

## **Presenting the investing framework, the structure, reason and how-to-act along with risks and opportunities in India:**

In this discussion, I aim to discuss the nature of uncertainty in markets, explore methods of harvesting it in investing, and examine the risks and opportunities for India and the global markets. The key points I hope to cover are,

- Markets are inherently uncertain. The dominant role of uncertainty in markets is often under-appreciated.
- Market uncertainty is the primary driver of returns. There are two main ways to harvest uncertainty: taking a systematic risk or timing the market.
- Understanding the nuances of returns from various assets is essential to size positions. Each asset class has an inherent uncertainty premium. But at most points – asset valuations deviate from it.
- My market timing framework involves the policy & valuation quadrant. There are more methods out there in the world to do the same. But building one at the intersection of macro and micro – I think is somewhat a unique approach and potentially rewarding one.
- India's markets have certain advantages and risks. It's neither China nor Africa or Latin America.

The future, particularly in intricate systems like markets, is inherently unpredictable and can only be discerned with minimal accuracy, if at all. Although estimates can be made, none prove reliable in the long run. The most practical approach to forecasting the future is by employing a probabilistic and iterative method. However, this line of thinking is not immediately applicable to everyday life, as much of our work lacks a mechanism to quantify uncertain outcomes and generate profit from them. Consider a rhetorical question: when faced with two roads, one well-paved and the other less so, the logical choice would be the former option, contrary to poet Robert Frost's advice. The objective, after all, is to reach the destination both roads lead to; hence, the condition of the road matters. Markets, in contrast, introduce an added layer of complexity, as investors must only account for the anticipated payoff (probability \* payoff), thereby rewarding their willingness to bet on even low-probability outcomes.

Despite, or perhaps due to, the prevailing uncertainty, financial assets tend to yield real returns over the long term. Diversification across assets and asset classes can mitigate (though not eliminate) uncertainty. While some uncertainty is irreducible, it is often the driving force behind real returns across asset classes. One straightforward approach to capturing the benefits of uncertainty in equities is to passively allocate funds through SIPs or dollar-cost averaging, according to one's risk appetite. This method avoids market timing and focuses solely on an individual's risk tolerance for asset allocation.

But I must caution you here. The idea of betting on risky assets to attain a certain upgraded lifestyle is ill-conceived if not totally flawed. Wise investing may yield good returns but the outcome and resultant expenditure from the same shouldn't be pre-conceived, because doing so distracts one to size, bear and endure risks. Equity investing arises from spare capital. One that is not mortgaged to your imminent liabilities or desired lifestyle.

Equity investing's fruits must be plucked only when regular income ceases to exist. Once an investor primes himself to dissociate his potential lifestyle from investing, he is likely to develop a longer-term view of the world, avoiding any FOMO and pursuing some form of disciplined or systematic investing.

So what is your risk appetite- you must ask yourself. One simple way to assess it is to consider the worst-case scenarios involving real losses of 50% in the short term (1-5 years), 20-25% in the medium term (5-10 years), and no real return in the long term (10-20 years). You must limit your equity investments so that these potential outcomes do not necessitate significant changes to your lifestyle- this is one way to manage risk in markets.

Despite the omnipresence of uncertainty in markets, many investors fail to grasp its significance, leading to the notion that time in the market will ultimately resolve all issues. This misconception stems from the belief that market uncertainty is solely manifested as volatility. In reality, uncertainty isn't that stocks jiggle but it's that actual market outcomes may considerably deviate from historical patterns and investor expectations, even over extended investment horizons. Ignoring this fact and succumbing to prevailing market narratives can result in unsatisfactory outcomes and loss of capital by dialling outsized risks at inappropriate time or exiting in panic when narratives shift. History is replete with examples of lowly returns for investments made in euphoric market conditions, eg investing in extremely bullish markets in 1992 would yield a mere 2% return over bonds in Indian equities over 30 years. Long bonds purchased in 2003 or 2009 would produce zero real returns. During 2000-13, 1973-84, and 1929-47, US equity markets also provided zero real returns. In the 18th and 19th centuries, US stocks barely delivered risk premiums over bonds.

Uncertainty is even more pronounced for individual stocks, eg in India, 4 out of 10 stocks deliver losses even after 2 decades of investing horizon, only 25% earn more than government bonds. While it is true that some stocks do extraordinarily well but it's important to realise that ROEs of most firms is lowly, take for instance aggregate return on equity of listed firms (ROE) is a mere 8% even in a favourable year like FY22. **Direct market access should be limited for those who devote ample time to investing and comprehend the concepts of uncertainty, position sizing, and stop losses.**

Not only do a large majority of stocks deliver disappointing returns, but as a corollary, most of the market return comes from very few stocks. This skew drives bottom-up investors to focus on stock selection, because the allure of picking winners opens up the possibility of outsized returns. This also encourages many investors to try concentrated portfolios, deviating from indices. A hypothetical portfolio that avoids a few losers or has concentrated bets on select winners can deliver dramatically better returns. Is this possible to do build such portfolios? Certainly. Many renowned investors have significantly outperformed the markets. However, knowing this ex-ante appears to be unpredictable.

To be sure, it should be expected that half of professional managers outperform indices. More than that do so, but the cost of doing so is generally prohibitive enough that nearly 80-90% of them end up delivering lower returns than the market. It's important to emphasize that Indian portfolio managers outperformed the markets even after high expense ratios until a decade ago. Something changed since then. The reason for this can only be speculated upon, but it might have to do with increased transparency that could have reduced the institution's information arbitrage. Additionally, the growing institutionalization of Indian markets may have contributed to this shift. Furthermore, the deterioration in general macro conditions may have also resulted in reduced opportunities for outperformance.

One approach to capitalizing on uncertainty is market timing, which involves forecasting market direction, updating growth expectations, adjusting position sizes based on evolving macroeconomic factors and valuations, and actively applying stop-loss measures when necessary. This active investment framework focuses on identifying cycles and determining position sizes accordingly. It's important to note that there is a lot of disdain for market timing strategies. Most of it arises from two specific reasons: one is related to the nature of the market itself, as we discussed earlier, being irreducibly uncertain, making long-term market projections unscientific, unreliable and most certainly

unusual. The other reason is that the flagbearers of market forecasting, are non-practitioner storytellers. This variety focuses on building a hyper and secularly optimistic or pessimistic narrative for the market. Their stories are the most exciting, as they promise clear pathways to a future distinct from the present.

The question is if there is a reasonable alternative to forecast markets and build a strategy to bet on it. There are very many in the world who have succeeded in navigating market cycles successfully. The most famous framework involves placing economic conditions in the growth and inflation quadrant. Ray Dalio made it a really popular one starting in the late 70s.

This deals with an assessment of the growth inflation regime of our country's & that of world's economy. The prior is that high growth and high inflation are favourable for emerging market equities, industrials, materials, energy, and commodities, while low growth and low inflation typically benefit US, developed markets, and technology firms. Also, a high growth and low inflation scenario represents a Goldilocks condition, where both bonds and equities yield reasonable real returns, and banks perform exceptionally well. Conversely, low growth and high inflation are detrimental to all financial assets, favouring real estate, commodities, and their respective firms. For a portfolio manager – the trick is to identify the turns in these regimes when one set of macros give into another. It is in that turn – a maximum risk premium cap be extracted or losses can be avoided.

Although the growth inflation cycle strategy has been successful, its applicability is limited for Indian investors due to the muted and narrow growth cycles in India. Additionally, the local policy response is slow due to concerns regarding currency and limited fiscal space. Also, Indian growth has become less volatile over the past few decades, with asset cycles tracking the global growth cycle instead of local ones. Thus, for local asset managers, relying solely on this strategy becomes more of a global macro-investing approach. While this framework is widely used, it may not be entirely convincing. Hence, I have developed a framework tailored for Indian equities and bond investing to address these challenges. Let me explain two key tenets of that, one that deals with explaining the regime and the other, that helps one time the entry.

**Valuation- policy quadrant:** This framework works through the signals given by both valuation and policies and serves as a guide for determining whether to be overweight (OW) or underweight (UW) equities versus bonds. It is advisable to be overweight equities when valuations are inexpensive and policies are reflationary, and underweight when expensive valuations coincide with obstructive policies. Three key policy aspects that I incorporate are, fiscal, tax, and monetary ones. Equity markets favour loose fiscal policies, declining taxes, and low real interest rates. Bonds tend to perform well in conditions of constricting fiscal policies, higher taxes, and higher real interest rates.

Valuations are assessed relative to various asset classes and their historical context. For example, I would examine Indian equities relative to their historical valuations (PE, PCF, PS), bonds, and international markets, particularly the US market. When valuations are expensive but policies are supportive, or valuations are cheap but policies are obstructive, it is recommended to maintain existing positions, a convention called "Hold."

As you can notice that this framework relies on valuation to enter equities but wait for the policies to turn restrictive before exiting. Incorporating policy macro into the equation has helped in a few things, one it safeguards you to both enter and exit early, two, it takes into account the regimes, particularly which are induced by political leanings on issues such as financial repression or tax or redistribution policies. Instead of relying on growth and inflation, which are key determinants of free market pricing, this framework explicitly acknowledges the importance of policies which are more adjacent to asset pricing than macro variables themselves. Finally, since I bother about long-term trends as well, issues

regarding taxes, tariffs, trade and politics of wages vs profit do play an important role in helping me sign up for risk or avoiding it. For these reasons, I think this framework is more robust than the popular one, stemming from growth and inflation cycles.

**Volatility & liquidity:** The market is not characterized by perfect information and steely resolved investors. Rather, it is a space where average intelligence and fragile minds often dictate the direction. Periodically, investors misprice reality, becoming swayed by the dominant narrative and consequently overpricing or under-pricing markets. I am particularly interested in panic selling setups when a small group of investors (empirically, around 1% of market cap) exit the market in a frenzy. These situations correspond to heightened volatility, unexplained and widespread market drawdowns, wider bid-ask spreads, and reduced liquidity. Since most equity investors, even the astute ones, tend to be fully invested, strategies like mine serve as the sole buyers in such circumstances. By significantly increasing position sizes during these times, investors can potentially double their long-term risk premiums

In summary, this framework aims to take advantage of market inefficiencies and capture opportunities created by investor sentiment and economic fluctuations. This market timing framework involves several key steps:

1. Identifying the current policy regime, whether it's benign or unfavourable.
2. Place current valuations within the context of history as well as other markets.
3. Position sizing when panicky investors exit the market, exacerbating the underlying macro issues. And exiting when macro turns worse.

I often call this a "buy valuation-sell macro" strategy, as it primarily focuses on purchasing assets when valuations are cheap and selling them when the macro environment and policies turn obstructive.

### **Risk premiums:**

Now, let's review the risk premiums of bonds, equities, and real estate markets in the Indian context as of today. But first, a quick introduction to what a risk premium is. In the beginning of this essay, I argued that there is an irreducible uncertainty in the market, but asset markets compensate for them. That compensation is called risk premium. It varies across different asset classes. In this discussion, I will focus on the ballpark risk premiums available in various asset classes, particularly in the Indian markets.

- **Bonds:** Typically, bonds are considered less risky than equities, so their risk premium is lower. In the Indian context, the risk premium for bonds is around 0-2% above inflation. This means that investors can expect to earn a return of 0-2% more than the inflation rate by investing in bonds.
- **Equities:** Equities are considered riskier than bonds, and therefore, they offer a higher risk premium. In the Indian market, equities have historically provided a real return of 4-6% above inflation.
- **Equities provide higher returns in frontier and capitalistic economies, with emerging markets offering lower returns and socialistic economies even less.** India, a unique emerging market, has performed admirably over the past five decades due to its strong property rights framework.
- **Real Estate:** The risk premium for real estate in India falls somewhere in between bonds and equities. This is because real estate investments carry both the potential for capital appreciation and rental income, which can help offset the risks associated with property

ownership. As a result, the risk premium for real estate in India is estimated to be somewhere between 2-4% above inflation.

Keep in mind that these risk premiums are just ballpark figures, and actual returns can vary depending on the specific investment and market conditions. Additionally, risk premiums can change over time as market dynamics shift, so it's essential to regularly review your investments and adjust your strategy accordingly. Invest in equity markets in 1992, 2007 or 2010, you will be earning less than 2% excess over bonds to date. That is after, 31, 16 and 13 years. Instead invest in 1991, 2003, 2009 and 2013 – you will earn nearly 10% over bonds. Its likely that investors who invested in Covid crash will earn 10% excess over a decade and the ones who invested in Covid boom in 2021, will get just 2% excess.

This holds good for all assets. Invest in bonds in 2003 or 2008, the real return will be negative to date. Invest in real estate in 2016 and you will not even beat inflation.

At the current valuations, the following is my assessment of Indian assets and their expected returns over the medium term.

- a. Currently, bonds at 7% are somewhat higher than the past decade's average and are likely to deliver 1-1.5% real returns. This is a favourable state for bonds, as Indian monetary policy has generally been repressive for the past five decades, resulting in fixed deposits delivering near-zero real returns over the long term. As an investor – you have to be very careful being in fixed income in our country, as is the case in most emerging markets. policymakers often lose grip on inflation, or at times design to do so, resulting in wiping out any return on fixed income.
- b. Conversely, Indian real estate has performed remarkably well, delivering significant risk premiums with minimal drawdowns over the long term. However, the past decade's performance has been lacklustre. The dense and rapidly growing population and lack of infrastructure were the reasons for its past performance, which may not be replicated in the future. But given our dense population, low but progressing urbanisation and fewer cities than other major countries, it is likely that real estate will deliver better returns than fixed income over long periods in India.
- c. Indian equities are currently trading at around 17-18 times forward earnings, a small premium to pre-COVID levels and long-term averages. The equity risk premium at this valuation is close to 2.5-3%. The historical risk premium has been 4-5% over the past decade, 8-9% over the past two decades and 2-3% over past three decades. The diversity of these numbers underline the importance of market timing as the premiums over very long term tend to differ in a dramatic fashion.
- d. Over an extended period, Indian equities have delivered a decent 4-6% real return. Indian corporate ROEs used to be 5-6% higher in the past compared to the US, but they have converged in the last decade and appear to have settled at a 14-16% range. This alone is a reason to diversify away from the home country, most notably in the US.
- e. The S&P 500 is trading at approximately 18 times future earnings, a slight discount to pre-COVID levels. However, the equity risk premium is also lower than historical levels, as bonds offer significantly better deals for investors.

**India's growth and opportunities:** Allow me to outline some significant aspects of India's growth and opportunities. The main takeaway is that the outlook may disappoint both the extremely bullish and bearish investors. India has inherent advantages that enable it to grow 2-3% faster than the US, but it also has weaknesses that prevent it from accelerating like erstwhile miracle economies (catch up at ~4-6%). These aspects highlight a balanced growth trajectory for India, with both strengths and challenges shaping its future economic performance.

Since 1954, India's per capita (PPP) has converged at 1% compared to the US (Madisson), while China's has been 2% and Korea's 4%. Since 1990, China's convergence has been much faster at 6.5%, while India's has been at 2.5%. There is no evidence to suggest that India's convergence will be faster than what it has been since 1990.

**First the advantages of India:**

- a. Demography is India's most significant structural advantage. Over the next 30 years, India's labour force will grow by nearly 23%, even as China's declines by a similar amount. India's GDP is likely to grow at 5% during this period, compared to China's 3% and the US's 1.75%. India's GDP will surpass the US in the 2040s in PPP terms. Although an average Chinese person will be twice as wealthy as an Indian in 2050, the overall GDP will only be 40% larger due to the decline in the labour force.
- b. India's dependent population will continue to fall as a percentage of the total population, in contrast to most of the world, including China, where it will rise from 40% to 54%. This is a positive development for India's inflation, debt, and current account deficit.
- c. As India's population growth slows to around 0.5% per annum relative to the past 30 years at 1.5%, there will be tangible improvements in infrastructure (education, health, hard infrastructure) that have always struggled to keep up with rapid population growth. This is likely to boost productivity growth.
- d. Another advantage for India is its low private debt, which stands at 55% of GDP. China had twice the debt at India's level of prosperity. Low debt levels provide a strong anchor for macroeconomic stability, ensuring that tight financial conditions do not create crises in the economy. This creates an enabling condition for credit expansion and growth.
- e. Cyclically, India is well-positioned to accelerate. Indian banks are well-capitalized (13% CRAR – well above the regulated 11.3%) and have low NPAs (5% compared to a peak of 11% in FY18 and adequately provided for). Over the past decade, Indian corporations have deleveraged, and COVID-19 has helped improve profitability. Their capacity utilization is at 77%, a level at which India Inc. typically embarks on significant investments. Although household balance sheets are more leveraged in India than ever before, overall leverage remains low, and access to finance has never been better for Indians (JAM) – an enabling condition for further growth.

**Risks to India:** The key long-term risk for India is an antagonistic China, medium-term risk is crude oil prices and high public debt, and short-term risks include flow reversal and electoral outcomes.

- a. It is likely that China will continue to be a significant challenge for India over the next several decades due to geographical proximity, unsettled borders, and China's determination to prevent India from becoming a major power. India's dependence on China in critical areas such as electronics and capital goods means that decoupling from China is not a feasible option.
- b. Crude oil prices may remain high for an extended period due to years of underinvestment, depleting reserves, and climate change policies. Since India imports nearly 90% of its crude oil, high prices act as a significant tax on India's growth. In the past 12 months, India has experienced a 2% terms of trade shock due to higher prices for coal and crude oil.
- c. India's public debt is considerably higher than any economy with a similar per-capita income, which poses a disadvantage. High public debt limits India's policy response during crises and leaves little room for building public infrastructure and utilities.

**Global risks:** Finally, I want to leave you with potential risks to markets over next decade or two. Factors such as expensive energy resulting from climate change policies and underinvestment, a declining working-age population in the most productive economies, a disintegrating global order, protectionist policies, and reshoring all suggest that global real interest rates will be higher in the coming decade, even as growth slows down. This implies that a significant amount of TINA (There Is No Alternative) money will likely flow into bonds, easing the FOMO (Fear of Missing Out) felt by many investors. Consequently, returns over the next decade are expected to be lower than those achieved by investors in the previous decade.

Regarding demographics, the top four economic regions, which represent 60% of world consumption (US, Europe, China, and Japan), are expected to see their working-age population decrease by approximately 20% over the next 30 years. This demographic group is the most significant in terms of consumption and earnings. As there will be fewer babies and more elderly people, the structure of these economies will change. Healthcare costs will rise, while housing, auto, and education spending will decline, resulting in slower growth. Keep these trends in mind when making long-term asset allocation decisions.

The upside risks to the global economy could stem from two distinct areas: a breakthrough in energy technology and progress towards Artificial General Intelligence (AGI). These upside risks have never been as plausible as they are today. It's interesting to note that both significant upside and downside risks are present in the current environment, which supports the idea that timing the market and developing strategies to do so could be advantageous for investors.

I wish you all the best as well. May Goddess Saraswati guide you in developing a successful investing framework for better market timing. If you have any further questions or need assistance, feel free to ask.

Thank you!