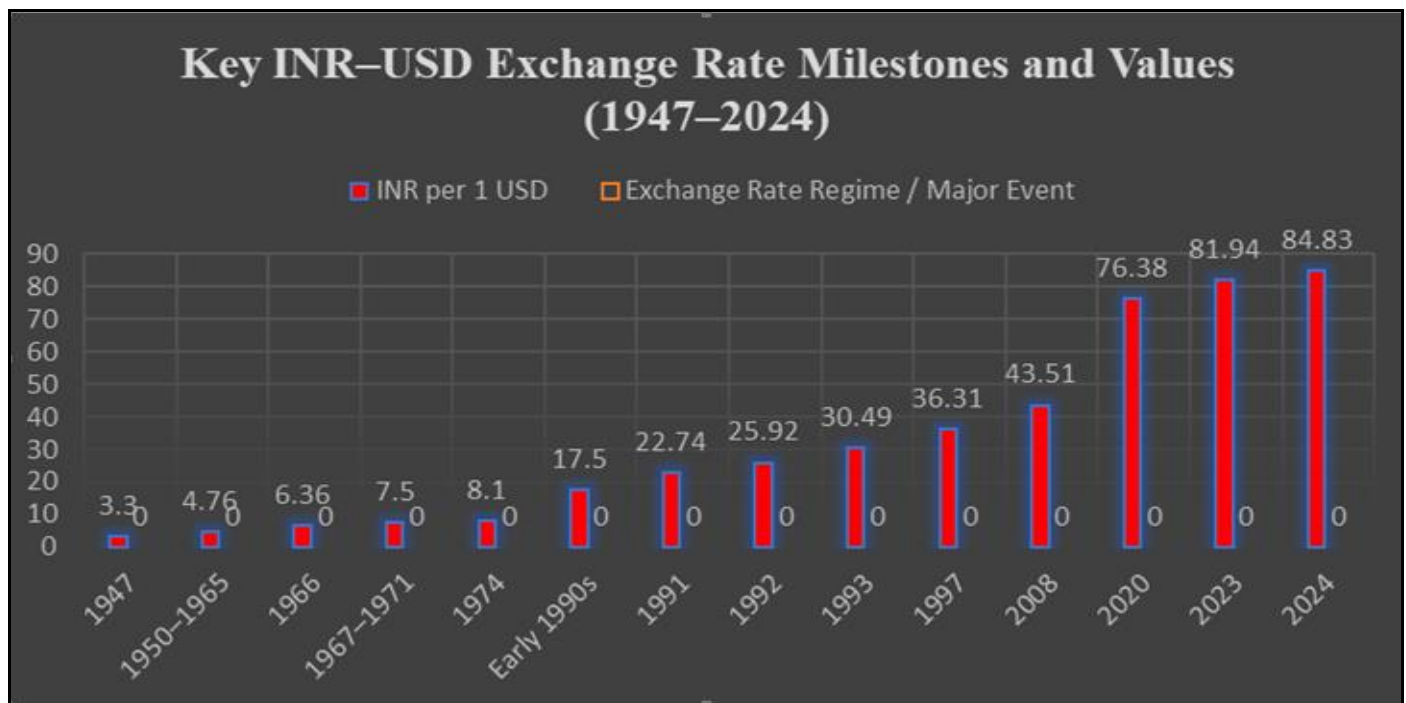


Fig 1 Key INR–USD Exchange Rate Milestones and Values (1947–2024)

➤ Interpretation:

The bar chart titled "Key INR–USD Exchange Rate Milestones and Values (1947–2024)" presents a historical overview of the Indian Rupee's (INR) depreciation against the US Dollar (USD) over several decades. The blue bars represent the value of INR per 1 USD, showcasing the declining strength of the rupee, while the orange bars labelled "Exchange Rate Regime / Major Event" remain at zero, possibly indicating that this component is either non-numeric or not depicted in this visualization.

Initially, post-independence in 1947, the INR held a relatively strong position at ₹3.30 per USD. From 1950 to 1965, the exchange rate was fairly stable at ₹4.76, reflecting India's adherence to a fixed exchange rate system. However, 1966 marked a turning point with a sharp devaluation to ₹6.36, driven by mounting economic pressures and the need to promote exports. By 1974, the rupee had further weakened to ₹8.10.

The early 1990s signaled a major shift as India undertook significant economic liberalization. The rupee, which stood at ₹17.50 in the early 1990s, depreciated rapidly in subsequent years—reaching ₹22.74 in 1991, ₹25.92 in

1992, and ₹30.49 in 1993. This period marked India's transition to a market-determined exchange rate system. By 1997, the exchange rate had reached ₹36.31, indicating deeper integration into the global economy and the impact of structural reforms.

In the 21st century, the rupee continued to depreciate steadily. In 2008, during the global financial crisis, the exchange rate reached ₹43.51. More recently, sharp declines have been observed: ₹76.38 in 2020, likely influenced by the COVID-19 pandemic and its economic disruptions; ₹81.94 in 2023; and ₹84.83 in 2024. These values reflect ongoing macroeconomic challenges such as trade deficits, inflationary pressures, and interest rate differentials.

Overall, the chart highlights a persistent depreciation of the rupee over time. Key trends include the shift from fixed to market-driven exchange rates, the impact of domestic reforms and external shocks, and a noticeable erosion of the rupee's international purchasing power. The continued weakening trend into 2024 may either reflect actual data or be a projected estimate, reinforcing the long-term narrative of a gradually declining INR in relation to the USD.

Table 2 INR–USD Exchange Rate: A Comparative Analysis of the Pre- and Post-1991 Reform Eras

Before 1991: The Pre-Reform Industrial Policy Era		After 1991: The Post-Reform Industrial Policy Era	
YEAR	Value of 1 US Dollar in Indian Rupee	YEAR	Value of 1 US Dollar in Indian Rupee
1913	0.09	1991	22.74
1925	0.1	1992	25.92
1947	3.3	1993	30.49
1948	3.31	1994	31.37
1949	3.67	1995	32.43
1950	4.76	1996	35.43
1951	4.76	1997	36.31
1952	4.76	1998	41.26
1953	4.76	1999	43.06
1954	4.76	2000	44.94

1955	4.76	2001	47.19
1956	4.76	2002	48.61
1957	4.76	2003	46.58
1958	4.76	2004	45.32
1959	4.76	2005	44.1
1960	4.76	2006	45.31
1961	4.76	2007	41.35
1962	4.76	2008	43.51
1963	4.76	2009	48.41
1964	4.76	2010	45.73
1965	4.76	2011	46.67
1966	6.36	2012	53.44
1967	7.5	2013	56.57
1968	7.5	2014	62.33
1969	7.5	2015	62.97
1970	7.5	2016	66.46
1971	7.5	2017	67.79
1972	7.59	2018	70.09
1973	7.74	2019	70.39
1974	8.1	2020	76.38
1975	8.38	2021	74.57
1976	8.96	2022	81.35
1977	8.74	2023	81.94
1978	8.19	2024	84.83
1979	8.13		
1980	7.86		
1981	8.66		
1982	9.46		
1983	10.1		
1984	11.36		
1985	12.37		
1986	12.61		
1987	12.96		
1988	13.92		
1989	16.23		
1990	17.5		

Source: Book My Forex

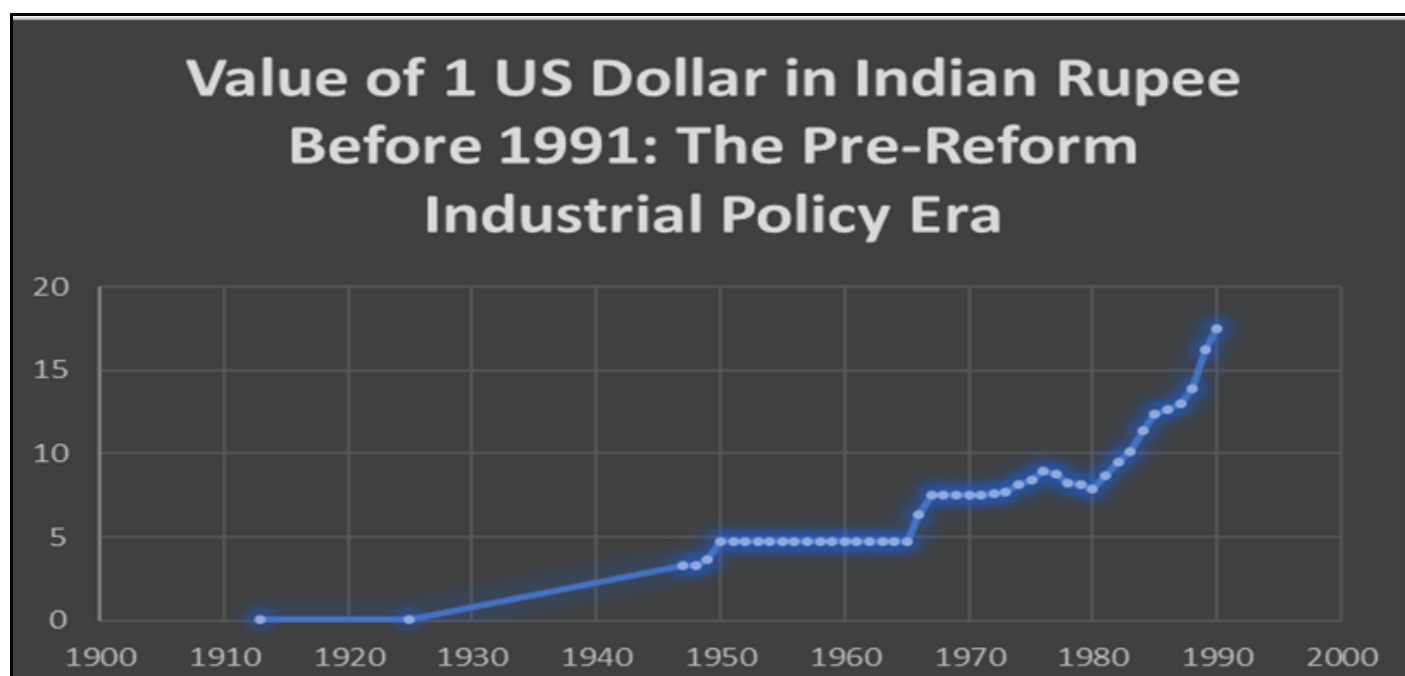


Fig 2 Value of 1 US Dollar in Indian Rupee Before 1991: The Pre-Reform Industrial Policy Era

➤ *Interpretation:*

The chart titled “Value of 1 US Dollar in Indian Rupee Before 1991: The Pre-Reform Industrial Policy Era” depicts the historical trend of the INR-USD exchange rate from the early 20th century up to 1990. In the early decades (1910s to 1940s), the value of 1 US dollar in Indian rupees remained relatively low and stable, reflecting India’s integration into the British colonial monetary system and the use of the sterling peg under the Bretton Woods framework. After independence in 1947, the Indian rupee began to gradually depreciate, particularly during the 1950s and early 1960s, as India adopted a protectionist economic model centered on import substitution and planning under a fixed exchange rate regime.

A sharp depreciation is noticeable in 1966, when the Indian government officially devalued the rupee from around

₹4.75 to ₹7.50 per US dollar due to a balance of payments crisis and pressure from international institutions like the IMF. The 1970s saw a period of relative exchange rate stability, with only minor fluctuations as the government maintained tight control over foreign exchange. However, during the 1980s, the rupee experienced a steady and significant depreciation, reflecting growing macroeconomic imbalances, rising fiscal deficits, and increasing external debt. By 1990, the exchange rate had depreciated to nearly ₹17–18 per US dollar, signaling the intensifying economic distress that eventually led to the 1991 balance of payments crisis. This chart thus captures the transition from a fixed and controlled exchange rate regime to one under pressure from internal and external economic forces, ultimately leading to the liberalization reforms of 1991.



Fig 3 Value of 1 US Dollar in Indian Rupee after 1991: The post – Reform Industrial Policy Era

➤ *Interpretation:*

The chart titled "Value of 1 US Dollar in Indian Rupee After 1991: The Post-Reform Industrial Policy Era" illustrates the trend of the INR-USD exchange rate from the early 1990s to the mid-2020s. Following the economic liberalization initiated in 1991, India transitioned from a fixed exchange rate regime to a market-determined managed float system. This shift led to a significant and continuous depreciation of the Indian rupee against the US dollar. In the immediate aftermath of the 1991 reforms, the rupee was devalued sharply, and by the mid-1990s, the exchange rate had risen to around ₹30 per dollar. Throughout the 1990s and early 2000s, the rupee continued to weaken, reaching approximately ₹45 by the turn of the century, reflecting the impact of trade liberalization, rising import dependence, and growing fiscal and current account deficits.

Between 2002 and 2008, the rupee remained relatively stable and even appreciated slightly, supported by strong economic growth, high foreign capital inflows, and increasing foreign exchange reserves. However, the global financial crisis of 2008 marked a turning point, and the rupee resumed its depreciation trajectory. In the following decade, factors such as global economic uncertainty, fluctuating oil

prices, US monetary policy shifts, and domestic macroeconomic imbalances further weakened the rupee. By 2020, the exchange rate had crossed ₹70 per dollar and continued to rise, reaching nearly ₹85 by the mid-2020s. This persistent depreciation reflects both internal challenges, such as inflation and trade deficits, and external pressures from global financial markets. Overall, the chart highlights how, in the post-reform era, the Indian rupee has become increasingly vulnerable to market forces and international economic conditions, despite the benefits of globalization and liberalization.

➤ *Comparative Analysis and Interpretation:*

The two charts illustrate the changing value of 1 US dollar in Indian rupees before and after the economic reforms of 1991, highlighting a significant transformation in India’s exchange rate policy. During the pre-1991 period, the rupee remained relatively stable for decades, largely due to the country’s adherence to a fixed exchange rate system under the Bretton Woods framework and later a basket peg. From independence in 1947 until the mid-1960s, the rupee depreciated slowly and was managed closely by the government. A major turning point came in 1966, when the rupee was sharply devalued, but even afterward, the

currency's value was maintained within a narrow range, reflecting India's controlled economic policies and focus on import substitution. However, by the late 1980s, growing fiscal deficits, external debt, and oil price shocks began exerting pressure on the rupee, pushing its value to nearly ₹17 per US dollar by 1990.

After the 1991 balance of payments crisis, India introduced wide-ranging liberalization measures, shifting from a tightly controlled exchange rate system to a market-determined regime. This transition marked the beginning of a more dynamic and volatile exchange rate environment. Post-reform, the rupee witnessed consistent depreciation, moving from around ₹17 in 1991 to over ₹80 by 2024. The fluctuations in the post-1991 era were influenced by global capital flows, monetary policy changes, inflation trends, and external shocks such as the global financial crisis and the COVID-19 pandemic. Overall, this comparison reveals a structural shift in India's economic policy—from a protectionist and centrally managed system to a liberalized, globally integrated economy—reflected in the more flexible and market-driven behaviour of the rupee.

VIII. CONCLUSION

This study has provided a detailed historical analysis of India's exchange rate regimes in relation to the US Dollar from 1947 to 2024. The Indian Rupee's evolution—from a fixed exchange rate under the Bretton Woods system, through a currency basket and dual rate system, to a managed float—reflects the broader shifts in India's economic strategy and institutional capacity. Each transition was shaped by a complex interplay of internal economic priorities, global financial changes, and geopolitical developments.

Major policy milestones such as the 1966 devaluation and the 1991 economic crisis marked turning points in India's exchange rate management, prompting a gradual move toward greater market orientation. The Reserve Bank of India (RBI) has emerged as a key factor in managing exchange rate volatility, especially under the managed float regime, which allows limited flexibility while prioritizing macroeconomic stability.

The long-term depreciation of the rupee underscores the structural challenges faced by emerging economies like India in maintaining currency stability amidst globalization, capital flow volatility, and inflationary pressures. The findings suggest that India's approach—characterized by gradualism, flexibility, and strategic intervention—has helped balance the trade-offs between monetary autonomy, exchange rate stability, and external sector resilience.

➤ *Policy Recommendations:*

- **Enhance Coordination Between Fiscal and Monetary Policies:** Effective exchange rate management must be supported by sound fiscal discipline and inflation control to ensure long-term currency stability.
- **Increase Transparency in RBI Operations:** Establishing a clearer communication framework for exchange rate interventions can improve policy credibility and align market expectations.

- **Diversify Foreign Exchange Reserves:** India should broaden the composition of its reserves to reduce overdependence on the US dollar and enhance returns, while maintaining adequate liquidity.
- **Strengthen Domestic Financial Markets:** Developing deep and liquid financial markets—especially in foreign exchange, bonds, and derivatives—can reduce excessive dependence on central bank interventions.
- **Develop a Roadmap for Capital Account Liberalization:** A phased and cautious approach toward fuller capital account convertibility, with necessary safeguards, will support India's deeper integration into global markets.
- **Modernize Regulatory Frameworks for the Digital Economy:** With the increasing prominence of digital currencies and fintech platforms, the RBI and other institutions must adapt to ensure continued exchange rate stability.
- **Promote Regional Currency Cooperation:** Expanding currency swap agreements and encouraging trade invoicing in regional currencies can help reduce vulnerability to USD fluctuations.

LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

➤ *Limitations of the Study:*

- The analysis is based on secondary data sources, which may involve inconsistencies or data lags across institutions.
- The research is primarily qualitative and descriptive; it does not include quantitative modeling to measure the causal impact of exchange rate regimes on macroeconomic indicators.
- The focus is limited to the bilateral INR–USD exchange rate, with limited attention to broader currency baskets or multilateral dynamics.

➤ *Future Research Directions:*

- **Empirical Modeling:** Future studies could employ econometric techniques (e.g., GARCH, VAR models) to evaluate the impact of exchange rate volatility on inflation, trade, and investment.
- **Comparative Country Studies:** Analysing the experiences of other emerging economies would offer comparative insights into different policy responses to exchange rate challenges.
- **Exchange Rate Pass-Through:** Further research is needed to assess how exchange rate fluctuations affect domestic prices, import costs, and corporate profitability.
- **Impact of Digital Financial Innovations:** The implications of central bank digital currencies (CBDCs), cryptocurrencies, and digital capital flows on exchange rate management warrant detailed investigation.
- **Simulation-Based Policy Analysis:** Macroeconomic models could simulate the potential outcomes of alternative exchange rate regimes to inform policy design under various global scenarios.

REFERENCES

- [1]. Agarwala, A. N., & Singh, S. P. (Eds.). (1958). *The economics of underdevelopment*. Oxford University Press.
- [2]. Jalan, B. (1991). *India's economic crisis: The way ahead*. Oxford University Press.
- [3]. Joshi, V., & Little, I. M. D. (1996). *India's economic reforms, 1991–2001*. Oxford University Press.
- [4]. Krugman, P. R., & Obstfeld, M. (2003). *International economics: Theory and policy* (6th ed.). Pearson Education.
- [5]. Panagariya, A. (2008). *India: The emerging giant*. Oxford University Press.
- [6]. Sasmal, B. (Ed.). (2024). *The Indian economy @ 75: Successes and challenges*. Routledge India.
- [7]. Subbarao, D. (2016). *Who moved my interest rate? Leading the Reserve Bank of India through five turbulent years*. Penguin Random House India.
- [8]. Verma, R. B. (2024). *The journey of Indian coins 1947 to 2024*. BFC Publications.
- [9]. Bhanumurthy, N. R., & Vashisht, P. (2010). *A perspective on India's exchange rate policy*. NIPFP Working Paper.
- [10]. Dahal, S., & Raju, R. (2023). *India's exchange rate (INR/USD) movement during the post-reform period*. ResearchGate. <https://www.researchgate.net>
- [11]. Goyal, A. (2010). *Evolution of India's exchange rate regime*. IGIDR Working Paper No. WP-2010-024. <https://www.igidr.ac.in>
- [12]. Patnaik, I., & Sengupta, R. (2021). *Analysing India's exchange rate regime*. NIPFP Working Paper No. 353. <https://www.nipfp.org.in>
- [13]. Patnaik, I., & Vasudevan, D. (2000). *Exchange rate management in India*. ICRIER Working Paper.
- [14]. Patra, M. D., & Kapur, M. (2012). *A monetary policy model without money for India*. RBI Working Paper Series.
- [15]. Pujari, S. R., & Rajasekhar, M. (2025). *Exchange rate determinants and forecasting for USD/INR: Historical analysis and insights*. SSRN Electronic Journal. <https://papers.ssrn.com>
- [16]. Rangarajan, C. (1993). *Monetary policy and exchange rate management in India*. RBI Bulletin, April.
- [17]. Rangarajan, C. (2000). *India's foreign exchange market: Past and present*. RBI Bulletin.
- [18]. Sen Gupta, A., & Sengupta, R. (2014). *Exchange rate volatility and its impact on India's trade: Evidence from the post-global crisis period*. ADBI Working Paper No. 476.
- [19]. *Annual Reports* (Various Years). <https://www.rbi.org.in>
- [20]. *Handbook of Statistics on the Indian Economy* (Various Years). <https://www.rbi.org.in>
- [21]. *Reports on Currency and Finance*.
- [22]. *Database on Indian Economy (DBIE)*. <https://dbie.rbi.org.in>
- [23]. *Exchange Rate Policy and Modelling in India*. RBI Publications (2010).
- [24]. *Speeches, FAQs, and Master Directions on Foreign Exchange Management*.
- [25]. *Economic Survey of India* (Various Years). <https://www.indiabudget.gov.in>
- [26]. *Article IV Consultation Reports* (Various Years). <https://www.imf.org>
- [27]. *International Financial Statistics (IFS)*.
- [28]. *Country Reports on India*.
- [29]. *World Development Indicators (WDI)*. <https://data.worldbank.org>
- [30]. *India Development Updates* (Various Years).
- [31]. *Gini Index and related macroeconomic databases*.
- [32]. Skills Hats. (2024). *USD to INR price trends from 1947 to 2024*. Skills Hats Blog. <https://skillshats.com>
- [33]. The Dollar Hub. (2024). *The Indian rupee's evolution from Independence Day 1947 to 2024*. <https://thedollarhub.com>
- [34]. Wikipedia. (n.d.). *Exchange rate history of the Indian rupee*. Retrieved July 2025, from https://en.wikipedia.org/wiki/Exchange_rate_history_of_the_Indian_rupee
- [35]. Wise. (n.d.). *Currency converter history – INR to USD*. <https://wise.com>

ANNEXURE WITH ABBREVIATIONS

Abbreviation	Full Form
INR	Indian Rupee
USD	United States Dollar
RBI	Reserve Bank of India
IMF	International Monetary Fund
REER	Real Effective Exchange Rate
NEER	Nominal Effective Exchange Rate
FDI	Foreign Direct Investment
FII	Foreign Institutional Investment
FPI	Foreign Portfolio Investment
CAD	Current Account Deficit
Bop	Balance of Payments
LPG	Liberalization, Privatization, and Globalization
LERMS	Liberalized Exchange Rate Management System
PPP	Purchasing Power Parity
IRP	Interest Rate Parity
CRR	Cash Reserve Ratio
MSS	Market Stabilization Scheme
OMO	Open Market Operations
PL-480	Public Law 480 (U.S. Food Aid Program)
GDP	Gross Domestic Product
CPI	Consumer Price Index
WPI	Wholesale Price Index
NSO	National Statistical Office
DPIIT	Department for Promotion of Industry and Internal Trade
FRED	Federal Reserve Economic Data
IEA	International Energy Agency
EIA	U.S. Energy Information Administration
BIS	Bank for International Settlements
VAR	Vector Autoregression
ARDL	Autoregressive Distributed Lag
GARCH	Generalized Autoregressive Conditional Heteroskedasticity
VECM	Vector Error Correction Model
CBDC	Central Bank Digital Currency
NRI	Non-Resident Indian
EMP	Exchange Market Pressure
FERA	Foreign Exchange Regulation Act
WTO	World Trade Organization
BRICS	Brazil, Russia, India, China, South Africa
WEO	World Economic Outlook