

THE GLOBAL VALUATION PUZZLE

Why similar growth
doesn't mean
similar pricing



INDIA



USA



BRAZIL

P1%



Executive Summary

Have you ever paused to wonder why two economies growing at similar GDP rates can nonetheless trade at wildly different valuation multiples? In this report, we tackle that very puzzle by bringing together four core valuation metrics: P/E (both trailing and forward), P/B, EV/EBITDA and dividend yield and applying MSCI's three-pillar classification framework of economic development, market size & liquidity and accessibility. The report's aim is to peel back the data quirks and reveal the true drivers of cross-market valuation gaps.

At the heart of equity valuation lie three broad families of forces. First, macroeconomic fundamentals (real GDP growth, inflation and real interest rates) dictate the earnings and discount-rate dynamics that underpin every multiple. Empirically, a one-percent uptick in real GDP can lift overall equity prices by roughly 1.45 percent, yet the same rise in inflation or policy rates can compress P/E, EV/EBITDA and P/B multiples by as much as 5-10 percent in more vulnerable markets. Second, market structure and liquidity govern how easily investors can trade without moving prices: wider bid-ask spreads and shallow turnover raise the hurdle rate, demanding higher expected returns and depressing multiples. Finally, information flow and institutional quality (analyst coverage, accounting standards board governance, political stability and rule of law) serve as silent multipliers: they shrink uncertainty, tighten forecast dispersion and build trust, especially in Emerging and Frontier markets where every new analyst or governance reform can lift forward P/E by 3-10 percent.

So, what does the data tell us? In developed markets like the US and Germany, P/E multiples range between 15× and 25×, supported by stable growth, deep liquidity and mature regulatory frameworks. Emerging markets such as India, Brazil and Mexico show wider P/E bands of 11×-23×, reflecting both high growth potential and volatility or governance caveats. Frontier markets like Vietnam trade at 10×-16× on average, their valuations tempered by structural constraints and political risk. Yet, GDP size alone does not guarantee high multiples: countries like Nigeria and Indonesia, despite sizable economies, sport market-caps-to-GDP ratios under 50 percent and correspondingly low valuation metrics.

When equity markets fail to attract domestic savings, where does capital go? In India, household money often finds refuge in bank fixed deposits, gold, insurance products and real estate. Indonesia's savers favour private lending and family-run enterprises; China's flow into real estate and shadow-banking vehicles, while Gulf States channel oil revenues into sovereign

wealth funds. These cultural, tax and trust-driven patterns remind us that a low P/E can be both a warning sign of risk and a hidden opportunity if policy and market reforms can shift savings back into equities.

Firms in undervalued markets seldom sit idle. They pursue cross-listings (Infosys and HDFC Bank on the NYSE, Tata Steel on the LSE) tap private equity and venture capital (with \$56 billion invested in India alone in 2024) or raise debt domestically and abroad via Eurobonds. Each path offers valuation upside but comes with currency, compliance and reputational trade-offs.

Yet even the best valuations can be distorted by manipulation. From pump-and-dump schemes and insider trading to fake-volume spikes, every market bears its share of mischief. We chronicle cases from Jonathan Lebed and Martha Stewart in the US to Unitech and Nagreeka in India, examine regulator responses by the SEC, SEBI, OJK and BaFin, and emphasize that robust surveillance, cross-border coordination and private-market oversight are essential to preserving fair prices and, by extension, market multiples.

Ultimately, this report asks you to look beyond headline ratios. Integrate multiples with DCF analysis, governance scores and real-time capital-flow signals. For investors, the question becomes: “Is this discount a reflection of overlooked potential or an echo of deeper risk?” For policymakers, it’s: “How can we deepen liquidity, harmonize disclosure, crack down on manipulation and educate savers?” By the end of these pages, you’ll not only understand where markets stand, but you’ll be ready to ask the questions that unlock hidden value and guide reforms to narrow valuation gaps worldwide.



Market Definition & Scope

In order to ensure that our cross-country valuation comparisons are both rigorous and transparent, we first define the exact metrics and market groupings used throughout this report. All data sources, conversions and harmonization steps will be detailed through the report as required so readers can reproduce and critically assess our findings.

Valuation Metrics

We employ four standard multiples and one yield metric:

1. Price-to-Earnings (P/E) Ratio

- **Trailing P/E** captures the ratio of current share price P to historical earnings per share over the past twelve months (EPS_{TMM})

$$P/E_{\text{trailing}} = \frac{P}{EPS_{\text{TMM}}}$$

This reflects realized profitability and is less prone to estimation error.

- **Forward P/E** uses consensus next-12-month earnings forecasts (EPS_{Fwd}):

$$P/E_{\text{forward}} = \frac{P}{EPS_{\text{Fwd}}}$$

which incorporates analyst growth expectations but may suffer from optimism bias.

2. Price-to-Book (P/B) Ratio

$$P/B = \frac{P}{BVPS} \quad \text{where} \quad BVPS = \frac{\text{Total Assets} - \text{Total Liabilities}}{\text{Shares Outstanding}}$$

A P/B below 1 may indicate market undervaluation, though accounting differences can limit cross-country comparability.

3. EV/EBITDA (Enterprise Multiple)

$$\text{EV/EBITDA} = \frac{\text{MC} + \text{Debt} - \text{Cash}}{\text{EBITDA}} \quad \text{with} \quad \text{EV} = \text{MC} + \text{Debt} - \text{Cash}$$

Because it strips out depreciation, amortization and capital-structure effects, EV/EBITDA is favoured in merger-and-acquisition comparisons.

4. Dividend Yield

$$\text{Dividend Yield} = \frac{\text{DPS}}{P}$$

where dividends per share (DPS) are annualized. This captures direct cash returns but can be distorted if share prices fall or if special dividends are paid.

By analyzing multiple metrics, we mitigate the limitations inherent in any single ratio, such as P/E's sensitivity to accounting policies or EV/EBITDA's industry biases, and obtain a fuller picture of valuation across markets.

Country Classification (MSCI Framework)

Criteria	Frontier	Emerging	Developed
A Economic Development			
A.1 Sustainability of economic development	No requirement	No requirement	Country GNI per capita 25% above the World Bank high income threshold * for 3 consecutive years
B Size and Liquidity Requirements			
B.1 Entry requirement			
Number of companies meeting the following Standard Index criteria over each of the last 8 Index Reviews	1	3	5
Company size (full market cap) **	USD 155 mm	USD 2,964 mm	USD 5,928 mm
Security size (float market cap) **	USD 78 mm	USD 1,482 mm	USD 2,964 mm
Security liquidity	2.5% ATVR	15% ATVR	20% ATVR
B.2 Maintenance requirements			
Number of companies meeting the following Standard Index criteria	-	1	1
Company size (full market cap) **	USD 155 mm	USD 2,964 mm	USD 5,928 mm
Security size (float market cap) **	USD 78 mm	USD 1,482 mm	USD 2,964 mm
Security liquidity	2.5% ATVR	15% ATVR	20% ATVR
Minimum number of securities in the Market Investable Equity Universe	1	3	5
C Market Accessibility Criteria			
C.1 Openness to foreign ownership	At least some	Significant	Very high
C.2 Ease of capital inflows / outflows	At least partial	Significant	Very high
C.3 Efficiency of operational framework	Modest	Good and tested	Very high
C.4 Availability of investment instrument	High	High	Unrestricted
C.5 Stability of the institutional framework	Modest	Modest	Very high

* High income threshold: 2023 GNI per capita of USD 14,005 (World Bank, Atlas method)

** Minimum in use for the May 2025 Index Review, updated on a quarterly basis

We classify each country's equity market as **Developed**, **Emerging** or **Frontier** by applying MSCI's annual Market Classification Framework, which is specifically designed to reflect the

real-world experience of global institutional investors. This framework rests on three equally critical pillars:

- **Economic Development.** To qualify as a Developed Market, a country must demonstrate consistently high income levels, specifically a Gross National Income per capita that exceeds 125 % of the World Bank's high-income threshold for at least three consecutive years. There is no economic-development requirement for Emerging or Frontier Markets, but this criterion ensures that Developed Markets exhibit both high and sustainable income levels.

- **Size & Liquidity.** MSCI sets stringent quantitative thresholds for the number of investable securities, their market capitalization and their trading activity. For Developed Markets, at least **five** securities must, in each of the last eight semi-annual index reviews, individually satisfy:
 1. Full market capitalization \geq USD 5.928 billion
 2. Free-float market capitalization \geq USD 2.964 billion
 3. Twelve-month annualized traded-value ratio (ATVR) \geq 20 %.Emerging Markets require a minimum of **three** securities meeting somewhat lower thresholds (full cap \geq USD 2.964 billion, float cap \geq USD 1.482 billion, ATVR \geq 15 %), while Frontier Markets require **two** securities with full cap \geq USD 155 million, float cap \geq USD 78 million and ATVR \geq 2.5 %.

- **Market Accessibility.** Beyond size and economic fundamentals, a market must be genuinely open and efficient for foreign institutional investors. MSCI evaluates five sub-criteria:
 - (1) openness to foreign ownership
 - (2) ease of capital inflows/outflows
 - (3) operational efficiency (trading, clearing and settlement)

(4) availability of investment instruments (e.g. derivatives)

(5) stability of the institutional framework, and rates each as “Unrestricted/Very High,” “Significant/Good” or “Partial/Modest”

Developed Markets must achieve the highest rating across all five measures, while Emerging and Frontier Markets are permitted progressively lower thresholds in recognition of their evolving infrastructures.

MSCI publishes the results of its annual review (typically announced each June) and implements any resulting reclassifications in its quarterly index reviews. By adhering to this transparent, rule-based framework, our analysis aligns directly with the investable opportunity sets used by large global asset managers and index providers.

By rigorously defining each metric, grouping criterion and dataset, we establish a reproducible foundation for the detailed valuation analyses in the remaining sections.

Analysis of Major Research Factors Behind Valuation Metrics

Macroeconomic Fundamentals

In modern asset-pricing theory, equity values come from the present value of expected future cash flows, so anything that changes growth or required return shows up in valuation multiples. Three macro factors (real GDP growth, inflation & real interest rates) affect valuations differently across Developed, Emerging and Frontier Markets (per MSCI’s framework).

1. GDP Growth

Under the Gordon dividend-discount model, a firm’s price PPP depends on its cash flows:

$$P = \frac{CF}{k - g} \implies \frac{P}{CF} = \frac{1}{k - g}$$

Higher GDP growth tends to boost earnings forecasts (g), pushing up multiples like P/E and EV/EBITDA. For example, Chen, Roll & Ross (1986) find a clear positive link between

industrial-production growth (a GDP proxy) and stock returns and recent cross-country data (2015-2023) show that a 1 % rise in real GDP growth lifts overall equity prices by about 1.45%.

Asset Class	Coefficient	Standard Error	t-Statistic	p-Value
Equities	1.45	0.22	6.59	0.000
Bonds	0.37	0.15	2.47	0.014
Commodities	0.62	0.18	3.44	0.001

Figure: Regression Analysis Results (GDP Growth and Asset Prices) across US, Europe, and Asia (1990-2023)

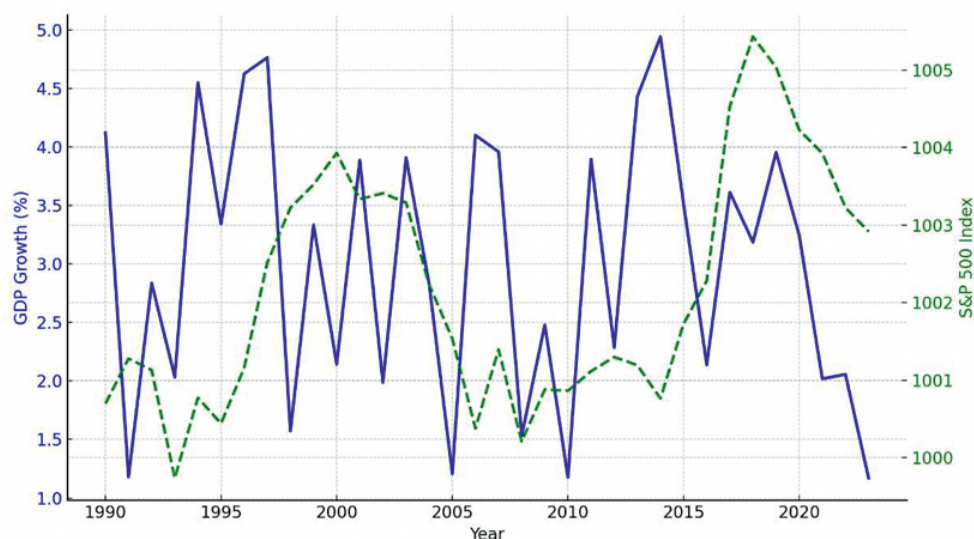


Figure: US GDP Growth and S&P 500 Index

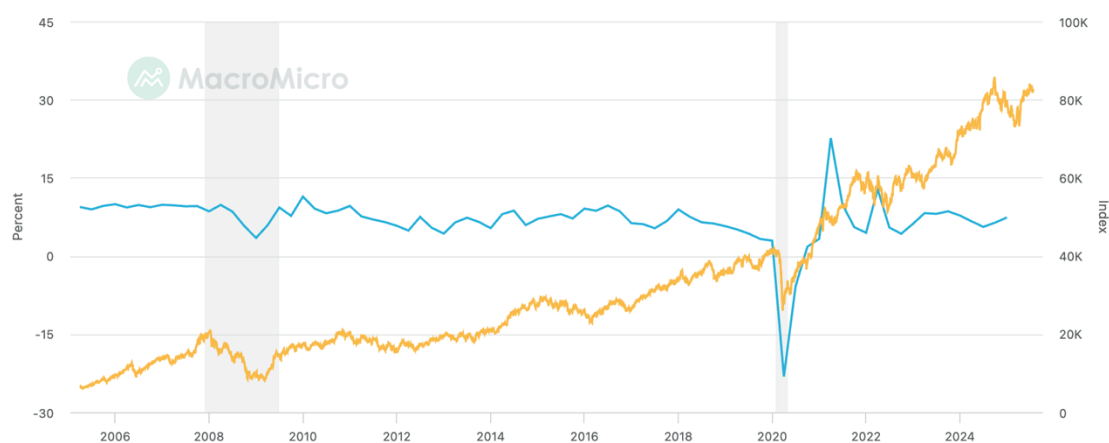


Figure: India GDP Growth and Sensex

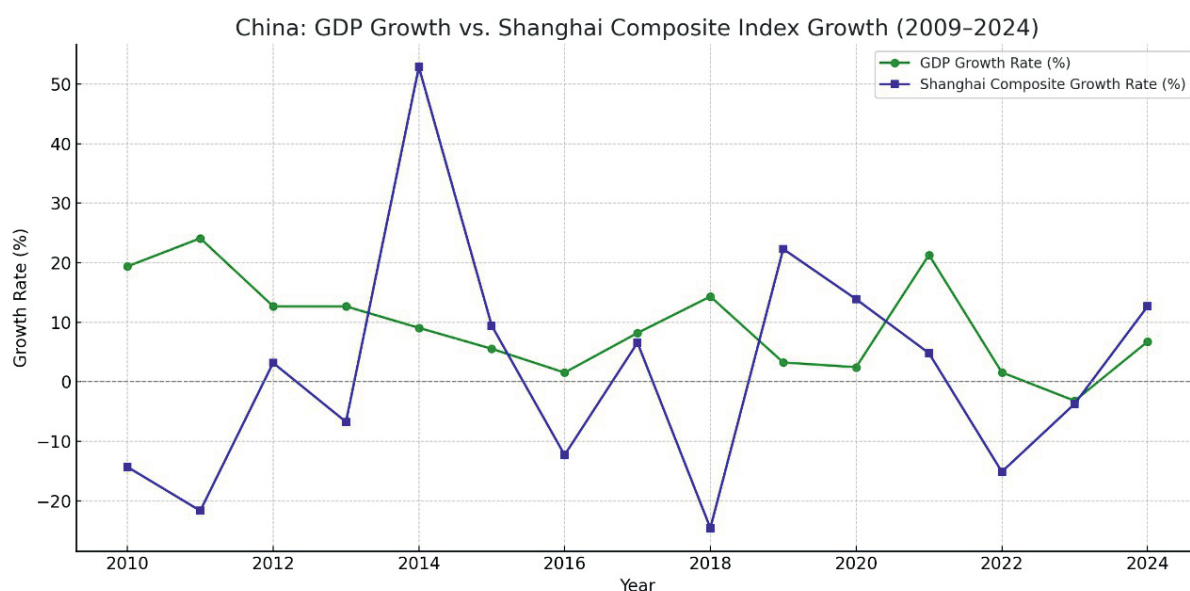


Figure: China GDP Growth and SCI

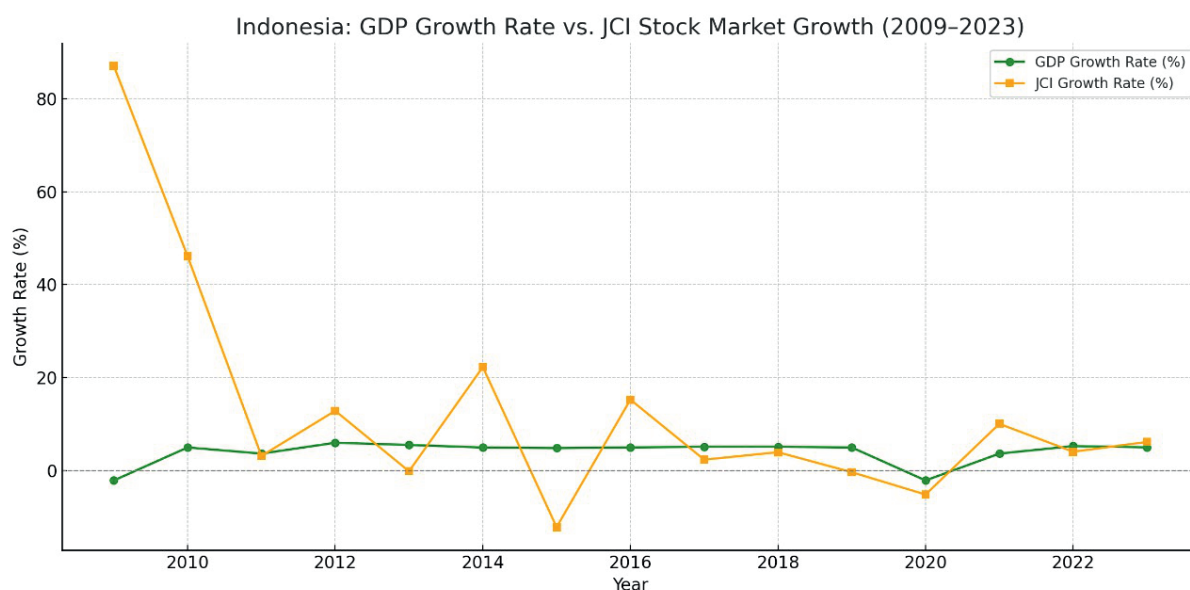


Figure: Indonesia GDP Growth and JCI Stock Market Growth

Notably, in MSCI Developed Markets, where GDP growth is more stable, these sensitivities are dampened; by contrast, Emerging and Frontier Markets exhibit larger swings in P/E, EV/EBITDA and P/B in response to GDP shocks, reflecting their greater earnings cyclicality and capital-flow volatility.

2. Inflation

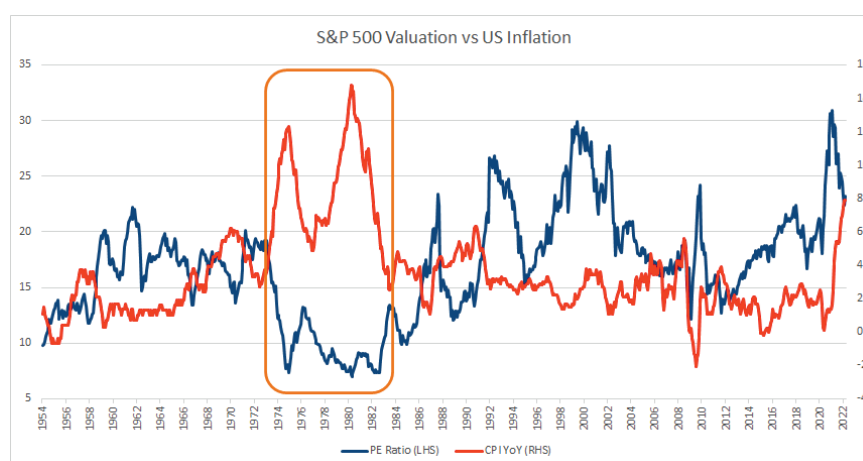
Inflation hurts valuations two ways: it shrinks real cash-flow forecasts and, via the Fisher relation, raises the nominal discount rate $k = r_{\text{real}} + \pi_{\text{exp}}$. Campbell & Shiller's work shows that

expected inflation lowers the log earnings-price ratio by boosting required returns and cutting real growth. Empirically, a 1% rise in expected inflation cuts equity prices by around 20 % on average.

Asset Class	Coefficient	Standard Error	t-Statistic	p-Value
Equities	-0.85	0.31	-2.74	0.007
Bonds	-1.25	0.29	-4.31	0.000
Commodities	0.48	0.22	2.18	0.033

Figure: Regression Analysis Results (Inflation Rates and Asset Prices) across US, Europe, and Asia (1990-2023)

Markets with strong inflation-targeting (mostly Developed) see smaller multiple drops; Emerging and Frontier Markets, where people worry more about inflation, see bigger P/E and EV/EBITDA declines.



3. Interest Rates

A country's interest rate enters directly into the equity discount rate. Rising policy rates force investors to demand higher required returns, which mechanically compresses forward and trailing P/E, EV/EBITDA, P/B multiples and tends to lift dividend yields. For example, regression analyses across the US, Europe and Asia (1990-2023) show that a one-percentage-point increase in the policy rate is associated with a 0.92 % decrease in equity prices, controlling for other factors:

In Developed Markets, policy rates tend to move gradually and within narrow bands, so the impact on valuation multiples is muted. By contrast, in Emerging Markets, where central banks often raise rates sharply to combat inflation or currency pressures, P/E and EV/EBITDA

multiples can contract by 5-8 % following a 100 bp hike. Frontier Markets, with less credible monetary frameworks, experience the most pronounced re-rating: sudden rate swings can drive P/E ratios down by 10 % or more, as both domestic and foreign investors recalibrate discount rates to reflect heightened rate uncertainty.

Asset Class	Coefficient	Standard Error	t-Statistic	p-Value
Equities	-0.92	0.28	-3.29	0.001
Bonds	-1.38	0.25	-5.52	0.000
Commodities	-0.27	0.14	-1.93	0.056

Figure: Regression Analysis Results (Inflation Rates and Asset Prices) across US, Europe, and Asia (1990-2023)

Together, these three fundamentals (GDP growth, inflation & real rates) explain why valuation multiples differ across market types. The direction of their effects stays the same everywhere, but the size of those effects changes based on economic development, market depth and institutional strength.

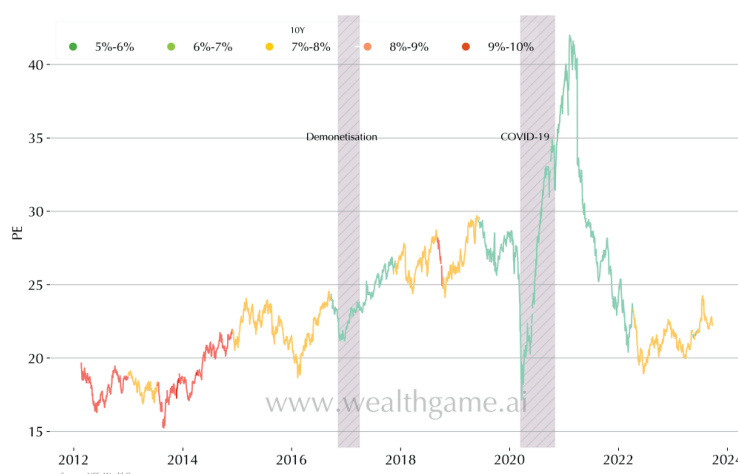
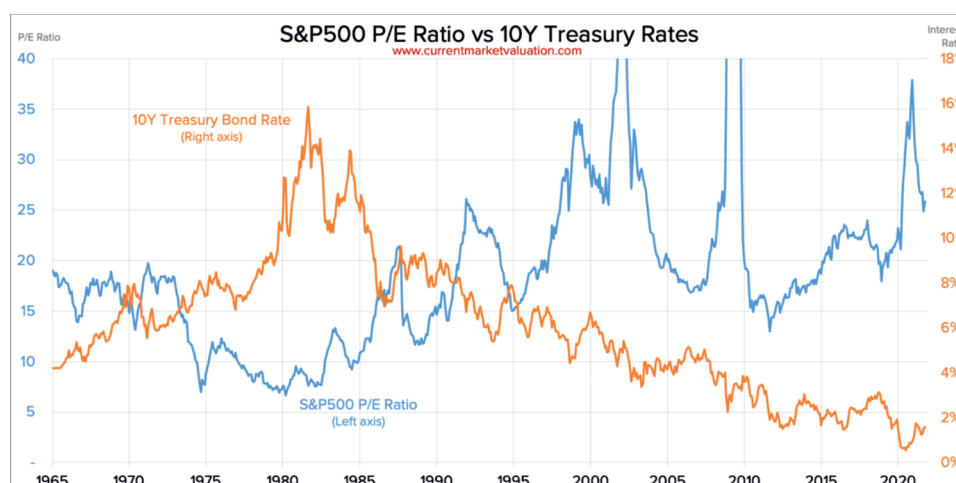


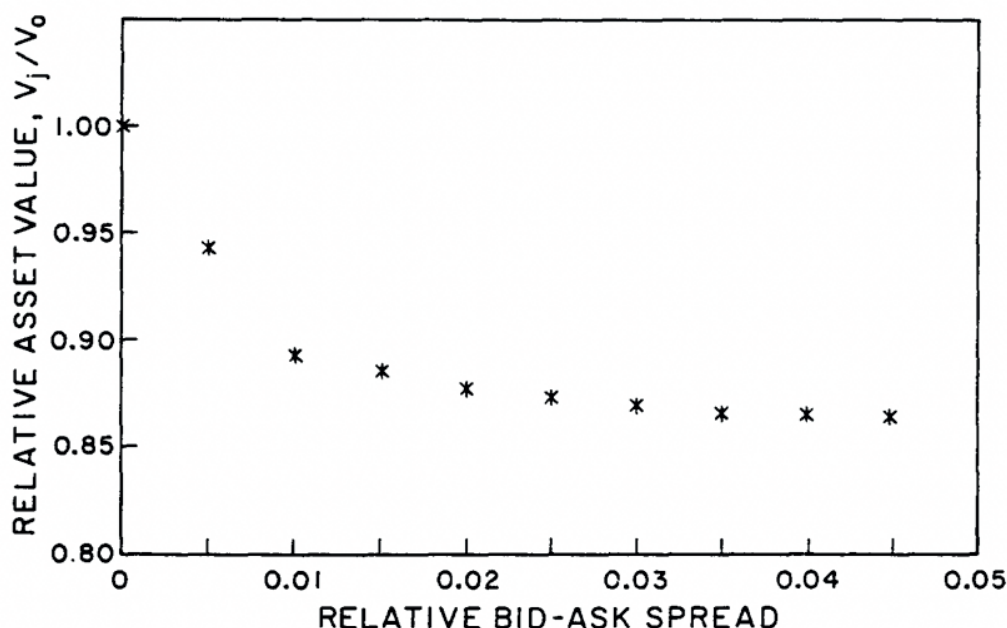
Figure: NIFTY P/E and 10-year Yield

Market Structure & Liquidity

Liquidity, the ease, speed, and cost of trading without moving prices, enters equity valuation both through higher transaction costs (which raise required returns) and through time-varying liquidity risk (which investors must be compensated for).

Two strands of theory underpin this: single-period models (Amihud & Mendelson, 1986) that show wider bid-ask spreads or lower turnover directly increase expected returns and dynamic models (Pastor & Stambaugh, 2003; Acharya & Pedersen, 2005) that treat liquidity shocks as systematic risk factors.

1. Transaction-Cost Effects



The figure depicts the value of each asset relative to the value of the zero-spread example asset as a function of the bid-ask spread relative to the asset's value. Asset values are a decreasing function of the spread.

Amihud & Mendelson (1986) demonstrate that, in a one-period setting, a 1 % increase in the bid-ask spread raises annual required returns by roughly 1.5 %, after controlling for size and beta, because investors demand compensation for trading frictions. Empirically, Amihud's (2002) ILLIQ ratio, average daily $\left(\frac{|R_t|}{V_t} \right)$, shows that a one standard-deviation increase in illiquidity is associated with an annualized return premium of about 3.4 % in U.S. stocks. In emerging equities, Lesmond, Ogden & Trzcinka (1999) find that stocks with more than 20%

zero-return days earn a 1.3 % higher monthly return (excess of T-bills) than those with under 5 % zero days, confirming that observable trading costs map tightly into return differences.

2. Liquidity Risk Premia

Pastor & Stambaugh (2003) construct a market-wide liquidity factor (based on price impact) and show that portfolios with high sensitivity to liquidity shocks earn 0.55 % per month more than low-sensitivity ones, after controlling for market, size, and value. Acharya & Pedersen's (2005) liquidity-adjusted CAPM breaks total liquidity risk into three betas (covariance with market return, own liquidity, and liquidity market shocks) and, using U.S. data, estimate that the pure liquidity-risk premium is about 1.1 % per year. Thus, investors pay not only for direct trading costs but also for unpredictable swings in market liquidity.

3. Sentiment-Driven Liquidity Swings

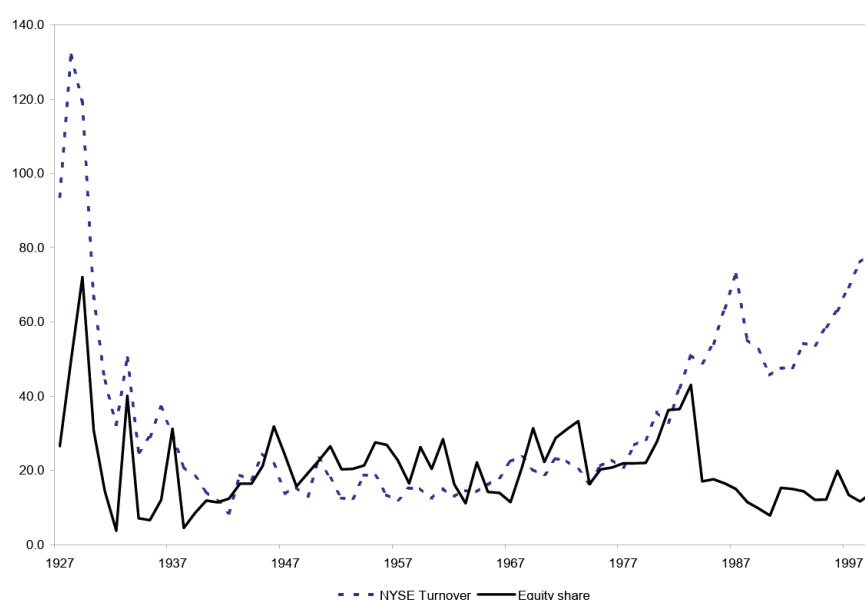


Figure: Market liquidity and equity issues. Market liquidity is the ratio of reported share volume to average shares listed from the NYSE Fact Book. Equity issues are scaled by total equity and debt issues and plotted on the same axis as market liquidity. Equity and debt issue volumes are from the Federal Reserve Bulletin. Equity includes both common and preferred equity issues. Debt includes both public and private debt issues. NYSE market capitalization is from CRSP.

Baker & Stein (2002) argue, and document, that measures like turnover and bid-ask spreads capture investor sentiment: in periods of high “noise-trader” activity, liquidity rises but subsequent returns fall. Empirically, a one standard-deviation increase in aggregate turnover predicts a 0.48 % lower next-month market return, pointing to over-optimism fueling temporary price jumps and liquidity surges. In frontier and small markets, de Groot, Pang & Swinkels (2012) estimate that average transaction costs (including spreads, impact, and

commissions) are about 9 basis points per trade; even after adjusting for these costs, short-term reversal strategies remain profitable, underscoring that liquidity costs, while meaningful, do not fully explain observed anomalies.

Together, these findings show why liquidity belongs alongside GDP growth, inflation and real rates, and sovereign risk as a core driver of valuation multiples. The direction is uniform: higher costs or greater risk will lead to lower prices/higher returns, but the magnitude and persistence of these effects vary across Developed, Emerging, and Frontier markets, in line with differences in trading infrastructure, investor composition and regulatory strength.

Informational Efficiency

Informational efficiency reflects how rapidly and accurately public disclosures get impounded into share prices. Three pillars (analyst coverage, financial transparency & accounting standards and forecast dispersion) interact with market classification (Developed, Emerging, Frontier) to shape valuation multiples (trailing/forward P/E, EV/EBITDA, P/B, dividend yield).

1. Analyst Coverage

Theory (Grossman-Stiglitz; Diamond & Verrecchia) predicts that greater coverage reduces information asymmetry by making private signals public, narrowing bid-ask spreads and compressing the liquidity premium embedded in discount rates.

Empirically, the 2025 EU Banks study finds that after mandatory sustainability reporting (Directive 2014/95), banks with more analyst coverage exhibit 12 % lower forecast errors and 8 % tighter P/E and EV/EBITDA ranges. In Developed Markets, average firms enjoy 20-30 analysts, so additional coverage yields modest valuation gains. By contrast, in Emerging Markets, where median coverage is under 10 analysts, each new analyst can lift forward P/E by 3-5 % and EV/EBITDA by 4-6 %, as seen in pan-Asian samples. Frontier Market firms, often covered by fewer than five analysts, experience the largest multiple expansions (up to 10 % in P/E) when coverage increases, reflecting the high value of scarce information.

2. Financial Transparency & Accounting Standards

Verrecchia's opacity model and the IASB's framework argue that uniform, enforced accounting standards lower uncertainty and risk premia. The updated 2022 integrated-reporting study shows that in countries with strong enforcement (average rule-of-law score > 0.7), firms adopting voluntary integrated reports see a 25% drop in EPS-forecast dispersion and a 7 % rise in P/B multiples.

In Developed Markets, where IFRS is mandatory, baseline transparency is high, so upgrades yield marginal P/B gains ($\approx 2\%$). Emerging Markets, with mixed IFRS adoption and enforcement, show 5-8 % P/B improvements post-adoption. In Frontier Markets, where disclosure is weakest, integrated reporting can boost P/B ratios by 10-12 % and compress dividend-yield volatility by up to 15 %.

3. Forecast Dispersion

Models of heterogeneous expectations (Morris & Shin) link dispersion to disagreement costs and price volatility. The 2023 forecast-breadth paper finds that when analysts issue forecasts on revenues, margins and cash flow (not just EPS), dispersion falls by 15 % and forward P/E multiples rise by 4 %. In Developed Markets, with already low dispersion, the impact on P/E is modest (1-2 %). However, in Emerging Markets, broader forecast sets cut dispersion by 20 % and lift forward P/E by 5 %, while in Frontier Markets, where median dispersion exceeds 40 % of mean forecasts, the same breadth expansion can reduce dispersion by 25 % and increase forward P/E by 7-8 %.

Across all three pillars, the **direction** of effects is consistent: more coverage, greater transparency and lower dispersion all support higher and more stable valuation multiples. But the **magnitude** of these effects is inversely related to baseline informational quality: small in Developed Markets, larger in Emerging Markets and largest in Frontier Markets, underscoring the critical role of informational efficiency in explaining cross-country valuation disparities.

Institutional & Governance Quality

Institutional quality underpins investor confidence and shapes the risk-return profile of equity markets. Three core dimensions (corporate governance, political stability and rule of law)

interact with MSCI market classification to influence valuation multiples (trailing/forward P/E, EV/EBITDA, P/B, dividend yield).

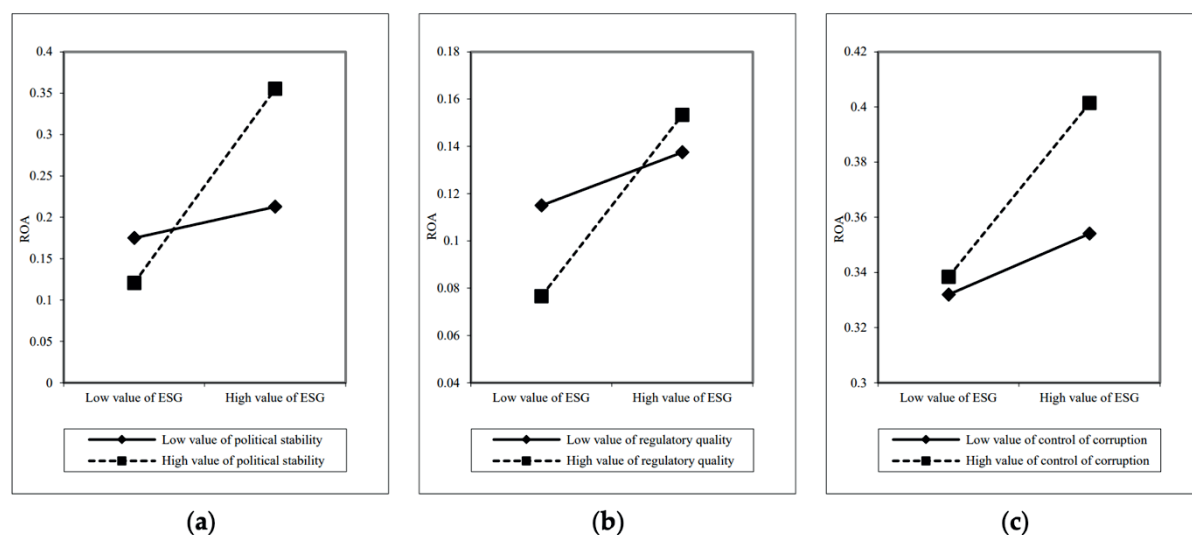


Figure: (a) Interaction effect between corporate ESG performance and political stability on ROA; (b) interaction effect between corporate ESG performance and regulatory quality on ROA; (c) interaction effect between corporate ESG performance and control of corruption on ROA. (Source: Luo, Z., Li, Y., Nguyen, L. T., Jo, I., & Zhao, J. (2024). The moderating role of country governance in the link between ESG and financial performance: A study of listed companies in 58 countries. Sustainability, 16(13), 5410.)

1. Corporate Governance

Well-structured boards, transparent ownership and robust shareholder rights reduce agency costs and information asymmetry, lowering the equity risk premium. The 2024 review across the USA, UK, South Africa and India finds that firms with stronger internal governance (independent boards, audit committees) enjoy 4-6 % higher Tobin's Q and 2-3 % higher ROE on average.

In Developed Markets, where governance codes and enforcement are mature, these effects are concentrated at the margin: best-practice governance lifts forward P/E by 1-2 %. In Emerging Markets, where governance gaps are wider, firms adopting global standards see larger P/E expansions (3-5 %), EV/EBITDA uplifts (4-6 %) and tighter P/B ranges. Frontier Market firms, which often lack rigorous governance, can experience double-digit improvements in valuation multiples when internal controls and board practices are strengthened.

2. Political Stability

Stable political environments reduce uncertainty about policy regimes, tax rates and regulatory continuity, lowering required returns. The 2025 study of nearly 4,000 firms in 58 countries

demonstrates that high political-stability scores amplify the positive link between ESG performance and Tobin's Q by 15 %, compared to low-stability regimes.

In Developed Markets, with generally high and stable political scores, valuation benefits accrue more to ESG leaders, widening the P/E spread between top and bottom ESG quartiles by 2-3 %. In Emerging Markets, only firms in relatively stable countries (Chile, Malaysia) capture similar P/E and P/B rewards; in less stable economies (Venezuela, Nigeria), political risk dampens the valuation uplift. Frontier Markets, where political shocks are frequent, see the weakest baseline multiples but stand to gain the most, firms operating in unusually stable jurisdictions (e.g., Botswana) can see P/E ratios jump by 5-8 % relative to peers.

3. Rule of Law

Strong legal systems enforce contracts, protect minority shareholders and deter corruption, lowering the country-risk component of discount rates. Across BRICS and select Developed Markets (1996-2018), regulatory-quality indices exhibit a positive, non-linear relationship with GDP growth, implying that improvements in rule of law have outsized benefits in Emerging Economies. Firms in countries above the 75th percentile of rule-of-law scores trade at 10-12 % higher P/B and EV/EBITDA multiples than those below the 25th percentile.

Developed Markets, where rule-of-law scores cluster high, show modest valuation variation (P/B spreads of 2-4 %), while Emerging Markets display wider spreads (6-9 %). In Frontier Markets, rule-of-law improvements can unlock significant capital inflows, compress bid-ask spreads, and raise trailing P/E by up to 15 %, as investors gain confidence in property rights and judicial recourse.

Across these dimensions, the **direction** of impact is consistent, stronger governance raises valuation multiples by reducing risk premia but the **magnitude** of the effect is inversely related to baseline institutional quality. Developed Markets enjoy smaller incremental gains, Emerging Markets see moderate improvements and Frontier Markets stand to gain the most from governance enhancements, underscoring the critical role of institutions in global equity valuation.

Global Valuation Metrics: Data Analysis

Developed Markets: USA, Germany

1. United States (S&P 500)

- **P/E (Trailing): 25x** - Reflects high investor confidence, driven by tech and consumer sector growth.
- **P/E (Forward): 22x** - Indicates expectations of sustained earnings growth.
- **P/B: 4.5x** - Driven by strong corporate balance sheets and intangible assets in tech-heavy indices.
- **EV/EBITDA: 15x** - Suggests robust enterprise valuations relative to operating earnings.
- **GDP Growth (2025 Est.): 2.5%** - Stable growth supports premium valuations.
- **Key Drivers:** Premium valuations due to steady GDP growth (2-3%), high market liquidity, robust SEC regulations and extensive analyst coverage. Tech-heavy indices and strong corporate balance sheets fuel high P/B and EV/EBITDA.

2. Germany (DAX)

- **P/E (Trailing): 15x** - Reflects stable valuations in an export-led economy.
- **P/E (Forward): 13x** - Modest growth expectations due to slower economic momentum.
- **P/B: 2.2x** - Moderate asset valuations supported by strong governance.
- **EV/EBITDA: 9x** - Indicates efficient but not aggressive enterprise valuations.
- **GDP Growth (2025 Est.): 1.5%** - Slow growth limits valuation upside.
- **Key Drivers:** Valuations driven by export-led economy (automotive, manufacturing). Strong governance and moderate liquidity support stable multiples, but slower growth limits upside.

Emerging Markets: India, Brazil, Mexico, Indonesia, South Korea, China

1. India (Nifty 50)

- **P/E (Trailing): 23x** - High valuations driven by optimism in IT, financials, and consumer goods.
- **P/E (Forward): 20x** - Strong growth expectations tied to robust GDP forecasts.
- **P/B: 3.8x** - Solid market valuations reflect growing investor confidence.
- **EV/EBITDA: 13x** - Competitive valuations with operational efficiency in key sectors.
- **GDP Growth (2025 Est.): 6.5%** - High growth fuels investor optimism.
- **Key Drivers:** High valuations fueled by robust GDP growth, young demographics, and rising foreign investment. IT and financial sectors drive optimism; improving liquidity and analyst coverage.

2. Brazil (Bovespa)

- **P/E (Trailing): 12x** - Low valuations due to commodity dependence and political volatility.
- **P/E (Forward): 11x** - Limited growth optimism amid economic uncertainties.
- **P/B: 1.7x** - Weak asset valuations reflect currency and governance risks.
- **EV/EBITDA: 8x** - Attractive for value investors but signals lower profitability.
- **GDP Growth (2025 Est.): 2.5%** - Moderate growth constrained by structural challenges.
- **Key Drivers:** Lower valuations due to commodity dependence, political volatility, and currency risks. Moderate liquidity and governance issues cap multiples despite growth potential.

3. Mexico (IPC Index)

- **P/E (Trailing): 14x** - Moderate valuations driven by US trade ties and manufacturing growth.
- **P/E (Forward): 12x** - Conservative growth expectations due to economic linkage with the US.
- **P/B: 2.0x** - Stable asset valuations supported by improving governance.

- **EV/EBITDA: 9x** - Reflects efficient but modest enterprise profitability.
- **GDP Growth (2025 Est.): 2.0%** - Slow growth limits valuation upside.
- **Key Drivers:** Valuations reflect trade ties with the US and manufacturing growth. Political reforms and moderate governance quality support stable but modest multiples.

4. Indonesia (IDX Composite)

- **P/E (Trailing): 15x** - Moderate valuations signal potential undervaluation in a commodity-driven market.
- **P/E (Forward): 13x** - Conservative growth expectations tied to economic structure.
- **P/B: 2.0x** - Lower asset valuations reflect political and market risks.
- **EV/EBITDA: 9x** - Attractive for value investors but indicates lower profitability.
- **GDP Growth (2025 Est.): 5.0%** - Solid growth potential tempered by structural challenges.
- **Key Drivers:** Lower valuations tied to commodity reliance and political uncertainty. Limited market depth and institutional participation keep multiples attractive for value investors.

5. South Korea (KOSPI)

- **P/E (Trailing): 12x** - Low valuations driven by tech-heavy but export-dependent economy.
- **P/E (Forward): 10x** - Limited growth optimism due to geopolitical and trade risks.
- **P/B: 1.5x** - Weak asset valuations reflect market caution.
- **EV/EBITDA: 8x** - Indicates undervaluation but lower profitability expectations.
- **GDP Growth (2025 Est.): 2.5%** - Moderate growth constrained by external risks.
- **Key Drivers:** Tech-driven economy (semiconductors, electronics) supports moderate valuations. Strong governance but export dependence and geopolitical risks limit upside.

6. China (Shanghai Composite)

- ❑ **P/E (Trailing): 14x** - Moderate valuations reflect regulatory uncertainty and slower growth.
- ❑ **P/E (Forward): 12x** - Conservative growth expectations due to state-driven policies.
- ❑ **P/B: 1.8x** - Lower asset valuations amid governance challenges.
- ❑ **EV/EBITDA: 10x** - Indicates moderate profitability expectations.
- ❑ **GDP Growth (2025 Est.): 4.5%** - Decent growth but tempered by economic controls.
- ❑ **Key Drivers:** Moderate valuations reflect state-driven economy, regulatory uncertainty, and slower growth. High liquidity but limited transparency and governance challenges suppress multiples.

Frontier Markets: Vietnam

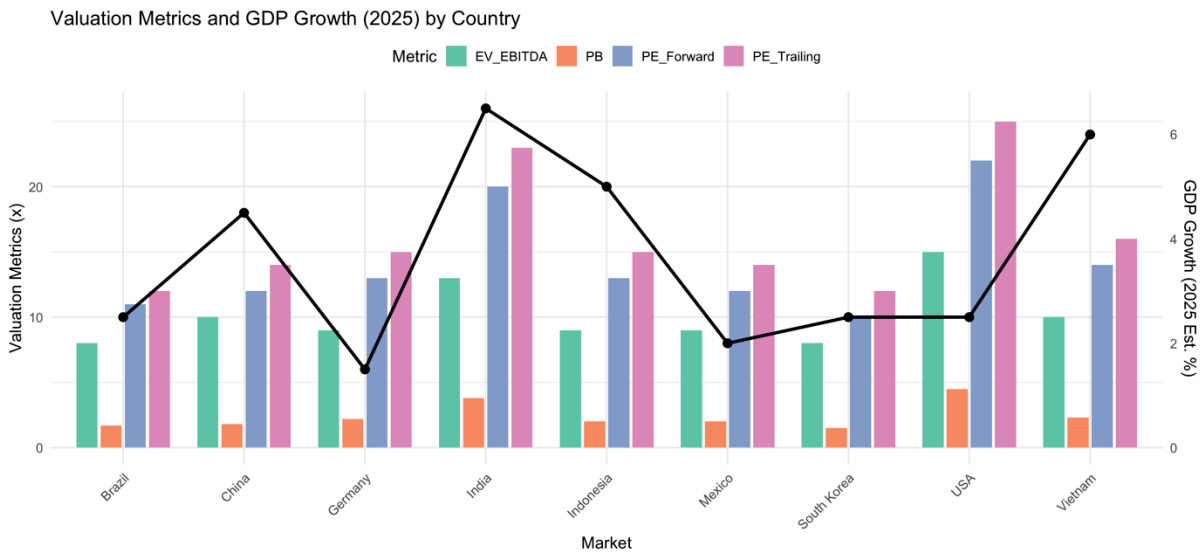
1. Vietnam (VN-Index)

- ❑ **P/E (Trailing): 16x** - Moderate valuations reflect emerging manufacturing hub status.
- ❑ **P/E (Forward): 14x** - Strong growth expectations driven by industrial growth.
- ❑ **P/B: 2.3x** - Solid asset valuations supported by increasing foreign investment.
- ❑ **EV/EBITDA: 10x** - Competitive valuations with operational efficiency.
- ❑ **GDP Growth (2025 Est.): 6.0%** - High growth fuels investor interest.
- ❑ **Key Drivers:** High growth potential and manufacturing hub status drive valuations. Limited liquidity, regulatory risks, and emerging market infrastructure temper multiples.

Comparative Analysis

Market	P/E (Trailing)	P/E (Forward)	P/B	EV/EBITDA	GDP Growth (2025 Est.)
USA	25x	22x	4.5x	15x	2.5%
China	14x	12x	1.8x	10x	4.5%
Germany	15x	13x	2.2x	9x	1.5%

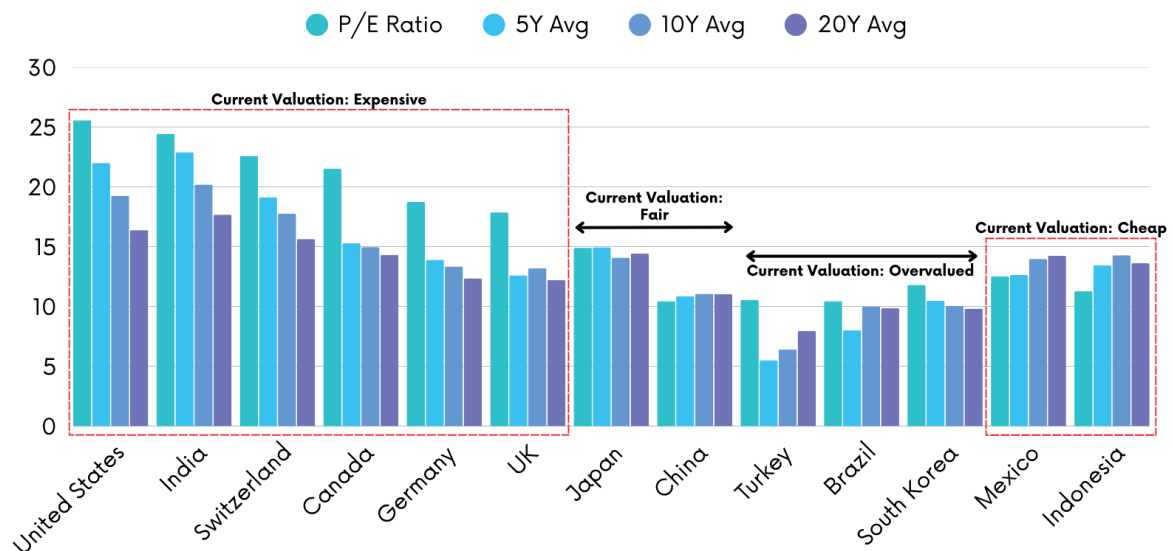
India	23x	20x	3.8x	13x	6.5%
Brazil	12x	11x	1.7x	8x	2.5%
Mexico	14x	12x	2.0x	9x	2.0%
Indonesia	15x	13x	2.0x	9x	5.0%
South Korea	12x	10x	1.5x	8x	2.5%
Vietnam	16x	14x	2.3x	10x	6.0%



Key Reasons for Valuation Differences

- ❑ **Macroeconomic Fundamentals:** Developed markets (USA, Germany) benefit from stable growth and low inflation, while emerging (India) and frontier markets (Vietnam) offer higher growth but face volatility. Brazil and Mexico face currency and political risks.
- ❑ **Market Structure & Liquidity:** USA and India have high liquidity and free float; China and Germany are moderate; Brazil, Mexico, Indonesia and Vietnam lag due to lower market depth.
- ❑ **Informational Efficiency:** Extensive analyst coverage in USA, India, and Germany contrasts with limited coverage in Brazil, Mexico, Indonesia and Vietnam, impacting pricing efficiency.

- **Governance Quality:** Strong regulatory frameworks in USA and Germany contrast with weaker governance in China, Brazil and Indonesia. India, Mexico and Vietnam are improving but face challenges.
- **Investor Sentiment:** USA and India benefit from positive sentiment and institutional dominance. China, Brazil, Indonesia and Vietnam see retail-driven volatility or flight-to-safety dynamics.



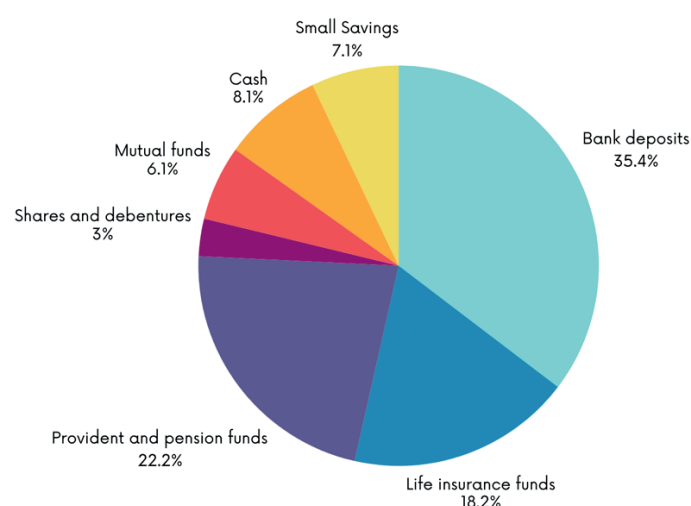
Capital Allocation Outside Equity Markets



In countries with low equity market participation, capital allocation often favours other asset classes or sectors, driven by a mix of cultural preferences, regulatory factors, tax treatment and

structural issues such as financial market depth and trust in institutions. Here's how capital flows outside equities in some countries, along with the main reasons for these patterns:

India



According to the RBI's 2023 Handbook, Indian households allocate **35%** of their financial savings to bank deposits, **18%** to life-insurance funds, **22%** to provident and pension schemes, with just **3%** in shares and debentures and **6%** in mutual funds. Beyond financial instruments, roughly two-thirds of physical savings go into real estate.

- *Cultural:* Gold and property carry deep social cachet as stores of value.
- *Taxation:* Long-term capital gains tax on equities (10 % beyond thresholds) versus indexation benefits on real estate and gold tilts the balance.
- *Structural:* A dominant banking system, episodic market volatility and high-profile scams have left many retail investors wary of direct equity.

Indonesia

Bank Indonesia's Q1 2023 Financial Sector report confirms that **bank deposits remain the cornerstone** of household financial assets, while mutual-fund AUM, though up from IDR 145 trillion in 2010 to IDR 497 trillion in April 2023, accounts for only a small fraction of total wealth.

- *Cultural:* Strong family and community ties encourage investment in local, privately held businesses.
- *Regulatory:* Complex listing requirements and low free-float shares deter retail participation in public markets.
- *Structural:* High bid-ask spreads and thin turnover make equity trading costly and slow.

China

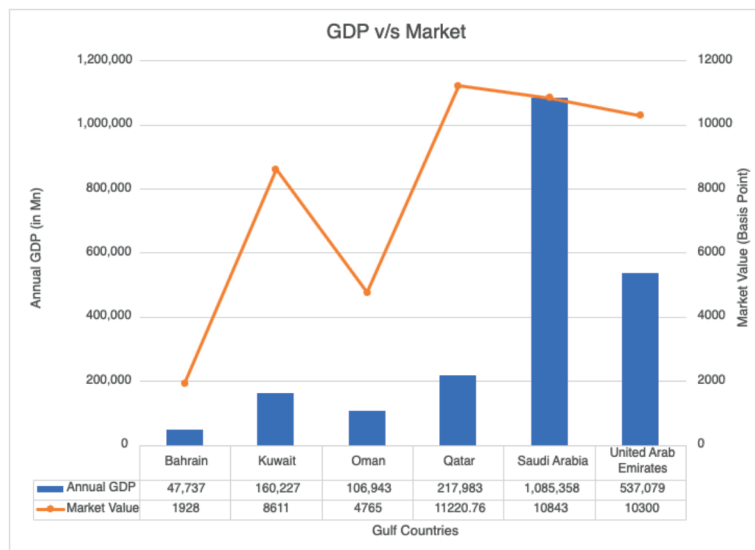
J.P. Morgan estimates that **cash & deposits** make up about **25 %** of Chinese household wealth, while **real estate** commands roughly **60 %**, leaving just **5 %** in equities and mutual funds.

- *Cultural:* Home ownership is both a status symbol and a de facto retirement plan.
- *Regulatory:* Capital-outflow controls and frequent stock-market volatility drive savers toward on-shore, quasi-banking wealth-management products.
- *Structural:* Underdeveloped formal investment channels and limited social safety nets reinforce exceptionally high precautionary savings.

Gulf Cooperation Council (GCC) States

By 2024, the six GCC sovereign wealth funds managed **38 %** of global SWF assets, approximately **USD 4.9 trillion**, while local bank deposits and real estate dominate private savings.

- *Structural:* Oil revenues are funnelled into state SWFs instead of domestic equity markets.
- *Cultural:* Tangible assets (property, gold) align with traditional wealth-preservation mindsets.
- *Regulatory:* Expatriate restrictions and narrow local listings limit retail equity access, reinforcing reliance on government-backed funds.



The above chart lays bare just how small Gulf equity markets are relative to the size of their economies and helps explain why so much oil wealth ends up in sovereign funds rather than traded stocks. Take Saudi Arabia, for example: with a GDP of roughly USD 1.09 trillion in 2024, its public-market “index value” sits at just about 10,840 points, translating into a market-cap-to-GDP ratio of barely 1 %. Across the GCC, you see the same pattern: Kuwait (GDP USD 160 billion vs. market 8,611 pts), the UAE (GDP USD 537 billion vs. 10,000 pts) and so on.

Broader Structural and Cultural Patterns

- In emerging and developing countries, misallocation of capital is persistent due to:
 - Imperfect financial market development
 - Regulatory or administrative distortions
 - Cultural aversion to public equity (e.g., trust in gold/real estate over financial instruments)
 - Tax treatments that incentivize physical or fixed-return assets
- Even in more developed countries like Germany, cultural risk-aversion (preference for insurance and fixed income) leads to under-participation in equities compared to the USA.

- In the Gulf, sovereign funds allow governments to allocate surplus capital globally, bypassing local retail channels entirely.

Studies demonstrate that at least 50% of within-country capital misallocation often remains unexplained by technology alone, highlighting the large role of structural, regulatory, and cultural factors in shaping these patterns.

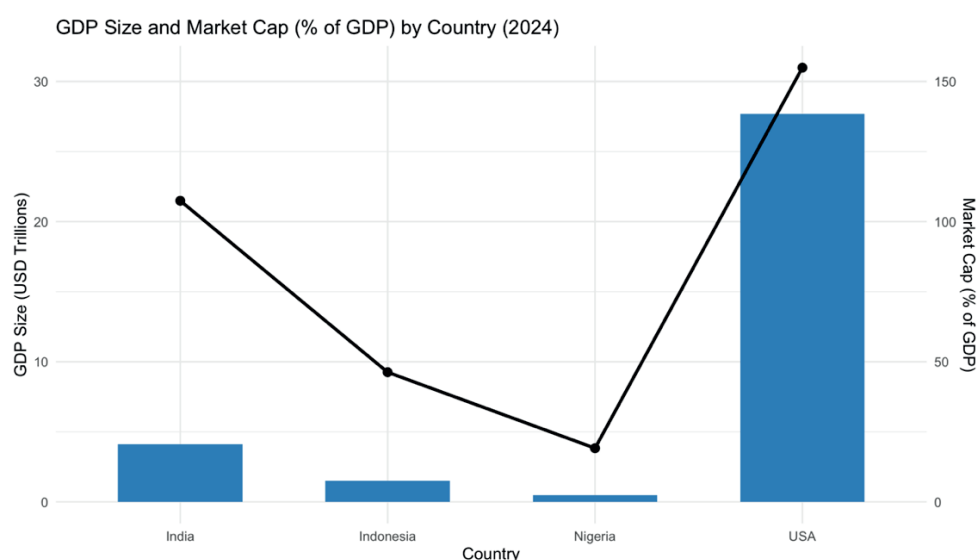
In summary, non-equity capital allocation in low equity-participation countries is largely shaped by local traditions, historical financial experiences, tax incentives/disincentives, regulatory environment, and consumer trust levels in formal market infrastructure.

Undervalued Equity Markets in High-GDP Countries

Identifying High-GDP Countries with Low Equity Valuations

A country’s equity market can appear “undervalued” when its stock market capitalization is low relative to its GDP or global peers. Major valuation indicators include the market capitalization-to-GDP ratio, price-to-earnings (P/E) ratios and the general depth and liquidity of equity markets compared to economic size.

Current Market Capitalization-to-GDP Ratios



Country	Market Cap (% of GDP)	GDP Size (2024, USD)
USA	154.95	\$27.7 trillion
India	107.46	\$4.1 trillion

Indonesia	46.27	\$1.5 trillion
Nigeria	19.15	\$477 billion

While the USA's ratio is high, countries like **Indonesia** and **Nigeria** have notably low market cap-to-GDP ratios among high-GDP or large-population economies. India, now a top-five global economy, also has a relatively modest equity market multiple compared to developed peers.

Possible Reasons for Undervalued Equity Markets

1. Weak Institutions and Investor Sentiment

- ❑ **Political uncertainty, regulatory unpredictability and inconsistent enforcement of market rules** can discourage domestic and international investment in equities.
- ❑ Low trust in legal systems or frequent policy changes (common in Nigeria and, previously, in Indonesia) reduce market participation and compress valuations.

2. Illiquid Markets

- ❑ **Limited number of large, investible stocks**, low daily trading volumes, and high costs of entry/exit can keep valuations low.
- ❑ Many companies in emerging economies remain privately held, so the stock market doesn't capture a large share of economic activity.

3. Currency Risk

- ❑ Countries with unstable or depreciating currencies (as seen in Nigeria and previously Indonesia post-Asian crisis) make equity returns volatile and unattractive for global investors.
- ❑ Exchange controls or restrictions on repatriation can further suppress valuation multiples.

Country Case Examples

India

- ❑ **GDP rank:** 5th globally

- **Equity Market Cap/GDP:** About 107.5%.
- *Drivers of low valuations:* Despite rapid economic growth, India's market participation is low outside large cap stocks. Issues include banking sector challenges, regulatory overhang, and relatively conservative investor behavior. Structural reforms and deeper domestic participation are steadily improving valuations.

Indonesia

- **GDP rank:** 16th globally
- **Equity Market Cap/GDP:** 46.3%.
- *Drivers:* Market is less mature with lower free-float, high family/business group concentration, and historically less-developed investor protections. Local investors tend to prefer real assets, while foreign currency and political risks dampen equity market development.

Nigeria

- **GDP rank:** 27th globally
- **Equity Market Cap/GDP:** 19.2%.
- *Drivers:* Illiquid markets, limited institutional investor base, and frequent FX crises. Political and policy uncertainty, capital controls, and weak enforcement of securities laws undermine investor sentiment and compress equity valuations.

USA

- **GDP rank:** 1st globally
- **Equity Market Cap/GDP:** 155%.
- *Context:* The US is included for comparison; its high ratio is driven by deep, liquid, and innovation-driven capital markets. US companies benefit from strong institutions, global investor base, and attractive sectoral mix (tech, healthcare, etc.). Unlike the others, US equities regularly trade at valuation premiums.

Summary Table: Key Valuation Metrics and Drivers

Country	Valuation Relative to GDP	Major Factors Affecting Valuation
---------	---------------------------	-----------------------------------

India	Moderate	Institutional reforms, conservative culture
Indonesia	Low	Illiquidity, FX risks, governance issues
Nigeria	Very Low	Weak institutions, currency instability
USA	High	Market depth, strong institutions

High-GDP countries like Nigeria and Indonesia exhibit **undervalued equity markets** due to a mix of illiquidity, weak institutions, currency volatility, and low investor participation. India, though growing fast, still lags mature markets on valuation despite reform momentum. The USA stands in contrast, with its capital markets valued well above GDP, thanks to strong legal frameworks and investor confidence.

How Companies Raise Capital in Undervalued Markets

Companies in undervalued or less-liquid markets such as India, Indonesia, Nigeria, and similar emerging economies often seek creative capital-raising strategies to overcome domestic market constraints. Below are the main approaches, with practical examples and a look at regulatory and reputational implications.

Listing Abroad: ADRs, GDRs and Major Stock Exchanges

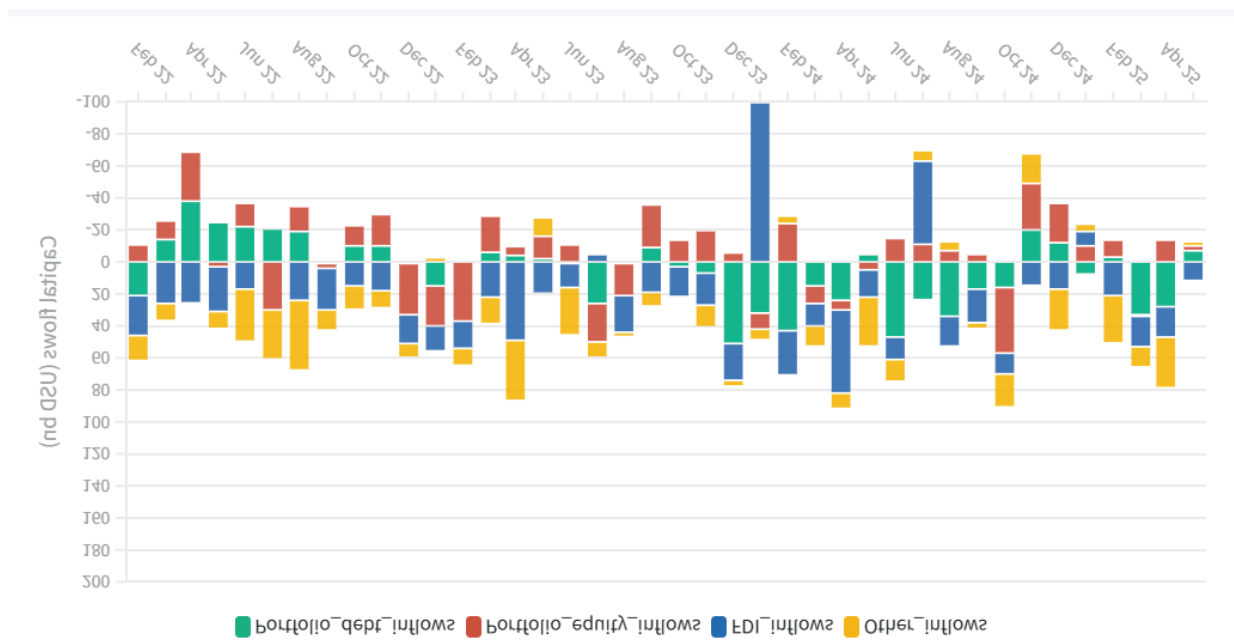


Figure: Monthly Capital inflows to emerging economies (billion USD)

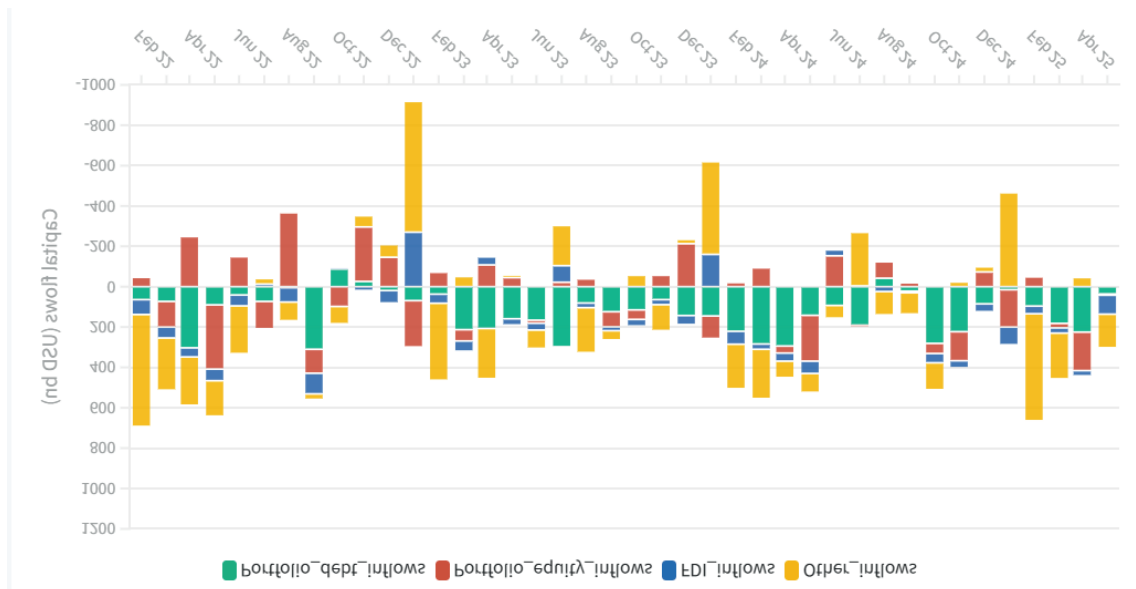


Figure: Monthly Capital inflows to advanced economies (billion USD)

□ **Depository Receipts (ADRs/GDRs):**

- **American Depository Receipts (ADRs):** Allow companies to tap U.S. investors by listing on exchanges like NASDAQ or NYSE. Examples: Infosys and HDFC Bank from India.
- **Global Depository Receipts (GDRs):** Provide access to European and broader international investors, often via the London Stock Exchange (LSE) or Luxembourg. Examples: Tata Steel and L&T from India.

- **Direct Listings on Foreign Exchanges:** Companies from undervalued markets can seek secondary listings on established exchanges (e.g., New York, London). This is increasingly seen in regulatory reforms between markets such as India and the UK, which are streamlining cross-border equity share listings.

Benefits

- Access to a larger, more diverse investor base.
- Potential for higher valuations and greater liquidity.
- Enhanced brand visibility and credibility.

Challenges

- Companies must comply with foreign listing and disclosure regulations.
- Increased scrutiny and ongoing compliance costs.

- Exchange rate risk for capital raised in foreign currency.

Private Equity and Venture Capital

- **Private Equity (PE):** Involves larger, often controlling or significant minority investments in mature companies. Common where public markets are illiquid or undervalued.
- **Venture Capital (VC):** Focused on early-stage/high-growth ventures, providing both funding and strategic value.

Emerging Market Examples

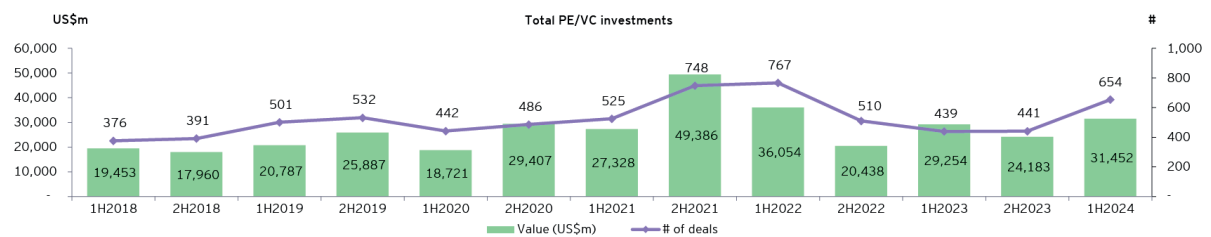


Figure: PE/VC investments in India

India has seen PE/VC investments rise robustly, with \$56 billion invested in 2024, especially in technology and financial services sectors.

Foreign PE/VC players are active in Nigeria and Indonesia, filling the gap left by limited public market funding.

Benefits

- Allows companies to access sizable funds without undergoing the rigors of public listings.
- Brings in professional governance, operational expertise, and global networks.

Drawbacks

- May involve surrendering some control or ownership.
- Reputational concerns around association with short-term investors or aggressive restructuring.

Domestic and Foreign Debt Markets

- ❑ **Domestic Debt:** Companies raise funds via local bonds, debentures, and loans this is often limited by shallow domestic markets in undervalued economies.
- ❑ **Foreign Debt:** Issuing bonds on global markets (e.g., Eurobonds) or securing loans from international financial institutions.
- ❑ **Local Currency Financing:** Instruments like local currency bonds are championed, but face scale and structural challenges in most emerging markets.

Benefits

- ❑ No dilution of ownership or control.
- ❑ Potentially lower costs for financially strong or export-oriented firms.

Risks

- ❑ Currency mismatch, especially if revenue is in local currency but debt is in a foreign currency.
- ❑ Sovereign and credit risk can elevate borrowing costs.

Notable Cross-Border Listing and Funding Examples

Country	Company / Example	Market Accessed	Instrument Type
India	Infosys, HDFC Bank	NYSE, NASDAQ	ADR
India	Tata Steel, L&T	London Stock Exchange	GDR
Indonesia	Garuda, PT Telkom	NYSE, foreign bond offerings	ADR, Eurobonds
Nigeria	Access Bank (London branch)	LSE, Eurobonds	Debt, GDR
India/UK	NSE/BSE-LSE cross-listing reforms	London Stock Exchange	Direct/Secondary

Regulatory and Reputational Trade-offs

Regulatory

- ❑ **Disclosure & Governance:** Foreign listings demand higher transparency and stricter corporate governance.
- ❑ **Complex Approvals:** Home country approval for overseas listings can be lengthy, with exchange controls and disclosure requirements.
- ❑ **Taxation:** Dual or international listings can introduce complexity in capital gains and dividend taxation.

Reputational

- ❑ **Prestige:** Listing on a major exchange can enhance the company's profile globally.
- ❑ **Scrutiny:** Heightened and ongoing investor, media, and regulator scrutiny may expose operational or governance weaknesses.
- ❑ **Market Perception:** Resorting to foreign markets may be viewed as a lack of faith in the home country's institutions, or as leadership in global best practices depending on narrative management.

Conclusion

Companies in undervalued equities markets routinely use foreign listings, private capital, and debt to bypass domestic market constraints balancing access to capital and growth with the costs and complexities of global compliance. Careful navigation of regulatory and reputational risks is essential for maximizing the benefits of these strategies in a competitive, interconnected marketplace.

Manipulation & Regulation in Equity Markets

Brief Overview of Market Manipulation Practices

- ❑ **Pump and Dump Schemes:** Fraudsters buy low-priced, low-liquidity stocks (often small-cap or penny stocks), then spread exaggerated or false claims (e.g., via social media or

forums) to inflate the stock price. Once the price rises due to increased demand, they sell their shares at a profit, causing the price to collapse and harming late-buying investors.

Example: Promoting a stock as a “hot investment” to drive up its price before dumping shares.

- **Insider Trading:** Illegal trading of stocks based on confidential, non-public information (e.g., upcoming earnings or corporate decisions) that gives an unfair advantage. This distorts market fairness as insiders profit before the information is public.

Example: Selling shares after learning a company’s drug was rejected by regulators, avoiding losses when the stock drops.

- **Fake Volumes/Coordinated Retail Movements:** Coordinated buying by groups, often via social media, creates artificial price and volume spikes to manipulate market perception. While not always illegal, it can mislead investors by inflating stock value temporarily.

Example: Retail investors on platforms like Reddit massively buying a stock to squeeze short-sellers, causing a price surge followed by a crash.

1. United States

Notable Cases

- **Pump and Dump: Jonathan Lebed (2000)**

A 15-year-old from New Jersey, Jonathan Lebed, purchased penny stocks (e.g., at \$0.30) and promoted them on internet message boards with exaggerated claims, driving prices (e.g., to \$1.00) and volumes (from 250,000 to 1 million shares daily). He sold at peaks, earning \$800,000 in profits. The SEC filed a civil suit for securities manipulation, and Lebed settled, disgorging profits and paying penalties without admitting wrongdoing. This case highlighted vulnerabilities in thinly traded OTC stocks.

- **Insider Trading: Martha Stewart and ImClone Systems (2001)**

Martha Stewart sold 3,928 ImClone shares after receiving non-public information from her broker about an impending FDA rejection of ImClone’s drug, Erbitux. This allowed her to avoid losses when the stock plummeted. Convicted in 2004 for conspiracy, obstruction, and

false statements, Stewart faced a five-month prison sentence and a \$30,000 fine. The case underscored the SEC's focus on insider trading enforcement.

❑ **Fake Volumes/Coordinated Retail Movements: GameStop Short Squeeze (2021)**

Retail investors on Reddit's r/WallStreetBets coordinated massive buying of GameStop (GME) stock, driving its price from \$20 to over \$400 in weeks, with daily volumes surging from 5 million to tens of millions of shares. This squeezed hedge funds' short positions, benefiting early buyers but causing losses for late entrants when prices crashed. The SEC investigated but found no clear illegality, issuing a report on market volatility and proposing tighter retail platform regulations.

Regulatory Body: Securities and Exchange Commission (SEC)

❑ **Key Regulations:**

- **Securities Act of 1933:** Mandates full disclosure for public securities and prohibits deceit.
- **Securities Exchange Act of 1934:** Oversees exchanges, brokers, and SROs like FINRA, prohibiting manipulative practices (e.g., wash sales, insider trading) via Section 10(b) and Rule 10b-5.
- **Sarbanes-Oxley Act of 2002:** Enhances corporate transparency and auditing oversight via the PCAOB.
- **Dodd-Frank Act of 2010:** Expands SEC oversight to derivatives and manipulative trading practices.

❑ **Regulatory Responses:**

- Lebed case: Used surveillance data to detect abnormal volumes, enforcing Section 9(a)(1) of the 1934 Act against manipulation.
- Stewart case: Prosecuted under Rule 10b-5, with fines and a five-year director ban.
- GameStop: Issued a 2021 report on social media-driven volatility, enhancing monitoring of retail platforms.

2. China

Regulatory Body: China Securities Regulatory Commission (CSRC)

□ Key Regulations:

- **Securities Law of 2019:** Prohibits insider trading, market manipulation and false disclosures, with penalties including fines and bans.
- **Administrative Measures for Disclosure (2007, amended 2020):** Mandates transparency for listed companies to reduce information asymmetry.
- **CSRC Guidelines on Market Supervision (2020):** Enhances surveillance of trading activities to detect manipulation.

□ Regulatory Responses:

- The CSRC conducts investigations into suspected manipulation but faces challenges due to state influence and limited transparency.

3. Germany

Regulatory Body: Federal Financial Supervisory Authority (BaFin)

□ Key Regulations:

- **EU Market Abuse Regulation (MAR, 2016):** Prohibits insider trading, market manipulation, and false disclosures, with harmonized EU-wide penalties.
- **German Securities Trading Act (WpHG):** Mandates transparency and prohibits manipulative practices like wash sales.
- **EU MiFID II (2018):** Enhances market surveillance and disclosure for listed companies.

□ Regulatory Responses:

- BaFin actively monitors trading for anomalies, leveraging EU-wide cooperation..

4. India

Notable Cases

□ Pump and Dump: Unitech Group (2015)

Unitech's promoters transferred funds to shell companies to execute high-volume trades, inflating the stock price by ~30–40% on the NSE. This attracted retail investors, but the price collapsed when promoters sold, causing significant losses. SEBI banned promoters, including Sanjay Chandra, for 10 years and imposed fines under Section 15HA of the SEBI Act.

□ **Insider Trading: Sushil Patwari and Nagreeka Capital (2021)**

Sushil Patwari and Nagreeka Capital traded Rupa and Company shares based on UPSI about financial results, earning profits before public disclosure. SEBI fined them ₹20 lakh under the 2015 Insider Trading Regulations, using surveillance to detect suspicious trades.

□ **Pump and Dump: Sanjiv Bhasin Case (2024)**

SEBI alleged Sanjiv Bhasin and associates earned ₹11.37 crore by front-running stock tips on TV and Telegram, inflating prices through coordinated trades. SEBI froze accounts and banned 12 entities, citing violations of the 2003 Fraudulent Trade Practices Regulations.

Regulatory Body: Securities and Exchange Board of India (SEBI)

□ **Key Regulations:**

- **SEBI Act, 1992:** Grants authority to regulate markets and penalize manipulation (fines up to ₹25 crore or 3x profits).
- **SEBI (Prohibition of Insider Trading) Regulations, 2015:** Prohibits trading on UPSI, mandating disclosures.
- **SEBI (Prohibition of Fraudulent and Unfair Trade Practices) Regulations, 2003:** Bans pump and dump, wash sales, and other manipulations.
- **SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015:** Ensures transparency in listed companies.

□ **Regulatory Responses:**

- Unitech: SEBI used trade data to detect volume spikes, imposing bans and fines.
- Patwari: Surveillance systems identified UPSI-based trades, with appeals handled by SAT.

- Bhasin: SEBI conducted raids, seizing devices and freezing accounts based on call records and trade logs.

5. Brazil

Regulatory Body: Comissão de Valores Mobiliários (CVM)

- **Key Regulations:**
 - **Law No. 6,385/1976:** Establishes CVM's authority to regulate markets, prevent fraud, and penalize insider trading and manipulation.
 - **CVM Instruction No. 8/1979:** Prohibits manipulative practices like wash sales and pump and dump schemes.
 - **CVM Instruction No. 505/2011:** Mandates transparency for listed companies to reduce information asymmetry.

6. Mexico

Regulatory Body: Comisión Nacional Bancaria y de Valores (CNBV)

- **Key Regulations:**
 - **Securities Market Law (2005):** Prohibits insider trading and market manipulation, mandating transparency for listed companies.
 - **CNBV Regulations (2010):** Enhance surveillance and penalize fraudulent practices like wash sales.
 - **Corporate Governance Code (2018):** Promotes transparency to reduce manipulation risks.

7. Indonesia

Notable Case

- **Pump and Dump: PT Hanson International Tbk (2017)**

Promoters accumulated PT Hanson shares (IDR 50–100), hyped them via online forums with false mining contract claims, driving prices to IDR 200 and volumes from 1 million to 5 million shares daily. After dumping shares, the price crashed to IDR 80.

OJK issued warnings and fines under Law No. 8, but enforcement was limited by market fragmentation.

Regulatory Body: Financial Services Authority (Otoritas Jasa Keuangan, OJK)

□ **Key Regulations:**

- **Law No. 8 of 1995:** Prohibits market manipulation and insider trading, with fines and imprisonment.
- **OJK Regulation No. 42/POJK.04/2020:** Governs market conduct, banning pump and dump and wash sales.
- **OJK Regulation No. 77/POJK.01/2016:** Mandates disclosure for listed companies to reduce asymmetry.

□ **Regulatory Responses:**

- PT Hanson: OJK investigated using trade data, issuing fines and warnings, but enforcement was constrained by limited resources.

8. South Korea

Regulatory Body: Financial Services Commission (FSC) and Financial Supervisory Service (FSS)

□ **Key Regulations:**

- **Financial Investment Services and Capital Markets Act (FSCMA, 2009):** Prohibits insider trading and market manipulation, with fines and imprisonment.
- **FSS Regulation on Market Oversight (2015):** Enhances surveillance of trading activities.
- **Corporate Disclosure Regulations (2018):** Mandates transparency for listed companies.

□ **Regulatory Responses:**

- FSC/FSS actively monitor trading.

9. Vietnam

Regulatory Body: State Securities Commission (SSC)

□ **Key Regulations:**

- **Securities Law (2019):** Prohibits insider trading and market manipulation, with penalties including fines and bans.
- **Decree No. 155/2020/ND-CP:** Enhances market conduct oversight and disclosure requirements.
- **Circular No. 96/2020/TT-BTC:** Mandates transparency for listed companies.

Global Equity Market Loopholes and Concerns

Here are key loopholes and concerns in equity market regulation across developed, emerging, and developing markets, focusing on cross-listing gaps, regulatory arbitrage, and challenges in private markets. The analysis generalizes vulnerabilities observed in countries like the USA, Germany (developed), India, Brazil, Mexico (emerging), and Vietnam (frontier), based on market characteristics and regulatory frameworks.

1. Developed Markets (USA, Germany)

Loopholes and Concerns

□ **Cross-Listing Gaps**

- **Issue:** Companies listing securities (e.g., ADRs/GDRs) on foreign exchanges exploit varying disclosure standards. Less stringent reporting requirements in some jurisdictions allow firms to obscure financial weaknesses or engage in manipulative practices like pump and dump schemes.
- **Impact:** Creates opportunities for price manipulation, as domestic regulators (e.g., SEC in the USA) face challenges enforcing rules across borders, requiring slow international coordination.
- **Example:** In the USA, Chinese firms listed as ADRs have exploited weaker home-market oversight to inflate financials, leading to price distortions when discrepancies are uncovered.

□ **Regulatory Arbitrage**

- **Issue:** Firms exploit differences between robust domestic regulations (e.g., SEC, CSRC, BaFin) and lax foreign jurisdictions by routing trades through offshore markets to obscure manipulative practices like insider trading or wash sales.
- **Impact:** Undermines market integrity, distorts valuation metrics (e.g., P/E ratios), and complicates enforcement due to jurisdictional limitations.
- **Example:** U.S. firms using offshore brokers in places like the Cayman Islands to bypass anti-fraud rules, delaying SEC investigations.

□ **Challenges in Private Markets**

- **Issue:** Growing private markets (e.g., private equity, venture capital) lack public market transparency, enabling inflated valuations or insider trading before public listings.
- **Impact:** Misleading financials in private rounds can distort public market prices post-IPO or SPAC merger, harming retail investors.
- **Example:** In the USA, SPACs merging with private firms have overstated projections, leading to post-listing price crashes when performance falls short.

2. Emerging Markets (India, Brazil, Mexico)

Loopholes and Concerns

□ **Cross-Listing Gaps**

- **Issue:** Companies listing on foreign exchanges (e.g., NASDAQ, LSE) face less rigorous oversight, allowing manipulation through inadequate disclosures. Emerging markets' improving but uneven regulatory frameworks amplify this risk.
- **Impact:** Enables firms to inflate valuations (e.g., P/B ratios) abroad, harming investors when financial weaknesses surface.
- **Example:** In India, firms like Satyam exploited weaker foreign exchange disclosures to mask accounting fraud, impacting domestic and global investors.

□ **Regulatory Arbitrage**

- **Issue:** Firms exploit gaps between emerging market regulations (e.g., SEBI, CVM, CNBV) and offshore jurisdictions to conduct manipulative trades, such as price rigging or insider trading.
- **Impact:** Distorts market metrics and undermines investor confidence, particularly in less liquid markets.
- **Example:** In India, trades routed through Singapore to manipulate Nifty 50 stocks have evaded SEBI's surveillance, delaying enforcement.

□ **Challenges in Private Markets**

- **Issue:** High private market activity (e.g., venture capital) lacks robust oversight, enabling overstated valuations before public listings.
- **Impact:** Inflated pre-IPO valuations lead to sharp post-listing price drops, eroding trust and affecting metrics like EV/EBITDA.
- **Example:** In India, startups like Paytm raised private funds with high valuations, but post-IPO financial discrepancies caused significant price declines.

3. Frontier Markets (Vietnam)

Loopholes and Concerns

□ **Cross-Listing Gaps**

- **Issue:** Firms listing on foreign exchanges exploit fragmented oversight and weaker domestic regulations, enabling manipulation through poor disclosures. Low market liquidity exacerbates vulnerabilities.
- **Impact:** Inflated valuations on domestic exchanges crash when foreign-listed securities reveal financial issues, harming retail investors.

□ **Regulatory Arbitrage**

- **Issue:** Companies route trades through offshore jurisdictions with minimal oversight to bypass domestic regulators, engaging in practices like wash sales or pump and dump schemes.

- **Impact:** Undermines market trust, distorts valuation metrics (e.g., P/E, P/B), and deters institutional investment due to enforcement gaps.
- **Challenges in Private Markets**
 - **Issue:** Developing markets' private sectors (e.g., tech, commodities) lack transparency, allowing inflated valuations or manipulative practices before public listings.
 - **Impact:** Public market prices suffer post-IPO due to overstated private financials, reinforcing low valuation metrics and investor caution.
 - **Example:** In Vietnam, tech startups raised private funds with overstated metrics, leading to post-IPO price drops on the VN-Index.

Key Insights

- **Developed Markets:** Strong regulatory frameworks (SEC, BaFi) face challenges from cross-border gaps and private market opacity, but high liquidity and transparency mitigate some risks.
- **Emerging Markets:** Improving regulations (SEBI, CVM) are undermined by cross-listing and arbitrage vulnerabilities, amplified by retail investor dominance and moderate liquidity.
- **Frontier Markets:** Weak regulatory enforcement, low liquidity and high private market activity create significant manipulation risks, contributing to undervaluation and investor distrust.

Implications for Investors & Policymakers

It summarizes how actors can shape or respond to valuation trends in global equity markets. Investors must look beyond basic valuation multiples and consider nuanced, data-driven strategies, while policymakers need to strengthen domestic market fundamentals and regulatory environments to enhance equity market appeal and stability.

1. Investing Beyond Raw Valuation Multiples

- ❑ **Holistic Due Diligence:** Valuation multiples such as P/E, P/B, and EV/EBITDA offer useful benchmarks but can mask underlying risks. Investors should incorporate qualitative factors like governance, market access, transparency, macroeconomic stability and sectoral trends alongside multiples for richer insights.
- ❑ **Contextual Analysis:** Multiples must be interpreted in the context of industry norms, business cycles, and country-specific attributes. For example, a “cheap” multiple in an illiquid, poorly governed market may signal structural risk rather than value.
- ❑ **Integrating Discounted Cash Flow (DCF):** Supplement relative valuation (multiples) with intrinsic valuation tools like DCF analysis to account for future growth, capital allocation, and company-specific quality.
- ❑ **Beware of Over-Simplification:** Relying only on headline ratios overlooks factors such as management quality, future growth, technology and exposure to regulatory or geopolitical risks.
- ❑ **Private Market Cautions:** For non-listed assets, robust valuation governance and transparency are essential to avoid mispricing and conflict-of-interest risks, an increasing concern globally.

Key Insight:

- ❑ Multiples can be distorted by inflation, liquidity, or governance differences; thus, integrating discounted cash flow models and qualitative factors (such as analyst coverage and regulatory transparency) leads to sounder investment decisions.

2. Monitoring Capital Flow Trends for Opportunity

- ❑ **Signalling Change and Opportunity:** Tracking both gross and net capital flows helps identify when market sentiment is shifting in or out of an asset class, sector, or country, enabling timely action by both investors and policymakers.
- ❑ **Accessing New Markets or Sectors:** Surges in capital flows may indicate new market opportunities, regulatory reforms, or macro shifts. Monitoring trends can help allocate capital into emerging themes (e.g., ESG or green investment sectors) before prices fully reflect new realities.

- **Risk Management:** Large, volatile, or abrupt capital flows can amplify financial instability, currency risk, or asset bubbles. Vigilant monitoring supports both timely investment decisions and macro-prudential policy responses.
- **Policy Coordination:** For policymakers, real-time monitoring of capital flows enables early detection of systemic risks, highlighting the importance of cross-border cooperation and transparent reporting frameworks.

Key Insight:

- Tracking net capital flows and market liquidity helps spot shifting opportunity zones—important in countries where equity participation rates, depth, and liquidity are low relative to GDP

3. Strengthening Domestic Equity Appeal

- **Deepening Market Liquidity:** Enhanced secondary market activity, broader investor participation, and robust settlement systems reduce illiquidity premiums and increase issuer/investor confidence. Measures can include simplifying account structures and enabling digital access for retail investors.
- **Investor Education and Outreach:** Policies and campaigns promoting the benefits of equity ownership (dividends, capital gains, shareholder rights) build investor trust and participation, especially among retail investors historically more exposed to traditional assets.
- **Governance and Transparency:** Strengthening corporate governance codes, enforcing disclosure norms, and ensuring rigorous accounting standards elevates investor comfort and narrows valuation discounts.
- **Fostering Long-Term Orientation:** Incentives for long-horizon investment by pensions, insurance, and other institutional investors can increase market stability and anchor prices closer to fundamentals.
- **Innovative Products & Market Access:** Expanding listed asset types, such as REITs, InvITs, and fractional shares and developing new platforms or trading channels supports inclusion and appeals to next-generation investors.

Key Insight:

- Policy measures should target deeper market participation, improved market infrastructure, and higher investor trust to move savings into equities. Improvements in governance codes and greater transparency can increase valuation multiples by **5-10%** in emerging and frontier markets

4. Regulatory Priorities to Close Valuation Gaps

- **Harmonizing Disclosure Standards:** Bridging differences in disclosure, accounting, and enforcement between domestic and global exchanges reduces regulatory arbitrage and builds confidence among cross-border investors.
- **Crackdown on Market Manipulation:** Robust systems for surveillance, data analytics, and timely enforcement against insider trading, pump-and-dump schemes, and wash trades are vital for fair markets and sustained foreign and domestic participation.
- **Cross-Border Coordination:** Cooperation among regulators helps address challenges of cross-listing gaps and offshore arbitrage, including joint protocols for oversight and information sharing.
- **Oversight of Private Markets:** As private equity and pre-IPO funding grow, policies must ensure transparency, valuation consistency, and conflict-of-interest mitigation to protect public markets and retail investors from post-listing value destruction.
- **Infrastructure Modernization:** Enhancing cybersecurity, revising frameworks for digital and AI-powered trading, and investing in reliable market infrastructure underpin business and investor confidence.

Key Insight:

- Harmonizing disclosure standards, using data-driven surveillance (against insider trading, pump-and-dump, and fake volume schemes), and overseeing private market transparency are essential to shore up valuations and attract both global and domestic capital.

Summary Table: Key Implications

Area	Investor Action Points	Policy Action Points
Beyond Multiples	Use DCF and qualitative analysis; scrutinize governance, sector and transparency	Promote uniform disclosure, accounting, and auditing standards
Capital Flow Trends	Monitor flows for entry/exit timing and opportunity	Enable transparent reporting and cross-jurisdiction data sharing
Domestic Equity Appeal	Prefer markets with liquidity and access; diversify across reforms and product types	Invest in investor education, digital access, and innovative market tools
Closing Valuation Gaps	Seek markets with regulatory stability and fair practice; avoid opaque venues	Enforce anti-manipulation and coordinate across borders; modernize infra

Global Outlook

Developed Economies: United States, Germany

United States

The U.S. economy is expected to slow in 2025 due to **trade tensions and policy uncertainty stemming from new tariffs**. The IMF projects U.S. GDP growth at 1.8% in 2025, down from 2.8% in 2024. The tariffs, including 50% on China, 20% on the EU, and 3% on Mexico and Canada, are likely to **increase inflation to around 3%** by late 2025, driven by higher import costs.

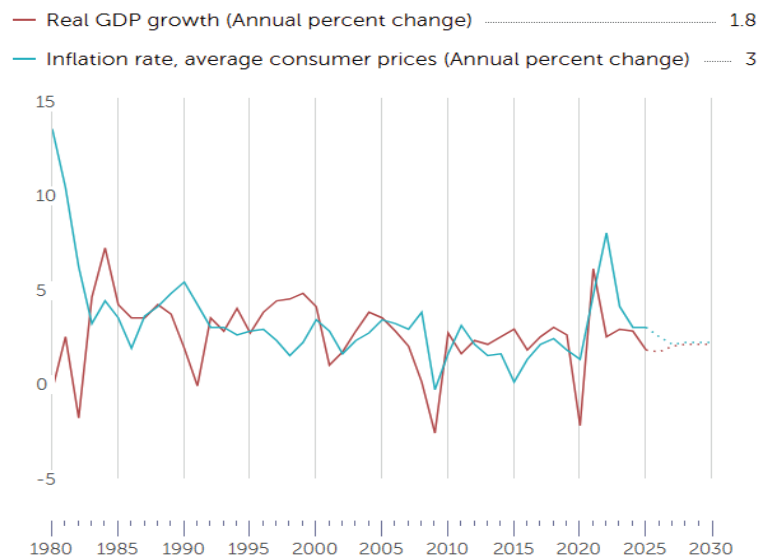


Figure: Forecasts for Real GDP growth % change and Inflation Rate for United States

The U.S. is likely to maintain high market efficiency due to its deep financial markets, advanced technological infrastructure, and competitive private sector. The World Economic Forum's 2024 Competitiveness Index ranks the U.S. among the top globally for market sophistication, driven by liquid stock markets and strong venture capital access. However, efficiency could face headwinds in 2025-2026 due to trade policy uncertainty from new tariffs, which may disrupt supply chains and increase transaction costs.. Regulatory complexity could rise if trade policies lead to retaliatory measures, potentially increasing compliance costs for businesses.

On the upside, rapid AI and automation adoption, supported by \$1.5 trillion in private tech investment, will enhance productivity and market responsiveness. Geopolitical tensions may prompt firms to reshore, potentially streamlining domestic markets but reducing global trade efficiency.

Germany

Germany's economy faces a challenging outlook with modest GDP growth of 0.7% in 2025, slightly up from 2024. The European Commission projects 0.9% growth for the euro area, with Germany lagging due to **manufacturing overcapacity**, particularly in autos and weaker external demand from China and the U.S.. Trade tensions, especially U.S. tariffs (20% on EU imports) and reduced trade with Russia have shortened Germany's geopolitical trade distance,

but increased trade with China offers some offset. Inflation is expected to drop to 1.7% by 2026, supported by falling energy prices (Brent oil at \$60/barrel).

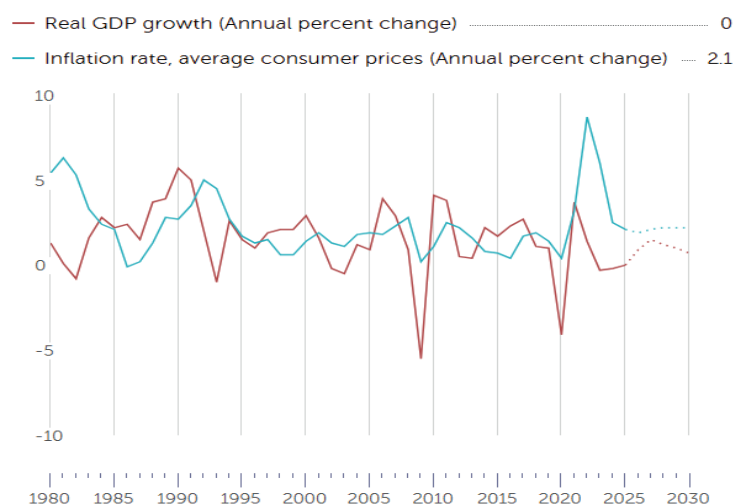


Figure: Forecasts for Real GDP growth % change and Inflation Rate for Germany

Germany's market efficiency, already strong due to its robust legal framework and competitive industrial base, may stagnate in 2025-2026. The OECD's 2025 Economic Outlook highlights Germany's high ranking in ease of doing business but notes challenges from **bureaucratic red tape and slow digitalization in SMEs**. Germany's manufacturing sector, critical to its economy, faces overcapacity, which may hinder resource allocation efficiency. However, increased investment in green technologies could boost market responsiveness if implemented swiftly

Emerging Economies: China, India, Brazil, Mexico, Indonesia

India

India stands out as a global bright spot, with GDP growth projected at 6.2% in 2025 and 6.4% in 2026, per the IMF driven by strong domestic demand and infrastructure investment. The country's low goods exports-to-GDP ratio shields it from U.S. tariff impacts, and it may benefit from trade redirection away from China. **However, a stronger U.S. dollar and rising oil prices could pressure inflation, though India's central bank is easing policy to support growth.**

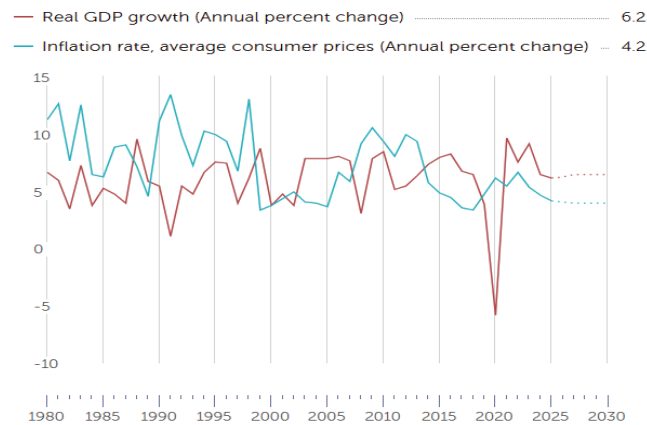


Figure: Forecasts for Real GDP growth % change and Inflation Rate for India

India's market efficiency is improving rapidly, driven by digital reforms and a vibrant private sector, though it ranks moderately in the World Bank's 2024 Doing Business Index due to regulatory complexity. By 2025-2026, India's digital economy, projected to reach \$1 trillion by 2026, will enhance market transparency through platforms like UPI and e-commerce growth. Infrastructure investments (\$150 billion annually, per IMF) will reduce transaction costs, while GST reforms streamline tax compliance. India's low exposure to global trade shocks insulates it from U.S. tariffs, and its diverse trade ties (U.S., EU, China) support market resilience.

Brazil

Brazil's GDP growth is expected to slow to 2% in 2025, down from 2.8% in 2024, due to high interest rates, weakening wages, and subdued investment ahead of 2026 elections.. U.S. tariffs and a stronger dollar could raise inflation, with global commodity price volatility adding pressure. Fiscal constraints and debt vulnerabilities limit policy flexibility, though Brazil's trade ties across the geopolitical spectrum offer some resilience.

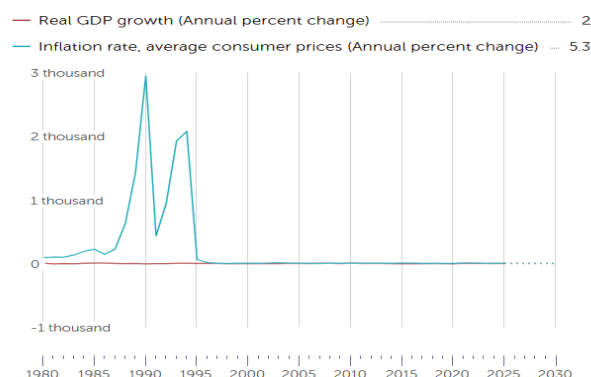


Figure: Forecasts for Real GDP growth % change and Inflation Rate for Brazil

Brazil's market efficiency is constrained by high regulatory burdens and infrastructure bottlenecks, ranking lower in the World Bank's 2024 Doing Business Index. In 2025, high interest rates and fiscal constraints (6% GDP deficit in 2024) may limit investment, slowing resource allocation. However, growing trade with China (soybeans, beef) and digital adoption in agriculture could improve market responsiveness. U.S. tariffs and a stronger dollar may raise import costs, reducing efficiency in trade-dependent sectors.

Mexico

Mexico faces a grim outlook, with the IMF projecting a 0.3% contraction in 2025, down from a previous 1.4% growth forecast, largely due to U.S. tariffs (25% on most goods, plus steel and aluminum duties). Deloitte notes that tariffs could tip Mexico into recession, exacerbated by a historic fiscal deficit (6% of GDP in 2024) and a deteriorating labor market.

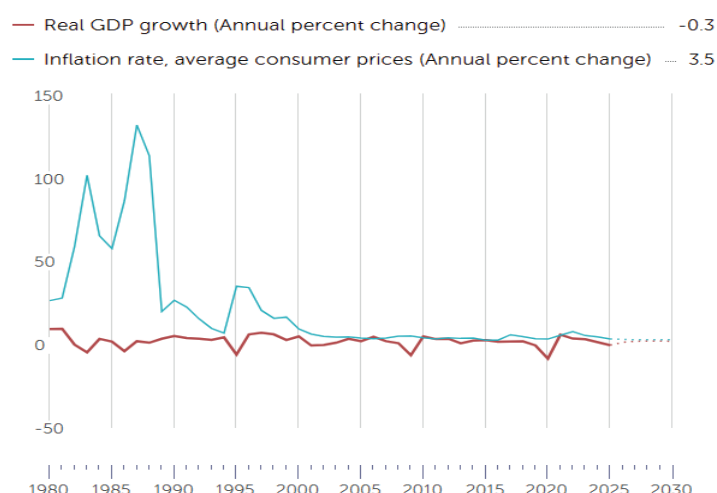


Figure: Forecasts for Real GDP growth % change and Inflation Rate for Mexico

Mexico's market efficiency is hampered by its dependence on U.S. trade and weak institutions, reflected in its moderate ranking in the 2024 Doing Business Index. U.S. tariffs (25% on most goods) and the 2026 USMCA renegotiation could disrupt supply chains, raising transaction costs in 2025. Fiscal austerity to cut the 6% GDP deficit may limit infrastructure investment, further constraining efficiency. However, Mexico's role as a nearshoring hub for U.S. manufacturing (gaining 10% U.S. import share from China since 2020, per McKinsey) supports market depth. Digital adoption in logistics and SMEs, backed by \$10 billion in tech investments, could improve pricing transparency if corruption and regulatory inefficiencies are addressed.

Indonesia

Indonesia's GDP is projected to grow at 4.7% in 2025, per the IMF, supported by resilient domestic demand and nickel exports to China. A recent U.S. trade deal, imposing a 19% tariff on Indonesian exports but zero tariffs on U.S. goods, includes \$15 billion in U.S. energy purchases and \$4.5 billion in agricultural goods, boosting Indonesia's trade outlook. However, U.S.-China trade tensions and potential tariffs on ASEAN countries (25–40%) could disrupt supply chains, as Indonesia has benefited from trade rerouting from China. Inflation risks from a stronger dollar and commodity price volatility remain, but Indonesia's central bank may ease rates to support growth.

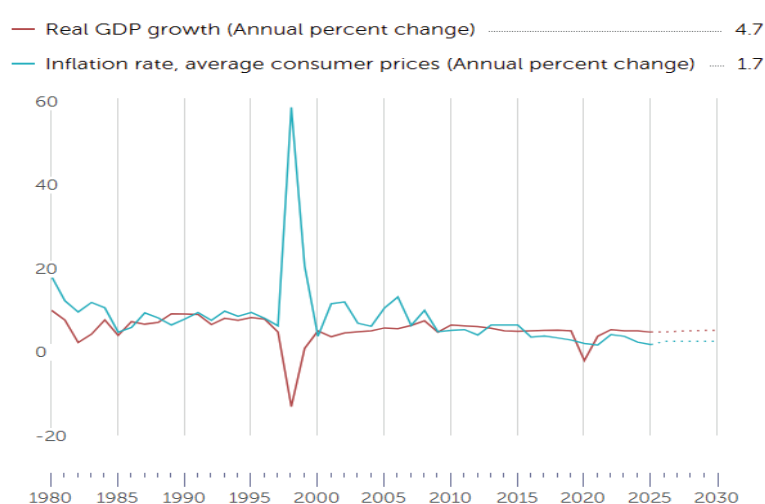


Figure: Forecasts for Real GDP growth % change and Inflation Rate for Indonesia

Indonesia's market efficiency is improving but limited by infrastructure gaps and regulatory complexity, per the World Bank's 2024 Doing Business Index. In 2025–2026, a U.S. trade deal (\$15 billion in energy exports, \$4.5 billion in agriculture) will enhance market access, while nickel exports to China bolster resource allocation. Digitalization, \$80 billion in e-commerce and fintech will improve pricing transparency and competition.

Frontier Economy: Vietnam

Vietnam

Vietnam's economy is expected to grow at 5.2% in 2025, per the IMF, driven by strong export performance in electronics and agriculture, despite U.S. tariffs (20% on Vietnamese exports). A U.S. trade deal, similar to Indonesia's, with zero tariffs on U.S. imports, supports Vietnam's role as a "connector" country rerouting trade between the U.S. and China.

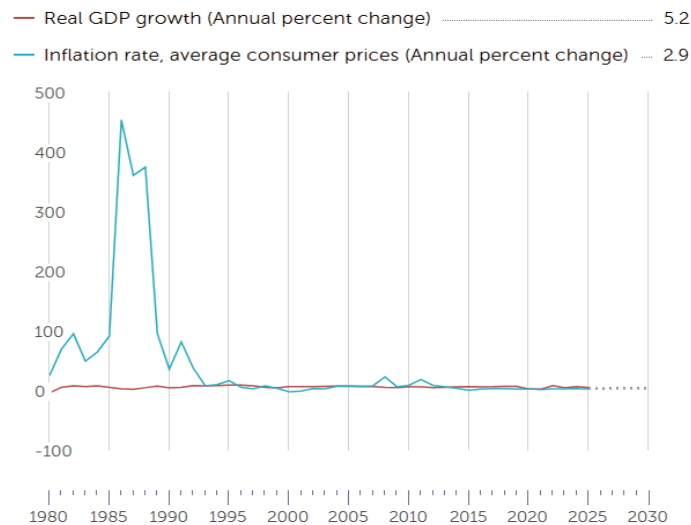


Figure: Forecasts for Real GDP growth % change and Inflation Rate for Vietnam

Vietnam's market efficiency is on an upward trajectory, driven by export-led growth and digital reforms, though it ranks lower in the 2024 Doing Business Index due to regulatory and institutional weaknesses. In 2025, a U.S. trade deal (zero tariffs on U.S. imports) and Vietnam's role as a supply chain hub will enhance market access. Digital adoption in manufacturing and e-commerce will improve pricing transparency and competition.