

	Variable	Description	Source	Time_Period	Unit	Transformation
1	avg_exchange_rate	Monthly average USD/INR exchange rate	RBI	2014–2025 monthly	INR per USD	None
2	deficit_usd_bn	Monthly trade deficit in USD billions	Ministry of Commerce	2014–2025 monthly	USD billions	None
3	exports_usd_bn	Monthly exports in USD billions	Ministry of Commerce	2014–2025 monthly	USD billions	None
4	imports_usd_bn	Monthly imports in USD billions	Ministry of Commerce	2014–2025 monthly	USD billions	None
5	usd_per_barrel	Monthly crude oil price per barrel in USD	Bloomberg	2014–2025 monthly	USD per barrel	Lagged by 1 month
6	reserve	Monthly foreign exchange reserves in USD billions	RBI	2014–2025 monthly	USD billions	None
7	inf_rate_perc	Monthly inflation rate percentage	Ministry of Statistics	2014–2025 monthly	Percentage	Percentage to decimal
8	avg_vix_usa	Monthly average US VIX index value	CBOE	2014–2025 monthly	Index points	None
9	avg_vix_ind	Monthly average India VIX index value	NSE India	2014–2025 monthly	Index points	None
10	repo_rate_inr	Monthly RBI repo rate in percentage	RBI	2014–2025 monthly	Percentage	None
11	fed_rate_usd	Monthly US Federal Reserve rate in percentage	Federal Reserve	2014–2025 monthly	Percentage	None
12	equity	Monthly foreign portfolio investment in equity (USD)	SEBI	2014–2025 monthly	USD	Converted to numeric
13	debt	Monthly foreign portfolio investment in debt (USD)	SEBI	2014–2025 monthly	USD	Converted to numeric
14	exchange_dep	Log difference of exchange rate (depreciation measure)	Calculated	2014–2025 monthly	Log difference	$\log(\text{rate}_t/\text{rate}_{t-1})$
15	trade_balance	Exports minus imports (USD billions)	Calculated	2014–2025 monthly	USD billions	exports – imports
16	net_inflow	Net capital inflows (Equity minus Debt) in USD	Calculated	2014–2025 monthly	USD	equity – debt
17	oil_lag	Lagged oil price by one month	Calculated	2014–2025 monthly	USD per barrel	$\text{lag}(\text{usd\_per\_barrel}, 1)$
18	rate_diff	Interest rate differential (INR repo – USD fed)	Calculated	2014–2025 monthly	Percentage points	$\text{repo\_rate\_inr} - \text{fed\_rate\_usd}$
19	volatility	3–month rolling standard deviation of log returns	Calculated	2014–2025 monthly	Standard deviation	3–month rolling sd
20	log_return	Monthly log return of exchange rate	Calculated	2014–2025 monthly	Log return	$\log(\text{rate}_t/\text{rate}_{t-1})$