

MONTHLY NEWSLETTER

MIRABAUD WEALTH MANAGEMENT



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INTERNATIONAL

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In ancient times, bards travelled across Greece to sing stories that would then spread out across the whole region. In a time when literacy was the exception, these stories carried information: religious, social, and everyday alike. The aoidos were poets skillfully versed in narrating epic adventures; stories that have been travelling across centuries to be part of today's popular culture. The Iliad and the Odyssey, both almost 3'000 years old, are the two most famous epics, passed down through generations to the present day. Sir Christopher Nolan just released another cinematic adaptation of the

Odyssey. The central plot follows Odysseus who in his quest to return home after the Trojan war, faces several challenges he overcomes through his great ingenuity.

One of the most daunting challenges arises when Odysseus crosses paths with the sirens. The half-bird half-human creatures were extremely dangerous as their singing would lure sailors into steering their boats onto the rocks. On the one hand, Odysseus had the brilliant idea of plugging his crew's ears with wax, impeding them from hearing the deadly song. On the other hand, his

thirst for knowledge led him to take great risks. He could not resist the temptation of hearing the sirens' song, but he took the precaution to tie himself to the mast. This allowed him to listen to the deadly song without being able to jump into the water and drown. He instructed his crew to not untie him as he would probably not be able to control himself. Whilst listening to the song, Odysseus could not resist the tempting appeal from the sirens; not only did he try to untie himself from the mast, but he also begged his crew to untie him. The crew followed Odysseus' instructions to ignore his own pleas and the boat managed to pass through the sirens' islands. The legend says that the sirens plunged into the sea and died as they failed to kill Odysseus despite him having heard their deadly voices.

Today's investor is a modern-day Odysseus: travelling across a sea of continuous information, he aims for stability and predictable outcomes but is also tempted by the desire to achieve more by allocating resources to investments that promise unrealistic returns.

In this vein, our May monthly newsletter focused on Korean semiconductors' companies and the incredible returns they

generated for investors. Since then, the subject continues to make headlines as the Korean equity index, the KOSPI, still exhibits an impressive volatility. The index is now plagued by an extreme concentration in two stocks, both backbones of the semiconductors sector. In July this interconnection dragged the KOSPI and the Philadelphia Semiconductors index down respectively by 22% and 28%. A correction was eventually inevitable as both indices had doubled between the beginning of the year and mid-June. This month sell-off in the semiconductor market offers us a unique opportunity for an in-depth analysis of the forces raging beneath the surface of the financial markets' waters.

Looking at the fundamentals, analysts have not downgraded earnings' expectations for semiconductors companies. The expected growth remains extremely elevated and current valuations are therefore not outrageously expensive; but companies are now required to live up to their expectations. More specifically, the recent negative momentum coincides with investors' doubts about the sustainability of AI related expenses. Since Chat GPT's launch in November 2023, the hyperscalers drastically

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increased their capital expenditures to compete in the AI race. The numbers are staggering: the consensus expects now capex spending to reach USD 750 billion in 2026 which would imply an increase of 84% from last year's numbers. Earlier this year, the expectation for capex was USD 550 billion, but recent earnings calls made analysts reassess it upward. For next year, the expected capex of US hyperscalers should reach USD 920 billion, a massive 22% increase compared to 2026. The earnings published this month testified returns generated from these investments, but more will be expected to justify the magnitude of the amounts injected.

In this context, investors' fears have been fueled by the nature of the investments. Hyperscalers, whose debt historically remained at low levels, began to release a tsunami of debt on the financial markets. AI exposure is now no longer confined to the equity market but is also borne by fixed income investors as Goldman Sachs estimates that almost USD 500 billion of AI-related debt has been issued in 2026. This represents more than 20% of both the investment grade and high yield gross issuance from the beginning of the year.

In this brave new world, the regulators have recently pinned down an additional market volatility compounder: the leveraged ETFs.

These have existed for more than 20 years, but the high risk-appetite of equity investors increased their popularity. The first leveraged ETFs were designed to track the daily performance of a standard broad equity index, such as the S&P500, with a coefficient of 2 (both to the upside and the downside). Then, some ETF issuers began applying a leverage factor of 3 while others introduced inverse products tracking the opposite of an index's performance, with factors of 1, 2, or even 3. Today, a broad range of possibilities is offered: commodities, basket of stocks, thematic or even on single stocks. The semiconductor world has not been spared by the leveraged ETF frenzy, and they have gained increased popularity even among retail investors.

Why is this a problem?

On a systemic level, leveraged ETFs may pose risks to broader financial stability. In July, they have allegedly amplified technology stocks' sell-off. Large 3x Nasdaq and 3x semiconductor ETFs can reach around USD 100 billion of notional exposure, and their daily rebalancing can drive flows of more than USD 10 billion, which can materially impact underlying stocks and indices in short-term trading. The long-to-short ratio in leveraged ETFs has climbed from a historical ceiling of around 5:1 to about 19:1 across the space. This optimism can feed back into markets: rising prices attract more leveraged long flows, which compound in a trending bull market, but when sentiment sours, the same leverage can accelerate downside moves forcing painful unwinds for ordinary investors whose core portfolios are heavily tied to those sectors.

For this reason, some regulators started to restrict the access to leveraged ETFs, with China explicitly banning leveraged ETFs from its domestic ETF universe and from various trading platforms. This decision was made after many retail investors suffered important losses trading

leveraged ETFs linked to gold. South Korea also took a similar decision after many Korean investors bought leveraged ETFs on KOSPI and on SK Hynix at their respective all-time highs. The Korean regulator decided to halt new listings of single-stock leveraged ETFs, raised the minimum cash deposit for trading such instruments and increased the minimum trading unit to 20 shares. The decision aims to limit the effects of leveraged ETFs on market volatility by making retail investors access much harder.

From a systemic perspective, it is quite clear that leveraged ETFs are not healthy instruments; but are they useful from an individual perspective? One thing is certain: these are tempting instruments for investors. Who would not want to double his equity returns? Yet, this is not what leveraged ETFs deliver. A 2x leveraged ETF will give twice the daily return of the underlying, but this only holds true on a daily basis. Over longer-term horizon, the return will not be twice the underlying's.

More concretely, the S&P 500 generated a total return of 87% in the last 5 years whilst a 2x leveraged S&P 500 ETF would have returned 138%, higher than the underlying's return, but not twice it, as one could have imagined. The more leveraged the ETF and the more volatile the underlying, the further the return may drift from the stated coefficient. A 3x leveraged Nasdaq delivered a 79% return over the last 3 years whereas the standard index returned 89%, nearly 10 percentage points more. It does not seem worth taking such risks, does it?

The greatest winners in the leveraged ETFs trades are the ETF providers themselves. Academic work shows that demand for leverage allows ETF providers to charge higher fees for leveraged exposure because contracting a Lombard loan is operationally cumbersome for many investors. Most standard

broad-market ETFs charge between 5 and 15 basis points but leveraged ETFs may charge between 60 and 100 basis points in fees without even accounting for financing and hedging costs.

If an investor like Odysseus cannot resist the alluring promises coming from the leveraged ETF sirens, he needs to restrain himself just like the Homeric hero. Odysseus acknowledged the risk inherent in his goal of listening to the sirens and he acted rationally in response. Where the mythological figure instructed his crew to tie him to the mast and, under no circumstances, to release him before the ship had passed those treacherous waters, the modern investor must adopt the same principle by adopting a rigid bucket approach to avoid the temptation of extremely risky instruments that could cost far more than imagined.

Performance of the main financial indices since 2022:

	Jul.	Jul. \$	2024	2024\$	2025	2025\$	2024	2024\$	2023	2023\$	2022	2022\$
S&P 500	-0.06		10.1		17.9		25.0		26.3		-18.1	
Stoxx 50	0.59	1.5	12.3	10.25	22.1	38.5	11.9	4.7	23.2	27.3	-8.5	-14.0
MSCI EM	-3.03		20.3		34.3		8.0		10.1		-19.9	
Brazil Bovespa	3.47	5.27	10.5	19.3	34.0	50.9	-10.4	-29.6	22.3	33.1	4.7	10.1
Euro	0.92		-1.9		13.4		-6.2		3.1		-5.8	
US Dollar Index	-1.26		1.6		-9.4		7.1		-2.1		8.2	
Gold Spot	0.95		-6.3		64.6		27.2		13.1		-0.3	
Brazilian Real	1.76		8.3		12.3		-21.4		8.9		5.4	
Brent	23.6		48.1		-18.5		-3.1		-10.3		10.5	
Bitcoin	7.26		-28.2		-6.5		120.5		157.0		-64.3	
Global Agg.	-0.53		-0.7		8.2		-1.7		5.7		-16.2	
Latam Bonds	-1.32		2.2		13.2		10.5		11.1		-13.2	
Global HY	-0.28		1.9		12.1		9.2		14.0		-12.7	
US T Bills	0.34		2.1		4.3		5.3		5.1		1.3	
Brazil CDI	1.22	2.98	8.1		14.3	28.4	10.9	-12.9	13.0	24.8	12.4	18.4



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BRAZIL

WE NEED TO TALK ABOUT THE MACROECONOMIC TRIPOD

In the same way that, in geometry, 3 points determine the existence of a plane, in Brazilian macroeconomics, 3 points determine the resilience of the Real Plan.

With the presidential elections approaching, we are concerned that some critical pillars of the three-pronged approach may be undergoing a silent and gradual process of erosion, with devastating consequences for the country.

The infamous Macroeconomic Tripod of the Real Plan is nothing more than the set of three main government commitments that generate credibility and long-term stability for the fiat currency:

(1) Inflation Targeting, pursued by an independent (or autonomous) central bank, using the basic interest rate as the main tool for acting on the economy;

(2) Fiscal Balance, expressed in Brazil by the pursuit of a primary surplus in the Public Sector

accounts, but also enshrined in the world as the pursuit of long-term stability in the ratio of public debt to GDP;

(3) Floating Exchange Rate, even within the scope of dirty or assisted floating, when punctual interventions by the Central Bank occur to mitigate episodes of illiquidity.

The main merit of the macroeconomic tripod is that it operates through a transparent and predictable framework for monetary and fiscal policies, allowing the market to freely set long-term interest rates and the exchange rate, so that the country's main macroeconomic variables are always fluctuating close to equilibrium, preventing the accumulation of large distortions over time and mitigating the conditions that usually trigger large-scale financial (or balance of payments) crises.

This month, we will take advantage of the 2026 election campaign to conduct a historical (and theoretical) review of each pillar of the macroeconomic tripod, its importance, and the main challenges facing each of them.

Inflation Targeting

The inflation targeting regime was adopted in Brazil as the main nominal anchor for the currency, after abandoning the exchange rate anchor linked to the dollar, following the massive devaluation of the Real in January 1999.

The adoption of an inflation-targeting regime provides transparency and flexibility, allowing the Central Bank, as manager of monetary policy, to influence and guide economic agents to act as auxiliary lines of its policy, increasing the efficiency of monetary tools and reducing the cost, in terms of the rate of GDP sacrifice and employment level, in the process of correcting deviations of the inflation rate from the target defined by the CMN (National Monetary Council).

We can say that the inflation targeting regime has been successful in maintaining the stability of the Real's purchasing

power over time, although it has caused, as a side effect, an increase in public debt relative to GDP, mainly after the great recession of 2015-16, since the interest rates used to bring inflation back to the target also cause an increase in the cost of rolling over public debt, if they are not offset by a concomitant increase in the primary surplus of the public sector.

The two main challenges facing the inflation targeting regime in the next four years are:

i) How to calibrate the use of monetary policy in an environment of significant macroeconomic discoordination between monetary and fiscal policy? The use of interest rates as a tool to control inflation has an obvious limit when the government's strongly expansionary fiscal policy causes pressure on aggregate demand that, ultimately, is not directly sensitive to the level of interest rates set by the central bank.

ii) How can we reconcile an ambitious inflation target (3%) with the low rate of productivity growth and the high indexation of contracts that we have in Brazil? The low rate of productivity growth implies that increases in labor and raw material costs are more likely to be passed on to prices; and the high level of contract indexation in the Brazilian economy causes a significant minimum guaranteed pass-through (inflationary inertia) of current inflation to the future.

Both the significant mismatch between monetary and fiscal policy, and the inflation target dangerously close to the inertial inflation rate in Brazil, may contribute to basic interest rates remaining at quite high levels, much higher than required if there were greater alignment between institutions or less rigidity in the country's mandatory public spending.

Fiscal Balance

Fiscal balance is the cornerstone of any commitment to macroeconomic stability that aims for lasting success.

The state, as the largest single entity in the economy, has broad power to influence aggregate demand and the

circulation of money in the economy, with crucial impacts both macro and microeconomically.

Fiscal balance aims to ensure that public debt does not grow at a faster rate than GDP, so as to remain within a range that guarantees the solvency and financial capacity of the State.

The nominal public deficit (which includes the primary surplus and debt service), when at high levels, always causes economic uncertainty, as it creates an environment of high dependence of the State on the capital market, due to the need to roll over the debt, such that, if at any time there is difficulty in rolling over the debt for any reason, there will be a risk of insolvency, collapse of public spending, explosion in interest and exchange rates, recession, and an increase in unemployment and inflation rates.

Still in the initial phase of the Real Plan, before the massive devaluation of 1999, the Fiscal Responsibility Law was enacted in Brazil, defining legal penalties for any government official who creates new expenses without the corresponding increase in revenue while in office.

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The commitment to fiscal balance was largely responsible, even in the first phase of the Real Plan, for the gigantic increase in Brazil's tax burden, which went from just over 25% of GDP to nearly 35% of GDP between 1994 and 1999, through increases in existing tax rates and even the introduction of new taxes, such as the CPMF (in effect between 1997 and 2007).

However, the model of seeking fiscal balance through revenue is showing clear signs of exhaustion, since the tax burden has a direct impact on the private sector, increasing production costs in the country, reducing the level of national industrialization, and pushing Brazil off the map of global supply chains.

Furthermore, it is always important to remember that every tax becomes a production cost and, ultimately, inflation in the long term, contributing to maintaining potential GDP, productivity, and competitiveness at levels below what is necessary to accelerate the country's economic development.

In short, the continued increase in the tax burden could stifle the private sector to the point where

doing business in Brazil becomes increasingly disadvantageous and, coupled with the ever-higher level of neutral interest rates, discourage private investment and domestic production, increasing dependence on imports and ultimately reducing the very economic activity that generates the desired increase in tax revenue.

In 2016, there was an important attempt at progress in the fiscal area with the enactment of Constitutional Amendment 95, which established the Spending Cap in the country's public sector. Its merit was precisely to create a fiscal control model on the expenditure side, in an attempt to reduce the revenue pressure on the private sector.

However, in 2023, the Spending Cap was replaced by the New Fiscal Framework, which was shamelessly discarded by the government in 2024, opening the door to the complete fiscal disarray that has been brewing ever since.

The two main challenges facing the inflation targeting regime in the next four years are:

i) How can the country reconcile the virtually uncontrollable increase in discretionary public spending with the inexorable rise in spending on retirees and inactive INSS beneficiaries, given that the public budget is not infinite? The excessive focus on increasing the tax burden, which is back on the agenda, fails to consider that its end result, if not accompanied by some kind of spending control, is more inflation and less economic activity, placing the country in a labyrinth whose exit could be quite costly.

ii) How can the country prevent excessive public spending from continuing to pressure aggregate demand to the point where controlling inflation requires ever-higher interest rates, thus having increasingly detrimental impacts on the trajectory of public debt? The argument that public debt grows solely due to interest is a fallacy, because it is the excess spending, even if financed by short-term revenue surges, that puts pressure on aggregate demand and, consequently, on the basic interest rates necessary to keep inflation under control.

Floating Exchange Rate

The free-floating exchange rate in Brazil has been a reality since the aforementioned episode of the massive devaluation of the Real in January 1999.

Indeed, if there is one lesson learned in most emerging countries, it is that exchange rates are not to be trifled with. Or, in the words of the great Brazilian economist Mário Henrique Simonsen, "inflation cripples, but exchange rate kills."

In the case of Brazil, this analysis must also consider the formation of international reserves, which allow the country to have the necessary resources for exchange rate interventions whenever necessary, in times of liquidity shortages or acute financial crises, whether internal or external.

International reserves today amount to approximately US\$ 360 billion and were primarily accumulated between 2003 and 2013, during the great bull market. Market fluctuations in commodity prices have created robust trade surpluses and improved Brazil's balance of external transactions.

However, international reserves have a cost, which is precisely the difference between the interest rates that remunerate dollar-denominated and real-denominated bonds. That is, if the monetary authority were to sell the reserves and invest them in Brazilian bonds, it would have a better return, which is equivalent to saying that Brazil pays to hold its international reserves, like a true insurance against economic storms.

In summary, we can say that, of the approximately R\$ 1.3 trillion in public deficit over the last 12 months, R\$ 147 billion corresponds to the primary deficit and R\$ 1.1 trillion to debt interest. However, the R\$ 1.1 trillion in debt interest would be at least R\$ 180 billion less if the country were not holding US\$ 360 billion in international reserves.

The corollary, in this case, is that the higher the basic interest rates needed to contain inflation, the higher the cost of carrying international reserves will be.

PERFORMANCE OF THE MAIN FINANCIAL INDICES:

Renda Fixa		31/07/26	MTD	3M	YTD	
CDI	-	106,27	1,22%	3,39%	8,14%	
IMA-B	-	11.494,88	0,97%	0,46%	5,09%	
IMA-B 5	-	11.470,06	1,24%	2,44%	7,80%	
IMA-B 5+	-	12.469,66	0,75%	(1,11%)	2,98%	
IRF-M	-	22.892,50	0,85%	2,60%	5,95%	
IMA-S	-	8.805,67	1,23%	3,42%	8,26%	
Índices Globais		País	31/07/26	MTD	3M	YTD
Ibovespa	BRL	177.999,00	3,47%	(4,10%)	10,47%	
Dow Jones	USD	52.485,03	0,32%	7,24%	9,20%	
S&P 500	USD	7.489,72	(0,13%)	4,01%	9,41%	
NASDAQ	USD	28.274,20	(6,61%)	2,25%	11,98%	
Euro Stoxx 50	EUR	6.358,01	0,47%	10,31%	9,78%	
FTSE 100	GBP	10.868,05	3,53%	4,71%	9,43%	
MSCI Emerging	EM	64,09	(6,31%)	0,50%	17,75%	
MSCI World	World	4.847,88	0,46%	4,32%	9,42%	
Moedas		País	31/07/26	MTD	3M	YTD
Real/Dólar	USD	5,07	1,72%	(2,19%)	7,34%	
Euro	EUR	1,15	0,92%	(1,40%)	(1,86%)	
Franco Suíço	CHF	0,81	0,11%	(2,92%)	(1,84%)	
Libra Esterlina	GBP	1,35	1,67%	(0,36%)	0,06%	
Bitcoin	BTC	62.899,25	7,26%	(21,31%)	(28,24%)	
Hedge Funds		País	31/07/26	MTD	3M	YTD
Ind. de Hedge Funds	BRL	6.261,44	(0,96%)	0,34%	2,27%	



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