Seeking For Alpha

Investor Letter

4th Quarter 2023

"Carry on, my wayward son,
There'll be peace when you are done,
Lay your weary head to rest,
Don't you cry no more, no."

Excerpt from the song "*Carry On Wayward Son*" da banda americana Kansas.

The SFA EAC FIC FIA – BDR LEVEL I Fund closed 2023 with a cumulative return of 33.41%, surpassing its Ibovespa benchmark, which returned 22.28%.

Período	SFA EAC	Ibovespa	CDI
4T23	11,50%	15,12%	2,84%
YTD	33,41%	22,28%	13,05%
Últimos 3 anos	19,76%	13,90%	32,67%
Últimos 5 anos	106,72%	56,58%	44,60%
Desde o início	358,78%	150,78%	154,09%

How Was the Year 2023

The year 2023 served as yet another reminder of the non-linear nature of stock market returns. At the start of the year, expectations were quite negative in both Brazil and the United States, reflecting a climate of uncertainty among investors. Defying those forecasts, both the Ibovespa and the S&P 500 surprised positively, reaching all-time highs by year-end. This scenario reinforces the importance of a long-term investment perspective. The hesitation to remain invested while waiting for the 'perfect moment' can significantly harm the growth trajectory of one's wealth. Investing is a commitment to the future, and patience plays a fundamental role in achieving long-term financial objectives.

We understand that the experience of a temporary market decline can be more impactful than the satisfaction of achieving gains. This psychological phenomenon leads many investors to try to predict the perfect moment to invest. However, this attempt can result in missing significant opportunities. Furthermore, it is crucial to recognize that facing challenging periods is part of the investment journey. Essentially, the act of investing reflects the nuances of human behavior, encompassing its hopes, fears, and aspirations.

Returning to the 2023 retrospective, the year brought several challenges to our management, and as always, learnings and reflections.

During the past year, two companies in our portfolio received take-private offers. The first, Sinqia, a company we discussed in detail in our Q2 2023 letter and in dedicated reports, was the target of an offer by a strategic player (Evertec), resulting in its delisting after approximately a decade on the public market. In parallel, Alper, another portfolio holding, received a take-private proposal from a financial player (Warburg Pincus), initiating its delisting process. This development was also covered in detail in a specific report sent to our investors. These events are clear examples of market dynamics and reaffirm the importance of our attentive monitoring and our ability to adapt to sector transformations, always aiming to maximize returns for our clients.

As a result, a significant portion of our capital was strategically redeployed, both into companies in which we already held positions and into new investment opportunities. We would therefore like to highlight two of these new investments and Porto, a company in which we have been investors for 10 years and which is today our largest holding.

- **Vittia:** The agricultural bioinputs sector has grown significantly in recent years. It is a segment that has been attracting increasing investor interest, advancing sustainability and productivity in the field. In addition to Brazil depending on agriculture for a large portion of its GDP, the country holds competitive advantages in agribusiness and across its entire supply chain, including the development of agricultural inputs owing to its biodiversity, experience in pest control, and cultivation of diverse crops. Vittia is one of the leading players in the biodefensive and inoculant market in Brazil. Vittia has over 50 years of experience in the agricultural inputs industry. The company has its own R&D, which grants it proprietary strains and a production process that ensures product efficacy. Despite having an in-house R&D pipeline with a considerable number of new products for commercial exploration, after our research we believe that R&D ultimately represents a *narrow moat*, as a new strain can become a commodity over time. We believe that Vittia's production and distribution capacity is what truly confers competitive advantages to the company, especially because the sector is highly fragmented and relatively unprofessional, which favors larger players. The major players, including Vittia, could become consolidators if they know how to leverage and manage a broad product portfolio, R&D capability, production capacity, and commercial strength — particularly as M&A opportunities emerge in the sector.

- **TSMC:** As we discussed in our Q3 2023 management letter, Taiwan Semiconductor Manufacturing Company is a semiconductor manufacturing company. It stands out for being nearly a monopoly in the foundry market (*foundry*). Its main competitors in this market, Samsung and Intel (which also own chip factories), go beyond foundry to design and sell directly to end customers. Therefore, TSMC has a natural advantage by being a *foundry* (dedicated foundry) and not competing with its customers directly in end-markets, unlike Samsung versus Apple, or Intel versus AMD. Today TSMC is at the technological frontier when it comes to chip manufacturing. We see a secular trend of digitalization growth in this sector. Furthermore, all current AI demand passes through TSMC in one way or another. Therefore, TSMC holds immense strategic value in an industry that, also driven by AI, is expected to reach trillions of dollars in TAM within a few years. In addition to promising areas such as AI and IoT, other areas like PCs, notebooks, and mobile phones are expected to go through a cycle inflection in 2024, marked by revenue reacceleration and inventory reduction. We see here *moats* competitive moats in technology and scale. Entering this competition requires massive investment and a long-term commitment. TSMC is also an excellent company from a management and governance standpoint. For this thesis specifically, we are aware of a potential China risk, but we judge it to be not very high in the near term for domestic and military reasons on China's part. We limit our exposure to this risk through position sizing.

- **Porto:** Porto Seguro is a company with a long track record. Founded in 1945 and listed on B3 since 2004, the company is well-known as Brazil's largest auto insurer, with approximately 30% of that market. Although widely recognized as the auto insurance leader, Porto is in fact a holding company of products and services aimed at helping customers care for their lives and assets. The company also offers its clients insurance products beyond auto, including home, life, business, mobile, and renters insurance. In addition, it has health plans and solutions, financial services such as credit cards, vehicle financing and consortia, and various services including vehicle subscriptions, home maintenance, pet care, and personal investments. Its more than 150 products and services are divided into 4 main verticals: Insurance, Health, Services, and Porto Bank. Porto has a strong brand in the auto segment and in other insurance lines where it leads — with a commanding lead in *market share*, being nearly double the second-ranked competitor, with the highest prices and consequently the lowest loss ratio. With a customer base of approximately 15 million, our thesis on Porto is based on the Company's work with brokers to extend its brand power to the other verticals such as health, services, and Porto Bank, with significant opportunity for *cross sell*.

These are companies in which we have been deepening our research, and as a result, they are positions that have been growing in weight within the portfolio.

Looking at the fund's performance attribution, the majority of the return came from the Core equities book, followed by the Tactical equities book, while the Hedge and Macro books detracted approximately 1.50% from the year's result.

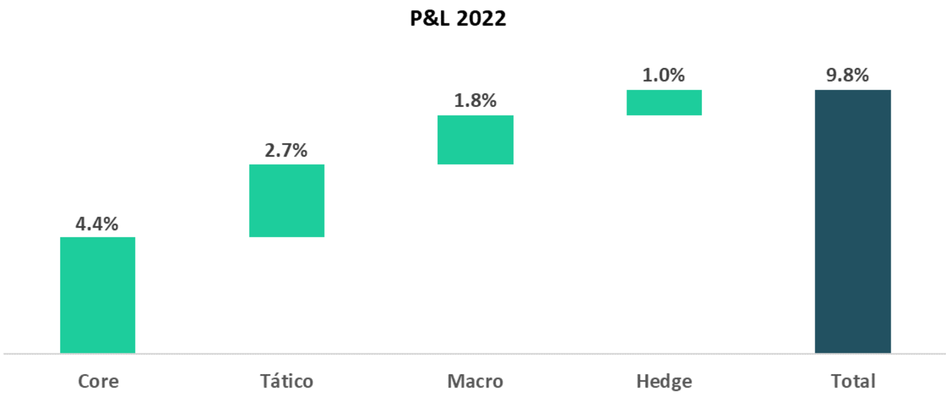
In our management approach, we adopt a dynamic and active strategy for managing the Hedge book, which is fundamental to our operation. This meticulous management involves the careful identification of the assets and instruments most appropriate for each phase of the economic cycle, with the objective of structuring effective protection operations. This practice not only minimizes hedge-related costs, but also enhances the fund's resilience and performance in the face of market fluctuations.

In parallel, our Macro book plays a distinct strategic role, allowing us to express our market view in a more opportunistic manner. It also serves as a vital source of insights, influencing and enriching the strategies implemented in the Hedge book. This integrated approach ensures that our investment decisions are well-grounded, agile, and aligned with market dynamics, always aiming to optimize results for our investors.

Both the Macro and Hedge books are underpinned by a sound macroeconomic view and both focus on operations with positive asymmetry. We adopt the principle that 'Hedge is price and asymmetry' and we recognize that these characteristics can be found across various markets, not limited solely to the equity segment.

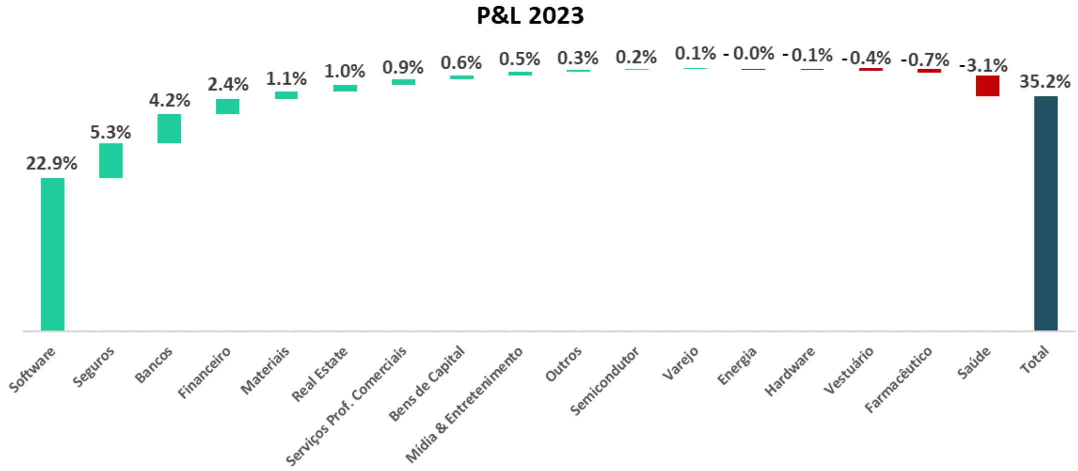
We view the Hedge book as a form of insurance, which carries a negative expected value in favorable scenarios. For this reason, we aim to prevent this book from becoming an isolated cost center, maintaining dynamic management that, combined with the Macro book (which has a positive expected return), forms a strategic combination capable of providing protection during adverse market periods.

A concrete example of the effectiveness of this strategy was observed in 2022, when, despite a significant correction in equity markets, the Hedge and Macro books contributed 5.3 percentage points to the fund's performance. In 2023, with the market recovery, this approach proved valuable once again, reflecting a result we consider excellent for having minimized its cost.



Active portfolio management is part of how we manage investments — whether in the books mentioned above, in the *sizing* of positions and cash management and *exposure* of the fund.

Looking at the equities portion, the software (Sinqia and Totvs), insurance (Porto and Alper), and banking (Itaú) sectors were the strongest positive contributors. The primary detractor was the healthcare sector (Hapvida).



It is important to highlight our decision regarding our position in Hapvida. After careful analysis, we concluded that our original investment thesis no longer held, leading us to exit our position in the company. This move was based on new information and a thorough reassessment indicating a significant divergence from initial expectations.

We detailed the reasoning behind this decision extensively in the report on the closure of the Hapvida investment, which was sent to our investors in the first quarter of 2023.

Our initial investment thesis in Hapvida was based on two aspects: macro/sector and micro. The sector aspect is related to cost dynamics in the healthcare market and incentives in the supplemental health insurance industry — an industry where healthcare providers, insured individuals, and insurers have divergent incentives and which structurally suffers from rising treatment costs (for various reasons). In addition to these structural sector aspects, the supplemental health industry was out of balance, accumulating heavy losses resulting from a perverse dynamic generated during the pandemic, when the loss ratio for the period was extremely low. On the micro side, we saw a company supported by a vertically integrated model capable of translating its lower costs into pricing advantages, capturing market share, and potentially increasing the penetration of supplemental health coverage in the Brazilian population.

We therefore believed that Hapvida would be able to pass through price increases considerably smaller than the industry average, at a time when the industry itself was implementing strong price hikes, and might even gain additional market share. This did not happen. Hapvida, which was known to be leveraged as a result of the NDI acquisition and low operating cash generation, not only had to implement strong price increases in line with the supplemental health industry, but also needed to conduct an equity offering and divest assets (through a SLB transaction to the controlling family, which always raises questions given related-party concerns) to ease its financial position. In other words, during this complex industry environment, we found that its vertically integrated model — the foundation of our micro thesis — did not prove to be a significant competitive advantage, and for this reason, among others, we chose to exit the investment.

We remain excited about the prospects of the companies in our portfolio, while staying attentive to challenges and scenario changes so that we can adapt with agility through active portfolio management.

10th Anniversary

In a recent interview, Jensen Huang, the visionary founder of Nvidia, shared a profound perspective on his entrepreneurial journey. He revealed that, had he been fully aware of the challenges he would face, he might not have started the venture. The adversities and intensity of the process far exceeded his initial expectations. This confession resonates deeply with us, as it echoes a universal truth in the business world: the essence of the journey lies in resilience.

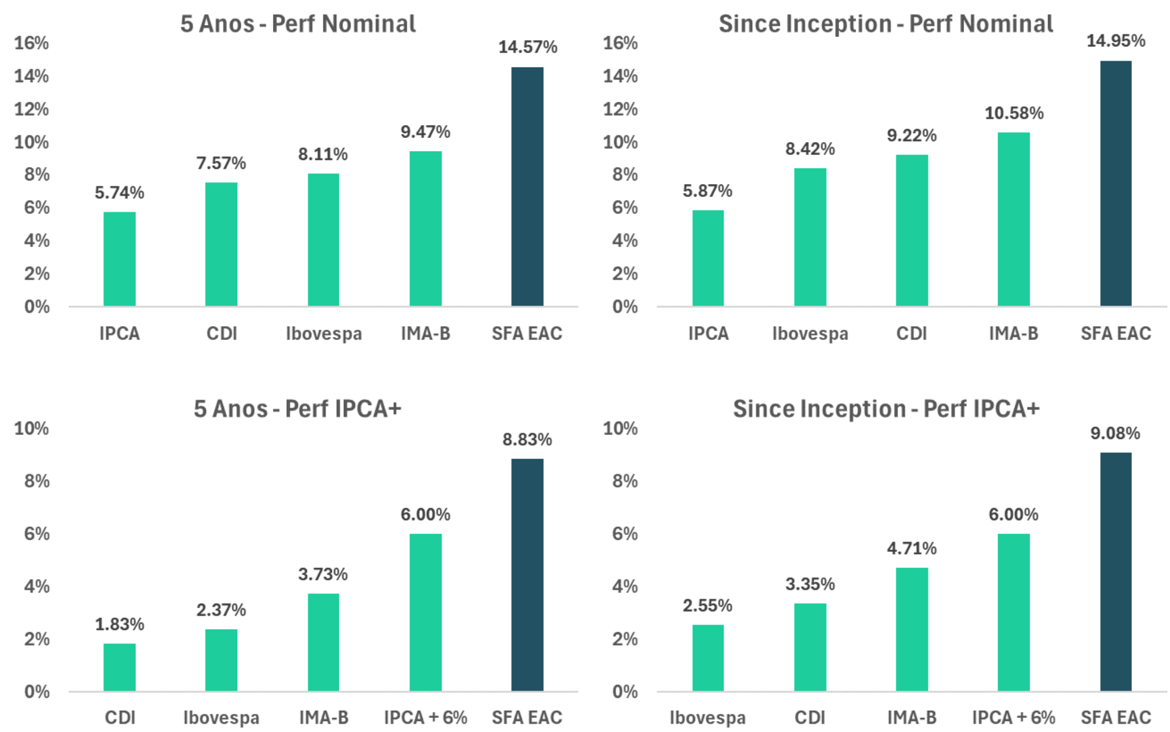
Like Huang, we firmly believe that resilience is not merely a virtue but an intrinsic necessity in entrepreneurship. The act of building and sustaining an investment manager goes far beyond the mere ability to invest with skill. Without a solid business foundation, success is fleeting.

We recognize that pillars such as organizational culture, investment philosophy, well-defined processes, strategic partnerships, team competence and synergy, as well as motivational, leadership, and delegation skills are indispensable. These elements, though intangible and difficult to quantify, form the foundation upon which a solid and resilient investment firm is built.

Reaching 10 years of business life with the odds stacked against you, given the high corporate mortality rate, is an achievement of which we are very proud. Reflecting on our 10-year journey, we draw inspiration from leaders like Huang and dedicate ourselves to cultivating these essential values, ensuring that our firm not only prospers but also leaves a lasting legacy in the investment world.

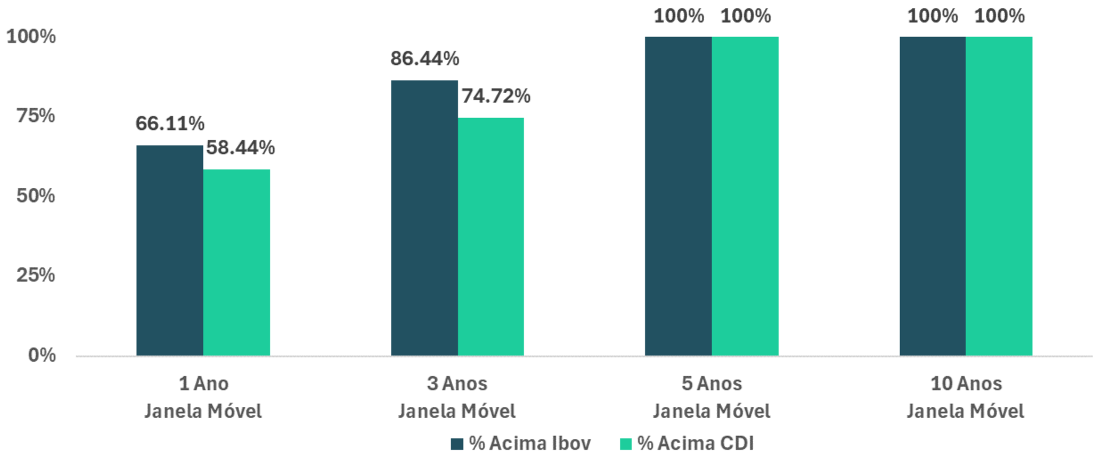
We closed 2023 with our highest historical net asset value per share and were able to deliver an annualized return since inception in 2013 of 15.5%, beating all market benchmarks. Even over the last 5 years — a difficult period for the local industry — we comfortably outpaced the benchmarks.

Looking at returns in real terms, we were able to deliver a result of approximately IPCA+9% both since inception and over the last 5 years.

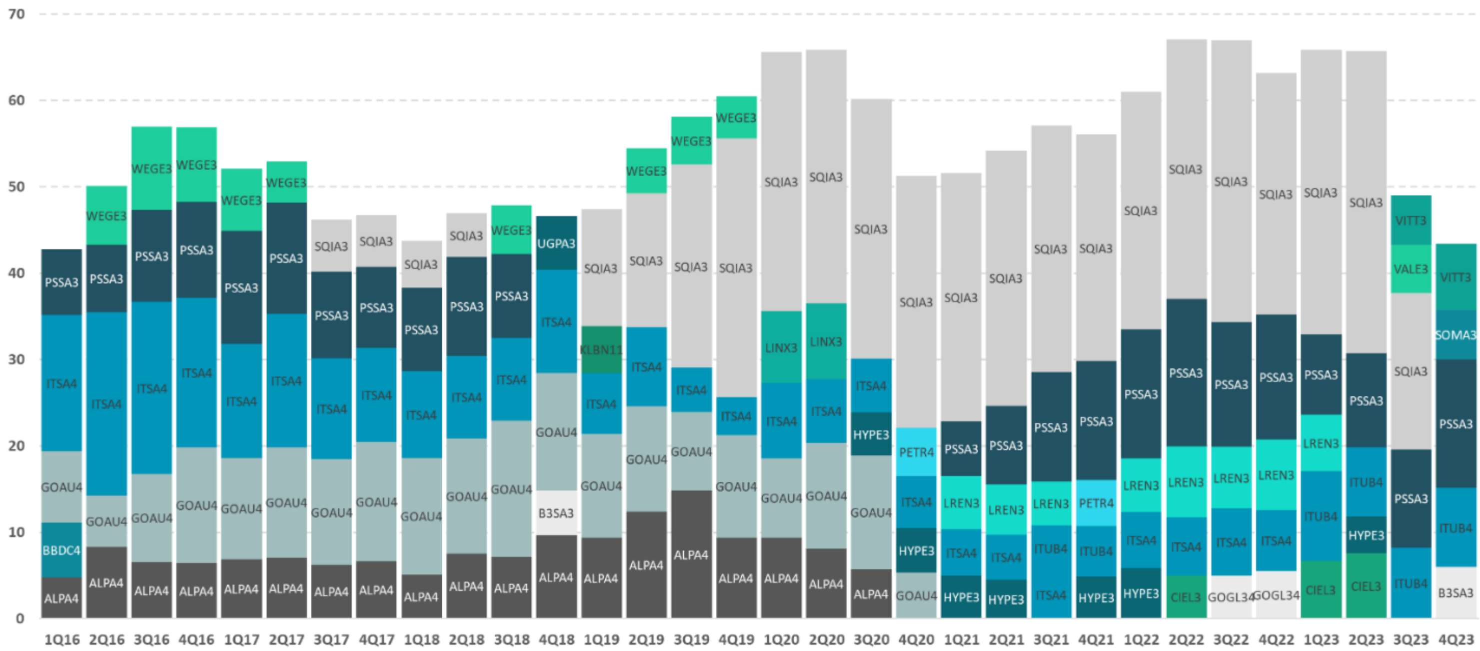


This type of result makes us very proud, given that several studies show that fewer than 10% of surviving funds beat the market after 10 years. But we are certain that this result is a consequence of a strong corporate culture, a robust investment philosophy, and a well-structured investment process.

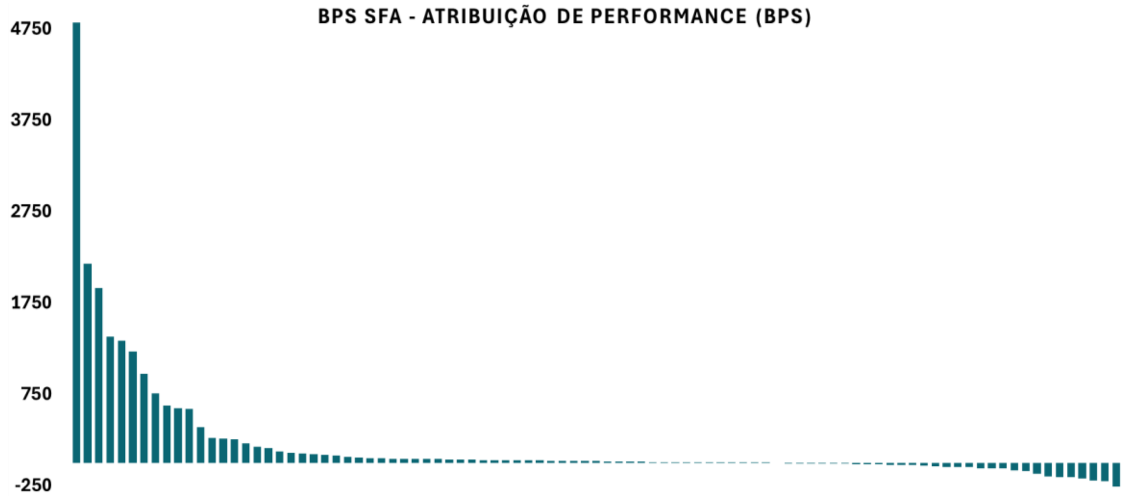
These are the pillars that have made our fund consistent over time (chart below). And it is these pillars that allow us to look ahead to the next 10 years with the confidence that we will be able to generate alpha for our clients. The chart below shows the percentage of rolling periods in which the fund beat the Ibovespa and the CDI.



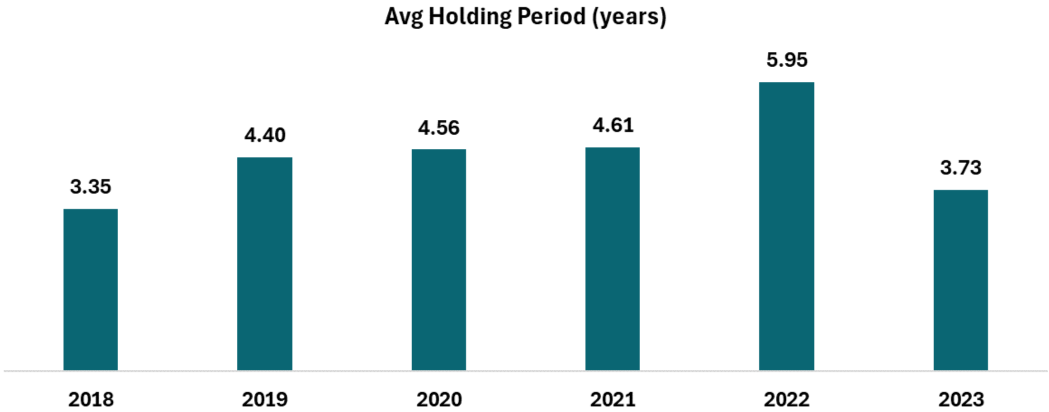
We are a high-conviction, concentrated fund, though concentration is not an obligation. Our analytical quality bar is very high, and therefore few companies make it through our screening process to become large positions. Nevertheless, when we find these cases of companies with excellent business models and high margins of safety, we hold concentrated positions. The chart below shows the size of the 5 largest positions each quarter.



We have a proprietary investment process that we have built, evolved, and refined over the past 10 years. We do not want to be rigid, but we believe in method and process for investing. This gives us the replicability of good results. Below we present the results of positions in which we made money versus those in which we lost money.

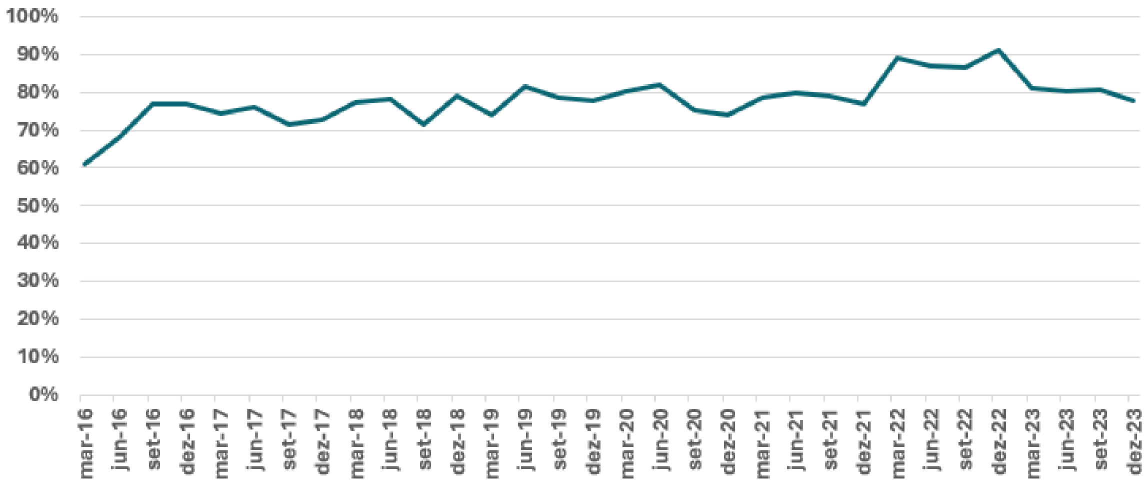


And always with a long-term investment horizon. We have numerous examples of companies in which we have been shareholders since the fund's inception. On average, positions in the fund are held for around 4 to 5 years.



At SFA, we cultivate a highly proprietary investment philosophy. This vision guides us to build our fund's allocation with considerable independence from market benchmarks. For us, a company's weight in the Ibovespa is irrelevant; what we prioritize is each business's intrinsic value-creation potential and the long-term sustainability of each investment. This conscious approach means that in the short to medium term we may experience periods of *underperformance* relative to the Ibovespa. However, this is a natural facet of our strategy, aimed at more significant and consistent long-term gains.

One tool for understanding our approach is the '*active share*', a metric that measures how distinct our fund's composition is relative to the market benchmark. The higher the *active share*, the more our portfolio differs from the Ibovespa, reflecting our pursuit of unique opportunities and our commitment to a proprietary and independent investment management approach.



Active		Index Close		Passive
100-80%	80-60%	60-40%	40-20%	20%-0

SFA continues strong, always evolving with a commitment to excellence in investment management. We are very excited about the new possibilities and prospects that lie ahead.

And may our 20-year letter proudly recount how we were able to continue generating long-term returns for our clients and partners.

Capital Allocation

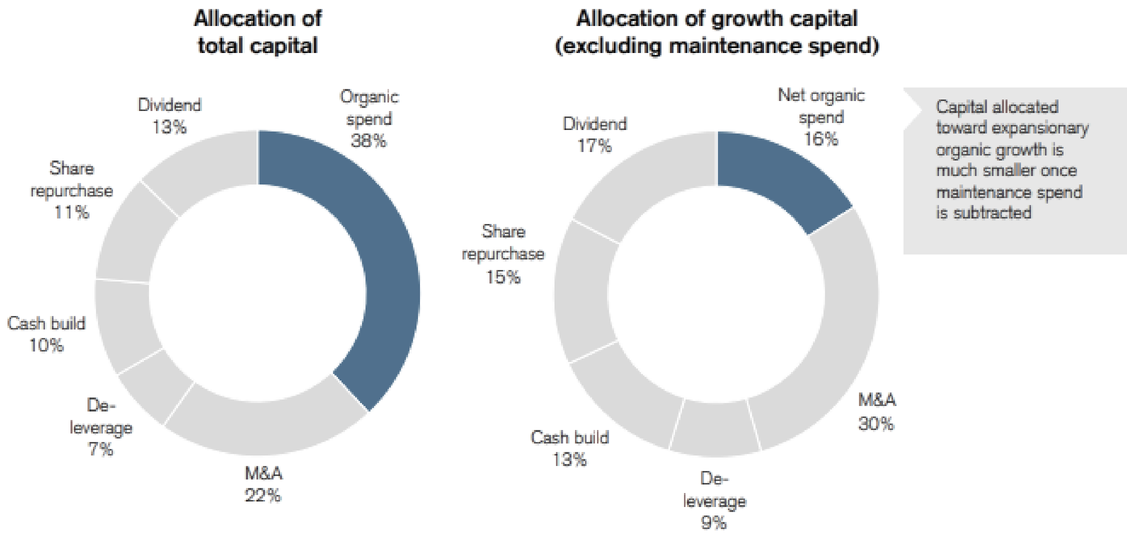
At SFA, we value well-managed companies. Good management's primary attribute is its track record in capital allocation.

Simply put, managers choose to allocate capital to:

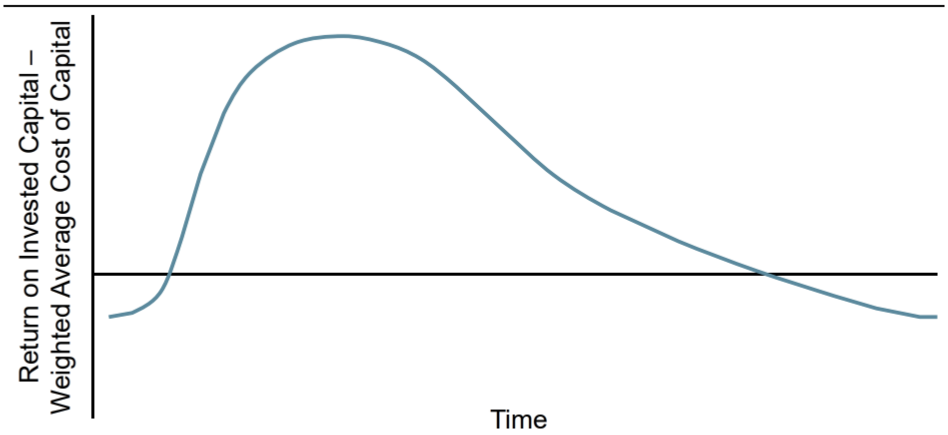
1. Reinvestment in the business itself
    a. Working Capital
    b. Capex
    c. R&D
    d. Investments in intangibles, such as software
2. Acquisitions of other businesses
3. Divestiture of assets
4. Dividends and *Buybacks*
5. Debt amortization

When we look empirically at how capital allocation was distributed over 20 years by listed companies in the US and Europe[1], approximately 60% of *capital deployment* went to organic investment — that is, in the business itself — and inorganic investment. We will therefore focus more on these two forms of capital allocation in this letter, even though the central message is valid for all other forms of allocating the company's resources.

[1] "Capital allocation: paths to value" – Credit Suisse, Corporate Insights, Spring 2021



Between organic and inorganic investment, organic is clearly more prominent, but it is worth noting that this allocation also includes investments in maintaining operations and sustaining current value generation. As a result, a smaller portion is linked to seeking organic growth for incremental value creation, as we can observe in the upper-right chart. This may suggest that, on average for these companies, there were few growth opportunities within the current business, due to the average position of these companies within the business life cycle (chart below) or incentives directing decisions in that direction.



Failing to invest can also jeopardize businesses and their perpetuity. In essence, it is new investments that will drive future returns. And a company capable of reinvesting part of its earnings while consistently maintaining its return rate above its cost of capital would be an incredible value-creation machine and a vehicle for *compounding*.

Thus, the managers and directors of these companies should not merely seek to remunerate capital, but also ensure that returns exceed its cost — in other words, to seek long-term value creation.

Executives who lack this orientation may put the company at risk, and this "misaligned" direction typically stems from wrong incentives, as well as the natural difficulty of reversing certain decisions — decisions that sometimes prevent the manager from following the right path. Faced with this challenge, we seek to learn as much as possible about the track record of managers as decision-makers, as well as the *background* and their profiles. We also seek strong governance that can protect the company from bad decisions.

We can cite good examples of sound management:

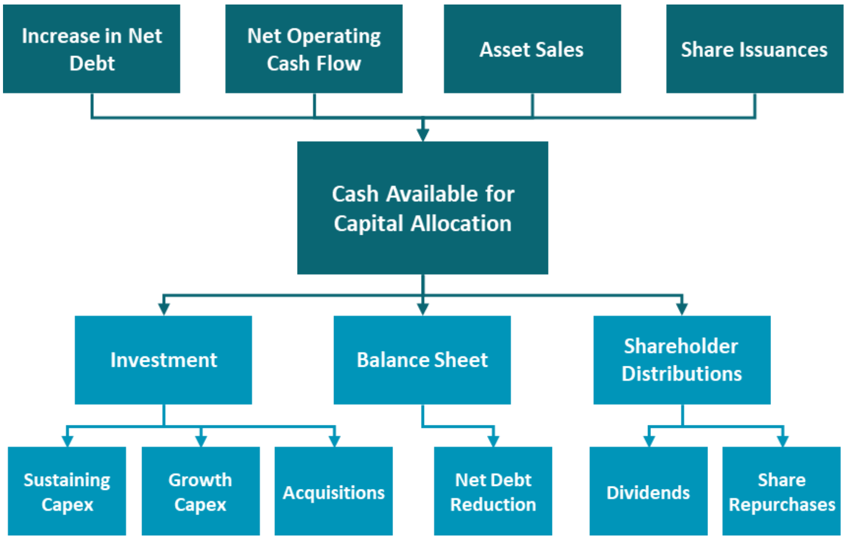
1. The management of Steve Jobs and Tim Cook, which brought enormous value to Apple's shareholders.

a. Beyond the innovation stimulated by Jobs and his focus on developing a small number of products, he built brand attributes within a *commoditized*segment, while Cook reduced the company's invested capital by outsourcing inventory and assembly to third parties — a move that left part of the operating margin in the hands of third parties, but the turnover of its invested capital more than compensated for this margin loss.

2. The current management of Satya Nadella at Microsoft and the advancement of cloud within the business.
3. Here in Brazil, we have José Galló during his tenure as CEO of Renner, Milton Maluhy at Itaú, Marcos Galperin and Stelleo Tolda at Mercado Livre, among others...

These executives were able to bring new perspectives to the business and elevate the *business* they managed to another level of value creation.

Assessing how management makes value-creation decisions involves analyzing the dynamic between the source of funds and their destination. In very simple terms, the source of funds comes from operations and financing, whether debt and/or *equity*. The use and destination of these resources is essentially what we discussed above: investments in the business and investments in improving the capital structure. Viewed this way, our analysis gains quality, though it is obviously not sufficient on its own.



Management's track record serves as a foundation for supporting arguments, favorable or otherwise, regarding its capacity to generate economic profit through investments in the existing business or in new projects — whether in a plant expansion, brand development, or simply in the expansion of its store footprint.

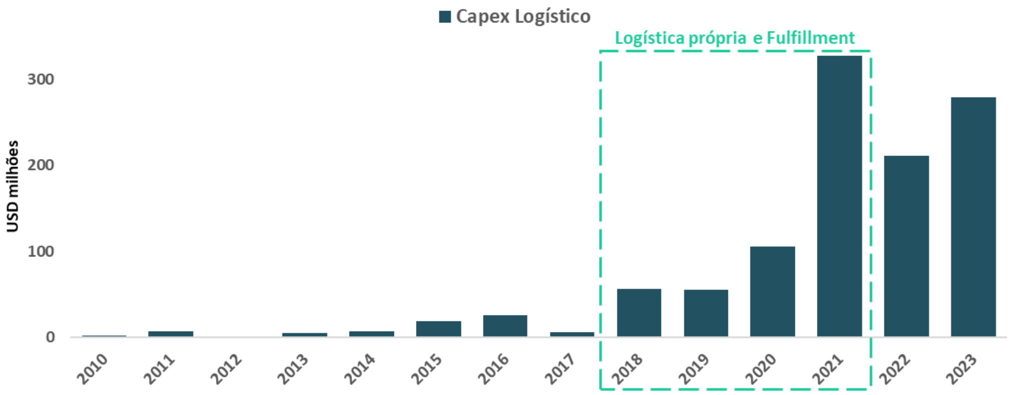
> *One day Deng Xiaoping decided to take his grandson to visit Mao. "Call me granduncle," Mao offered warmly. "Oh, I certainly couldn't do that, Chairman Mao," the awe-struck child replied. "Why don't you give him an apple?" suggested Deng. No sooner had Mao done so than the boy happily chirped, "Oh thank you, Granduncle." "You see," said Deng, "what incentives can achieve."*

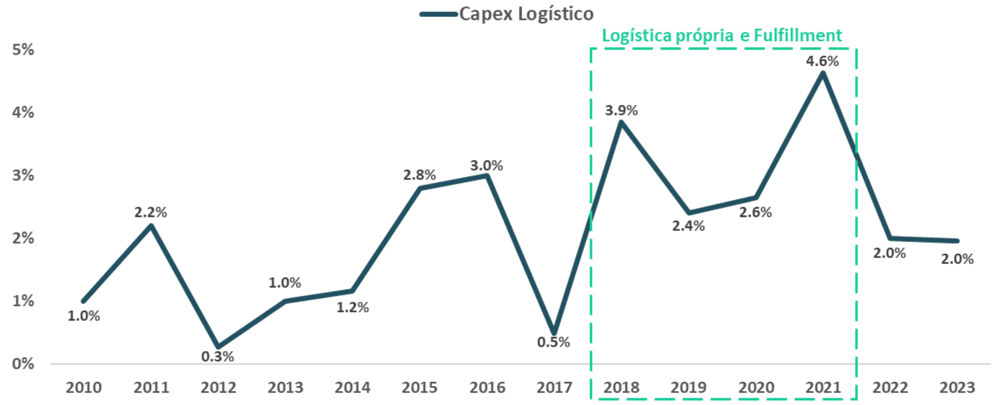
The passage above illustrates the power of incentives. Therefore, it is not enough to merely look at management's track record — we also pay attention to the company's governance and the alignment of management compensation, in order to, among other things, avoid the well-known *Principal-Agent Problem*. In corporate governance, the *Principal* is the individual who delegates tasks — in this case, the Shareholder and asset owner. The *Agent* would be, in this case, the Executives and Directors, who execute the tasks delegated by the *Principal*. One reason this problem arises is the difficulty for the *Principal* in monitoring and controlling the execution of tasks carried out by the *Agent*. Furthermore, these two parties tend to have distinct and conflicting interests.

Companies without the "owner's mindset" — that is, without a reference shareholder with a sense of control — tend to have weaker execution controls and, in many cases, decisions are made with a shorter time horizon for capturing results. Sometimes, executives may pursue initiatives that generate short-term value, such as cutting discretionary expenses or delaying investments in a new manufacturing plant, but that can negatively affect the long term. Imagine a branded-goods company, where its *Moat* economic moat is precisely this intangible asset. The marketing expenses of this business feed that brand strength. Short-term-oriented executives, compensated with short-term bonuses, may prefer to cut marketing spending, inflating results but potentially eroding the perception of that brand in the medium and long term — which is precisely the reason for the sustainability and longevity of its value creation. Incentives can also drive the adoption of more aggressive and controversial accounting, such as capitalizing values that are subjective, or recognizing revenue well in advance, which inflates short-term results and contributes to executives meeting their targets and, consequently, being rewarded for it. Given this, we prefer, as business investors, to find owner-operated companies with *skin in the game*, and obsessed with what they do.

As we have already mentioned, incremental value creation comes from new investments. These investments are uncertain by nature and will often generate positive returns only after a *ramp-up*. For those who look only at the snapshot without paying attention to the investment cycle context the company is going through, it is easy to misinterpret the situation. Moreover, market dynamics and what happens around the company can also contaminate the analysis and complicate the *assessment* of capital allocation and the strategy adopted by the company.

Looking back with the benefit of hindsight, we view Mercado Livre's decision to invest in the logistics infrastructure of its Brazilian operation in 2018 as an excellent example of capital allocation toward organic growth. See the chart below, which illustrates the logistics Capex amount relative to revenue size.

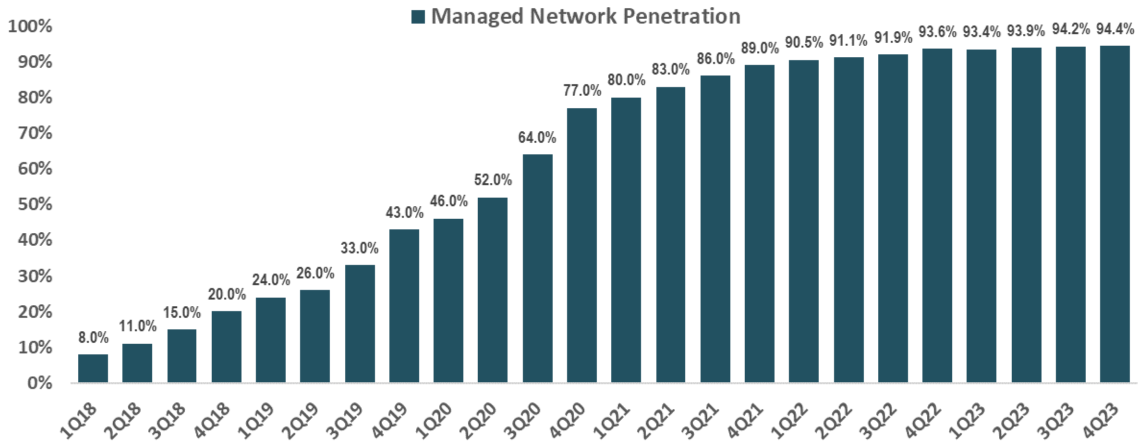


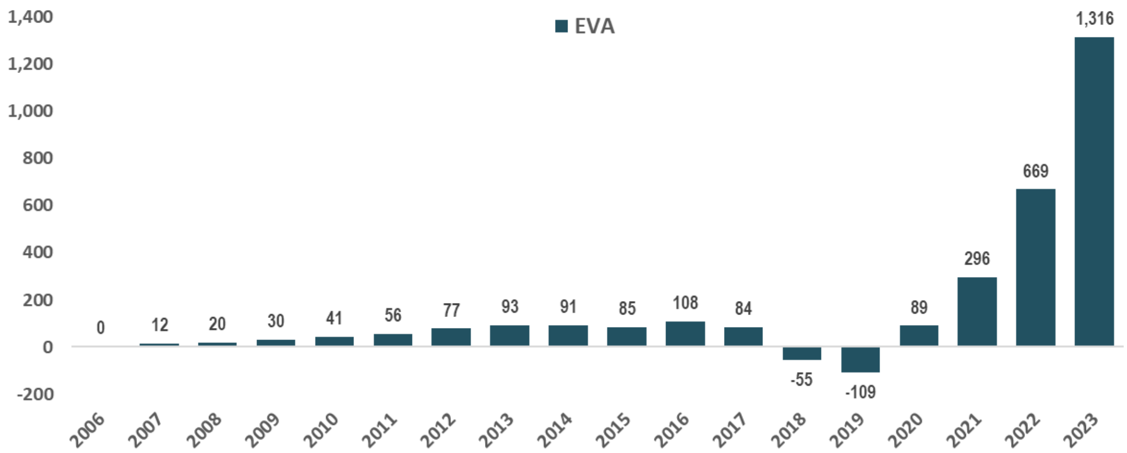


MELI's executives realized that they would only be able to maintain market leadership and serve their customers with quality by offering a broader assortment combined with faster deliveries and the removal of bottlenecks in the logistics operation, which at the time relied exclusively on the Brazilian postal service (Correios).

Not only were high investments in the logistics operation necessary, but in order to go through this transformation and achieve good scale in *fulfillment*, MELI needed to stimulate the use of its own network. This was done through incentives for *sellers*, which hurt its margins.

In other words, looking only at a snapshot of the numbers at the start of the investments, we saw a company increasing its invested capital while experiencing pressure on its operating margins. These investments matured as penetration of the proprietary network grew, which led ROIC to improve, but the company only returned to growing value creation from 2020 onwards — the year of the pandemic. The pandemic environment may have even helped accelerate the maturation of these investments, but without making them and without the executives' long-term vision, the story could have been different. Today, the "3P + *fulfillment* + smaller distributed logistics centers + <24h delivery" is seen as the "gold standard" in *e-commerce*. Mercado Livre was the first to implement this at scale in Brazil, and this was only possible because they thought about growth over the long term.



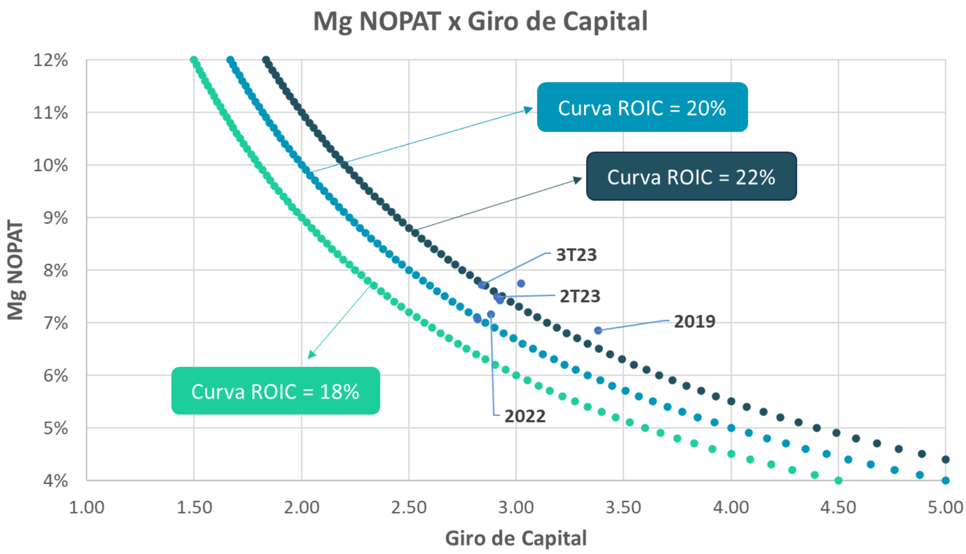


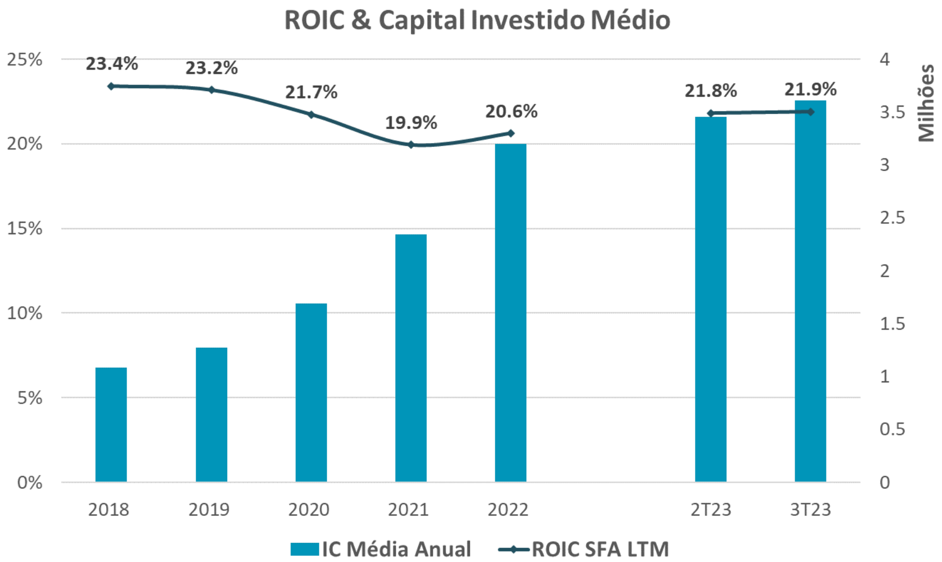
Still from a retrospective perspective, over the past 3-4 years, we saw many companies pursuing M&A strategies and leveraging their high multiples to justify them. Many of those acquisitions already appeared questionable in terms of their ability to extract future value, since the "check" handed to the seller was not "low" or, perhaps, even fair; today, in fact, many of them have proven to be disastrous.

Investment in inorganic growth, like any other investment, requires time to mature — especially when such acquisitions are significant in size. That said, we view M&A differently *versus* other forms of capital allocation:

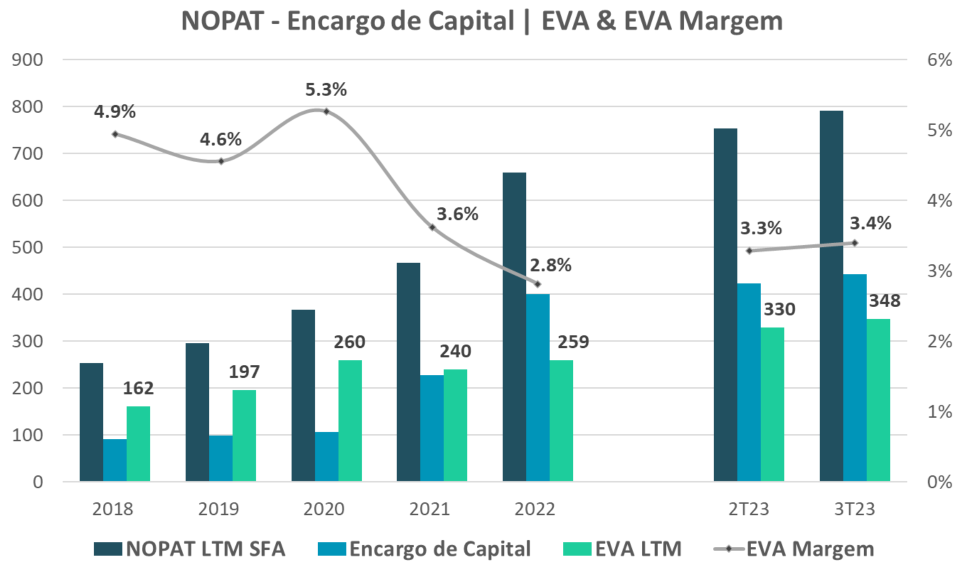
we are more skeptical about value creation for the investor when this strategy is adopted. We prefer smaller acquisitions, carried out by companies already accustomed to this type of investment and that are aligned with their strategy. Sinqia was one such *cases*. Another *case* that has caught our attention in the adoption of this strategy is Grupo GPS, the services outsourcing company.

GPS is an M&A "machine". With gross revenue above BRL 11bn, it targets companies with BRL 100mm to 300mm in revenue – this would be the *sweet spot* — to grow, integrate, and generate value. The executive team is very precise in the price allocated to the *target* and very fast in capturing synergies. This is evident in the evolution of Capital turnover and in the evolution of the company's NOPAT margin, considering the series of acquisitions made over time. The charts below help us perform this *assessment*: little variability in ROIC while the company grew at a 29% CAGR in Invested Capital from 2018 to 2023E.





The conclusion is one of growing value creation, and from 2022 onwards we have seen the EVA margin also growing, beginning to contribute to the business's EVA Momentum as well.



Thus, based on what they have accomplished over the past years, supported by: i) very strong cultural characteristics deeply rooted in the company and ii) many target opportunities for future acquisitions, we believe they will continue with growing value creation as they carry on with this strategy.

M&A and How We Evaluate It in Our Portfolio Companies

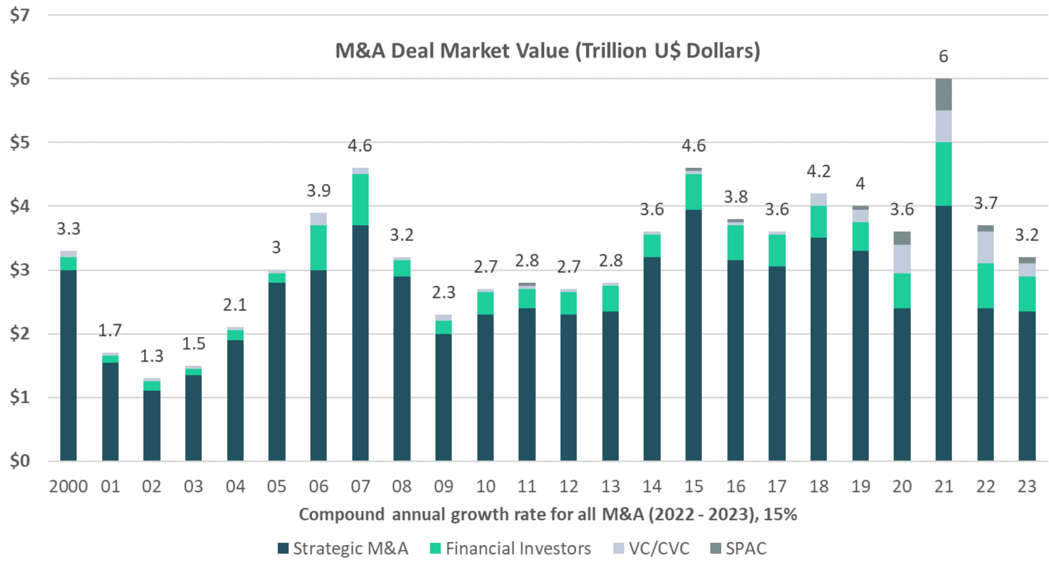
Speaking more broadly, M&A is the primary form of capital allocation when we adjust for organic investments — the resources devoted to maintaining current value generation — as we saw in the first chart of the Capital Allocation section. This contributes to the enormous size of this market. According to McKinsey, over the past decade, USD 8.3tr was allocated to mergers and acquisitions by the world's 2,000 largest companies — across all sectors[2]. In a broader study by Bain&Co[3], despite the total M&A market contracting 15% year-over-year in 2023, it still moved USD 3.2tr in the year[4]. M&A activity is recurring, but heats up or cools down in accordance with market price levels and *valuation*[5] — which may suggest some points of attention that we will examine further ahead.

[2] https://www.mckinsey.com/industries/oil-and-gas/our-insights/the-importance-of-cultural-integration-in-m-and-a-the-path-to-success

[3] https://www.bain.com/globalassets/noindex/2024/bain_report_global_m_and_a_report_2024.pdf

[4] Apenas uma observação que o estudo da McKinsey usou apenas aquisições realizadas pelas 2.000 maiores empresas do mundo, enquanto o estudo da Bain&Co é bem mais abrangente.

[5] https://www.morganstanley.com/im/publication/insights/articles/article_capitalallocation.pdf



Here at SFA, we view M&A as a path that helps a company grow, but we know there is a high probability of it going wrong. Some studies[6] indicate that the failure rate is between 70% and 90%. This occurs basically because the directors of such companies make mistakes in selecting the assets they will acquire and frequently err in the price they pay. Choosing the wrong asset makes the integration even more complex. Paying the wrong price, in turn, impacts the value creation captured by the buyer in the transaction.

The reasons for pursuing this acquisition strategy often rest on strengthening the company's strategic positioning — seeing itself as stronger and larger in the future, with new growth avenues or greater vertical integration, envisioning lower unit costs than in the prior situation. This strategic viewpoint is very important, but we should not confine ourselves to it alone. From our perspective as investors seeking businesses that generate incremental value over time, we expect the transactions themselves to translate into value creation.

Therefore, when our portfolio companies pursue this path of acquiring another business, debate and discussion become necessary. We conduct a qualitative review across several aspects: the transaction itself; its potential implications for the resulting operation's business; the motivations of the seller and the buyer; the resulting company; and the origin of (potential) synergies from the transaction. Alongside this qualitative discussion, we simultaneously address themes that may guide us in advancing the quantitative aspects of the transaction.

Naturally, at the announcement of any such transaction, we do not have all the answers to important questions. This implies that our initial opinion can change throughout the analysis and after conversations with stakeholders and industry members, in a natural process of refinement — especially when involving companies unaccustomed to this type of growth strategy, or when involving listed companies where the transaction size becomes very significant.

The qualitative view of the *deal* influences how we understand the real capacity of the companies involved to capture the transaction's synergies — that is, how feasible it is that 1 + 1 is greater than 2 in the transaction. We do not believe that a number on an Excel spreadsheet will suddenly appear in the new company's results without going through several stages. It is relevant to know:

- Who will run the new business, their profile, their *background*;
- The alignment and incentives of the people — employees, managers, directors;

[6] https://hbr.org/2011/03/the-big-idea-the-new-ma-playbook

- How the integration of assets and systems will be carried out, and at what speed — size matters a great deal here: the larger, the more complex;
- Which businesses are coming together, whether there is complementarity or not, their business models; among other factors.

Furthermore, future (and uncertain) synergies that exceed the premium paid for an asset may still concentrate on one side — the buyer or the seller. And thus, the value generated by the acquisition may be captured differently between the two entities combining.

Therefore, in order to understand whether the transaction was good or not from the perspective of the acquiring company, we operate simultaneously on two fronts: i) from a qualitative standpoint, we draw on past experience and conversations with *players* in the sector and industry; and ii) from a quantitative standpoint, we rely on a *framework*. Ultimately, with this *framework*, we aim to answer some questions to form an initial opinion:

1) Whether the *deal* generates sufficient return to cover its cost of capital — in other words, whether the return brought by the *deal* is sufficient to generate value
2) What are the *drivers* of this return
3) And whether such returns are sustainable

Beyond these 3 questions, we look at other points, such as:

1) The *funding* of this operation and what implicit message is being sent by the *management* in choosing this form of financing
2) And, historically, based on empirical studies, what is the probability of a transaction of this type succeeding

To answer these questions, we follow certain steps and assess:

I. The materiality of the transaction for the acquiring company, the *funding* used and the categorization of the transaction
II. Synergies
III. Value Creation

Materiality, *Funding* and Transaction Categorization

The materiality we measure is to understand the risk the business acquirer takes on should the expected synergies not be captured. This indicator depends on the *funding* of the operation and the premium offered. That is, if the buyer chose to use cash/debt without any form of share issuance, it is assuming the full risk of the new business and therefore assuming the entire risk of synergy capture. From the moment the buyer conducts the transaction via *share swap*, ele (o comprador) divide o risco da “nova companhia”.

This indicator was developed by Michael Mauboussin in one of his papers, and is called SVAR (*Shareholder Value at Risk*) which is defined as:

$$SVAR = {}^{Premium}/_{(NewCo\ Market\ Cap)}$$

Therefore, materiality is the Risk/Opportunity ratio for the buyer, measured through the relationship between the premium offered and the *market cap* of the combined company. The *market cap* of the combined company depends on the form of *funding* used by the acquiring company.

Naturally, in practice, the size of the transaction influences the form of *funding*, since, depending on it, the use of third-party financing becomes limited or not. Some transactions between companies of relevant relative size, both operationally and in terms of *market cap*, are not feasible through cash/debt — and the viability of the *deal* only exists if part or all of the acquisition is via *share swap*.

The financing method of the *deal* can also carry other implicit messages. In the case of a transaction conducted through a share exchange, the *management* of the acquiring company may or may not be implicitly telling us that:

I. Its share price is correctly valued or even that the shares are trading above their intrinsic value
II. They have low conviction in the execution and integration of the new combined company and prefer to dilute alongside the selling company's shareholder

These are important messages for us as we monitor the case for investment decisions, at least for the short term.

Alongside this, it is important to observe how the resulting company will emerge in terms of leverage. Should it emerge heavily leveraged and if the deleveraging process is expected to depend heavily on promising synergies, we understand that our investment in the company could be at risk, requiring greater attention to the *case*.

We also categorize the transaction based on the book[7] by Peter J. Clark and Roger W. Mills, who studied hundreds of transactions carried out over several years in the international market. These authors linked characteristics of certain transactions with their probability of success. In other words, the purpose of categorizing the transaction is to understand something about the probability of the *deal* succeeding based on prior experience.

As we can see in the summary table below, empirically, opportunistic acquisitions or acquisitions that benefit less from complementarity and more from overlap tend to have a higher success rate when companies come together. It is evident that transactions based on complementarity have success rates below 50%, and transformational ones below 25%. The authors' definition of transformational is when an acquiring company buys another in a totally different industry or with a very different business model.

Success Rate	Category	Description	Example(s)	Success Threats (Ex-Pricing, Phase)
87 – 92	Opportunistic	Dying competitor signals exit, advantage to fast, cash bidders	Marconi, Palm	Obsolescence, incompatible technologies
80 – 85	Operational	Fills void in acquirer's existing product/service offer, quickly	P&G/Pantene	Hidden integration difficulties cancel timing advantage
65 – 70	Operational	Next generation/different variant of existing product/service	Volkswagen/Skoda	Actual synergies limited to scale, insufficient to cover APP
55 – 60	Transitional	Same industry contraction: scale overhead synergies	Pharma, telecoms	Overestimation of market share gain importance
40 – 45	Operational	Logical complements to present offer: products/ channels/ areas Two or more related elements	Disney/ABC; P&G/Gillette; Coty/Avon	Mistaken judgement of development potential (r-synergies)
37 – 42	Transitional	Same industry contraction: picking winners	ABC Capital Cities/Dumont	Overstated premiums (APP) based on target's prior performance
30 – 35	Operational	Similar to complementary but one or less related elements	Daimler Chrysler	Exaggerated benefits attributed to target in 'marriage made in heaven'
20 – 25	Transformational	Major change in emphasis in acquiring company's business mix and forward strategy	IBM/PwC Consulting	Dependent on extraordinary acquiring company
15 – 20	Transformational	Radical, high-risk experimentation with company's business mix and model	AOL/TW; Vivendi (Messier)	CEO's imagined vision inconsistent with market realities

[7] Masterminding the Deal: Breakthroughs in M&A Strategy and Analysis

We also tend to refer to transactions of highly significant size as transformational, since they require enormous effort in integrating assets, systems, and culture to extract the maximum possible synergies.

Still in our initial analysis, we try to form a first opinion on how CADE (Brazil's antitrust authority) will analyze the transaction. Briefly, CADE has a technical team that will generate a report with an opinion for the tribunal's commissioners, who will then have the final say. This tribunal is composed of individuals chosen by the Executive Branch and confirmed by the Senate, and they may or may not have pro-business leanings. Understanding its composition is important for more complex cases.

Naturally, each case is unique, and depending on it, CADE's analysis may follow a summary rite or not, or may not even be subject to review. Knowing the agency's prior decisions and reports helps us understand how the sector has been analyzed and stratified for market concentration analysis, and thus infer how the agency's technical assessment would be for the specific case under review. In parallel, conversations with lawyers, law firms, and former tribunal commissioners also help us form a critical view of how CADE will act, especially at the tribunal level.

Synergies

In chemistry, synergy is defined as the association of different active principles from two or more chemical substances, producing an increase or potentiation of their effect. In finance and corporate strategy, we like Warren Buffett's straightforward definition from one of his famous letters[8] como "*a term widely used in business to explain an acquisition that otherwise makes no sense*".

For our quantitative conclusion, the estimation of synergies is crucial, as we use the following formula to understand whether there is value creation for the acquiring company:

$$NPV\ do\ deal\ para\ o\ Comprador = VP\ das\ sinergias - Prêmio\ ofertado\ a\ vendedora$$

Caso o "NPV do *Deal* for the Buyer" is greater than 0, the transaction creates value for the buyer.

The original formula was introduced in the book "*The Synergy Trap*" by Mark L. Sirower, but it has appeared in various other *papers* on the topic of M&A. We believe, however, that the original form carries an important premise with which we disagree: that market prices represent the true value of assets. To illustrate, a listed Company A can make an offer for a listed Company B, with a premium to *market cap* of Company B. However, we may judge that Company A paid a lower-than-apparent premium, since we would be valuing Company B above its *market cap*.

As noted, the value of synergies is an important component of the formula. And here lies the most complex part of our quantitative analysis: how to use our qualitative analysis to identify the sources of synergies and translate them into a number and timeline for achieving them.

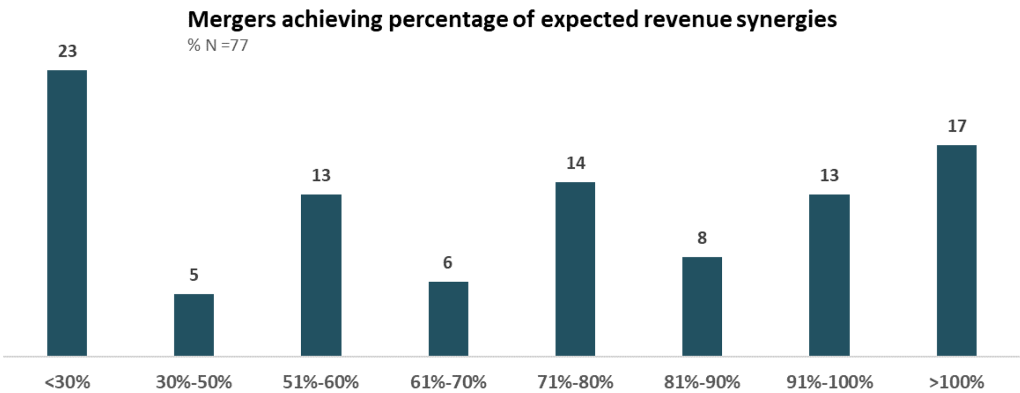
Strategic consultancies typically separate synergies into 3 sources: revenue, cost, and balance sheet. BCG[9] simplifies this with the framework below:

[8] https://www.berkshirehathaway.com/letters/1985.html

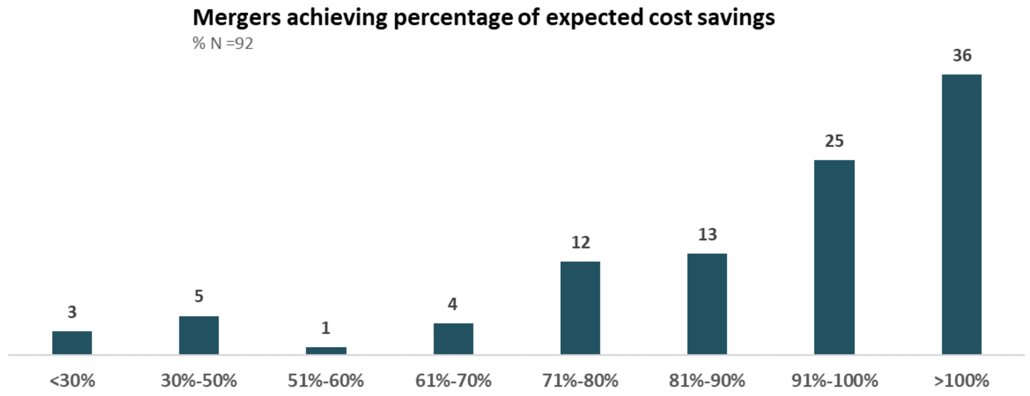
[9] https://web-assets.bcg.com/img-src/BCG-Synergies-Take-Center-Stage-Sep-2018_tcm9-202243.pdf

	Revenue synergies	Cost synergies	Balance sheet synergies
Description	Recurring synergies from incremental increases in revenues compared with standalone companies	Recurring synergies from realized cost savings across corporate functions	Primarily capex and working capital reductions Tax benefits are in addition to balance sheet synergies
Importance in deal decision	Usually regarded as add-on to cost synergies	Central argument in many transactions	Typically, only a minor role; high importance in specific sectors, such as financial institutions
Synergy breakdown	• Cross-selling • Pricing • Additional distribution • Innovation • Other (for example, brand recognition benefits)	• General and administrative costs • Procurement and cost of goods sold • Sales and marketing costs • Research and development costs • Other operating costs	• Inventory reductions • Financing terms • Better capital allocation • Elimination of duplicate capex • Tax optimization
Ability to control achievement	Low High	Low High	Low High
Time to achieve	Fast Slow	Fast Slow	Fast Slow
Costs to achieve	• Low for rollout of products on existing platforms • Dissynergies possible (due to overlapping products or services)	• One full run rate of synergies, on average • Includes contract termination costs	• Renegotiation of financing terms can incur costs • Tax optimization might require cost for external advice

We prefer to adopt a different name for revenue synergies, such as "new opportunities" and "new growth avenues" arising from the combination of the companies. They are more complex to capture, as we can see in the McKinsey study below[10] — first chart below. Meanwhile, in the same study, the success rate in capturing synergies from costs and expenses is considerably higher — second chart below.



[10] https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/where-mergers-go-wrong#/



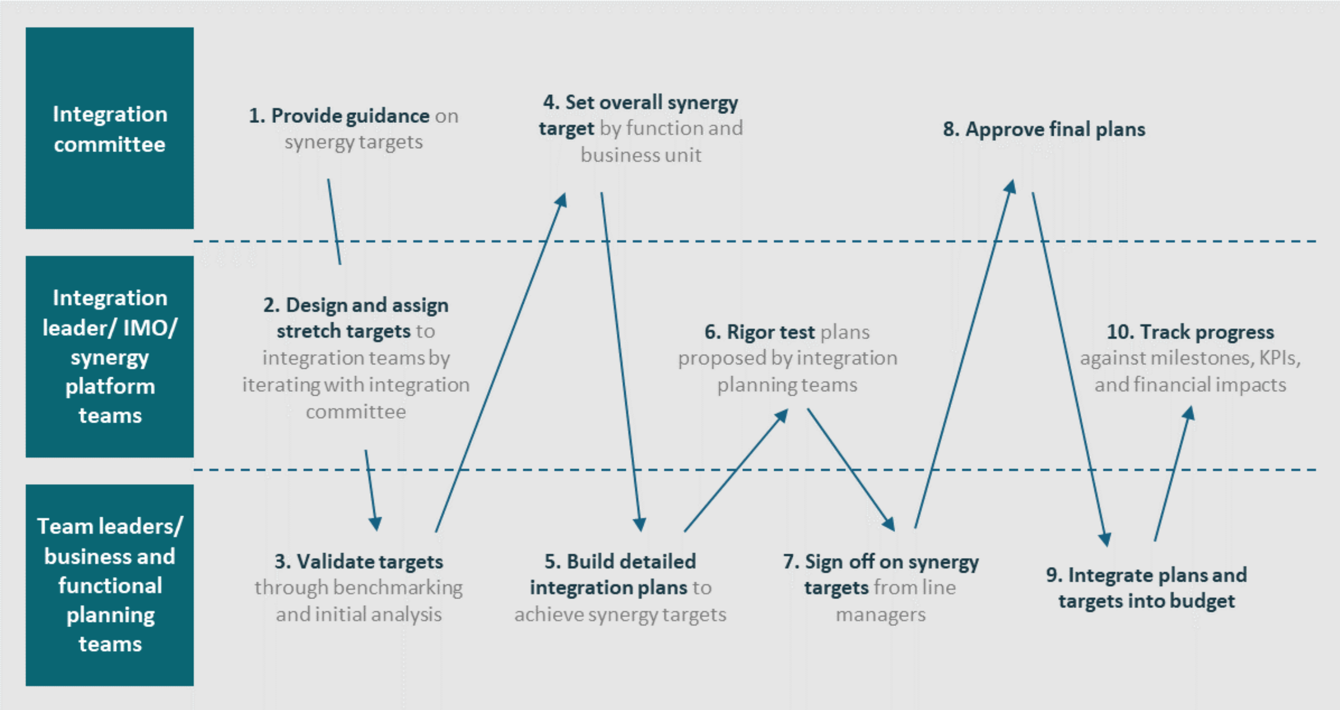
These historical data help us critically assess the synergy figures that company executives typically announce at the time of the *deal* announcement to the market, especially when referring to revenue synergies. In addition, the data forces us to take a conservative view and not anticipate this synergy potential or include it in our calculations to determine whether there is value creation for the acquiring company. We know there may be opportunities, but we prefer not to anticipate them.

On the cost and expense side, we should also not be entirely credulous. Bargaining power is difficult to measure and quantify, and the approach remains more qualitative. At the same time, when we speak of efficiency, larger and leading companies tend to be quite efficient, and capturing meaningful synergies on this front should not be straightforward. In any case, based on what we know of the business model, the *go-to-market*strategy, and the cost structure and positioning of companies in the value chain, we can estimate, case by case, an initial figure for synergies arising from lower costs and expenses.

We also estimate, case by case, an initial figure for gains on the tax front. The most obvious occurs when goodwill is recognized and an actual merger takes place. To estimate it, we use a simple calculation: how much was paid for the *equity* of the acquired company *versus* the shareholders' equity. The difference will be the goodwill we initially consider for our analysis, but we know that this amount will only be finalized at the *closing* of the transaction, together with the PPA (*Purchase Price Allocation*). In Brazil, this goodwill can be amortized in the IRPJ and CSLL tax base, generating a cash tax lower than the one recognized for accounting purposes.

Throughout the synergy analysis, we hold conversations with *stakeholders* to critically assess our initial evaluation, as well as the figures put out by the executives themselves. Indeed, executives and *Investment Bankers* are eager for acquisitions, and it is synergies that typically move stock market prices. That said, these agents tend not to be conservative in quantifying such synergies and are quick to announce them to the market. But it is when one gets into the concrete case — with the work of the *Clean Team* and after the *closing* of the *deal* with the beginning of the integration — that these executives will actually be able to have a more realistic assessment of what they will achieve. In this regard, an interesting *paper*[11] by BCG suggests an iteration model for refining *targets* during the integration process:

[11] https://web-assets.bcg.com/img-src/BCG-Six-Essentials-Achieving-Postmerger-Synergies-Mar-2017_tcm9-148629.pdf



With our synergy estimates in hand, we calculate their present value and compare it to the premium offered. As noted, value creation occurs when the difference between these two factors is greater than 0. It is important to remember, however, that there are numerous assumptions that may not materialize, such as the timeline for capturing synergies. The formula also does not tell us when the company would begin generating value; even though the transaction brings a positive NPV and this is a determining factor, the capture of that value may be far in the future, which adds more uncertainty to the conclusion.

Thus, given the complexity of reaching a precise valuation to quantify certain synergies, we propose analyzing in reverse. That is, how much synergy is necessary to compensate for the premium offered by the company. If this indicator is very high, we can interpret that the premium paid for the assets was elevated, it would demand greater attention during integration, and it would bring higher risk in capturing synergies in a way that they would be sufficient to offset such a premium. For this inverse perspective, we start from the relationship between the P/B multiple and the Spread between ROE and Cost of Equity.

From the perspective of the acquiring company, the ratio of the investment made by the acquirer — which we will call P — to the value we believe the asset is worth — which we will call B — will be the P/B ratio. And this ratio will hold the relationship between the Premium paid, the Cost of Equity, and the time factor.

$$P = B \times \frac{(1 + ROE)^n}{(1 + Ke)^n}$$

Thus, rearranging the variables:

$$ROE = (1 + Ke) \times \left(\frac{P}{B}\right)^{1/n} - 1$$

It is precisely the ROE in the formula above that represents how much the acquiring company will need to achieve after integration and synergy capture, relative to its investment made. For our calculations, we typically use our 5-year investment horizon to understand what return the offered premium will require.

Combined with a subjective view of this implied ROE, we also tend to compare it to what the acquired company has historically delivered without synergies. We draw a distribution of returns the acquired company has already delivered and check whether the implied ROE would be an *outlier* to that distribution. If it is well outside that distribution, we can infer that the realization of those synergies is more complex than it appears relative to what was offered for the company.

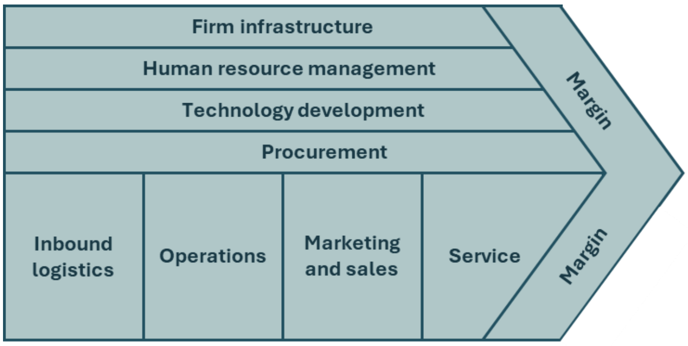
Sustainability of Synergies

The expected synergies also need to be sustainable over time. For this, we generally believe 4 pillars are required:

I. Strategic Communication of the new company
II. Operational Improvement
III. Systems Integration
IV. Cultural Integration

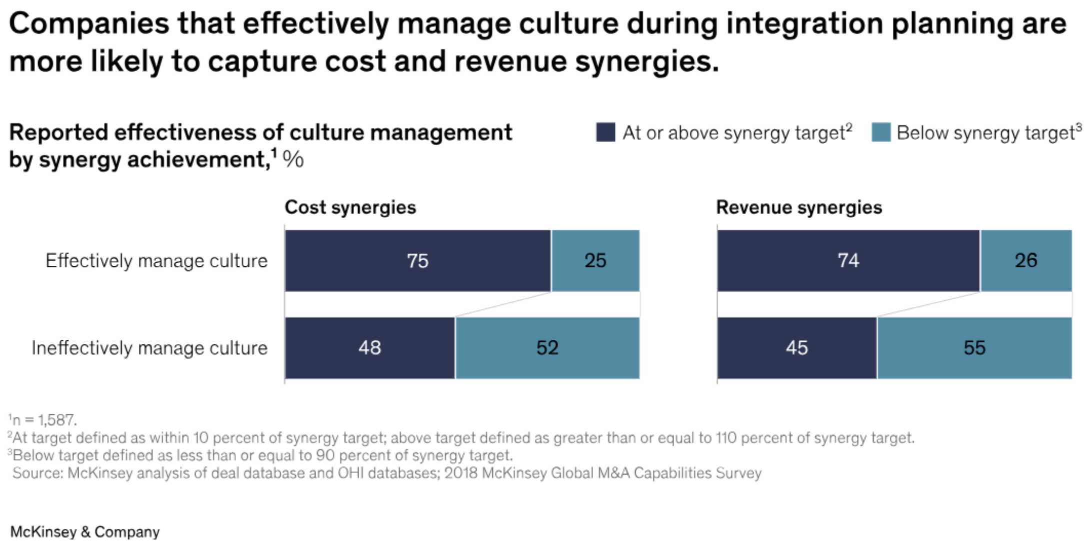
Strategic Communication is related to strategic positioning with customers, suppliers, and other *stakeholders*. That is, with the execution of the *deal,* the operational process typically undergoes change, as does the company's relationship with suppliers, customers, and competitors. Therefore, it is worth critically examining whether the transaction adds, for example, a product advantage and brings a differentiated value proposition to the customer; whether the supply chain is sufficiently flexible and able to handle the combination of the companies and the pursuit of synergies on this front; and what the competitors' reaction will be.

Operational Improvement is typically a pillar closely linked to the synergies we estimate, in a causal relationship. This improvement must be lasting — that is, the gain areas we mentioned, such as scale gains, specialization and niche, specialized human capital, better inventory and distribution management, among others, need to be permanent. Theoretically, operational improvement could come from any margin source in an organization's value chain as proposed by Michael Porter (image below). But naturally, some fronts are more complex than others, requiring more time and resources to achieve, and the prioritization of where to act initially becomes important.



Systems Integration is extremely critical and is a pillar for the perpetuity of synergies. Without it, we may conclude that the companies are not truly integrated and that operational improvement in some areas may be lost over time. Systems integration also typically generates operational synergies through the reduction of duplication, but it commonly brings many problems and demands the time and attention of many people in the combined company. It also tends to bring temporary additional expenses for operational security through the use of contingency systems for some time.

It is obvious that the combination of businesses also brings different cultures and people to the new company, and this tends to bring complexity to management. Some practices of the acquired company are naturally questioned by the acquiring company. If these practices have been established for many years and are deeply rooted within the acquired group or its management model, they can jeopardize the continuation of operations *as usual* and, of course, in the successful capture of the mapped synergies. Poorly handled cultural assimilation can lead to talent loss and may even result in part of the team no longer aligning with the strategic positioning of the combined company. Identifying management and cultural differences before the transaction is executed is important to know how to address this problem during integration. Failing to recognize them, on the other hand, is typically the death knell. A study by HBR[12], which identified the cultural factor as fundamental to the success of the *deal*, collected 4,500 M&As from 1989 to 2013 across 32 different countries and concluded that, on average, companies that were very culturally different and merged saw the combined business's ROA fall by 0.6pp. In another *paper*, this time from McKinsey[13], it is demonstrated that executives who focused on cultural integration in the planning of the merger have a higher probability of capturing expected synergies.



It is suggested that this acculturation process be *top-down*, but most importantly, employees need to be engaged. This task cannot be merely an item within the scope of the human resources department.

Having stated what we understand to be the pillars for the sustainability of captured synergies, it is important to highlight that the process of identifying and capturing them consumes focus — not only from the M&A team — as well as financial resources, and integration can last quite a long time. We also emphasize that during this integration process, competitors are not standing still; they are watching and moving, which can frustrate some synergy gains, or at least their perpetuity.

Value Creation

Value creation for the acquiring company in a transaction is a matter of NPV, but in our quantitative analysis of the *deal*, we do not regard this metric as sufficient. That is, the "NPV of the *Deal* for the Buyer" greater than 0 may be the result of a return that is quite distant on the time horizon, and the further out the assumed *payback* of the transaction, the riskier this "project" tends to be.

What we mean is that in this phase of our *framework*, we try to analyze M&A from the perspective of the acquiring company as a project seeking returns above its cost of capital within a time horizon we consider reasonable. Large transactions typically take more time for this to happen and carry more significant financial risks than smaller transactions. Therefore, if it is part of the strategy of one of our portfolio companies and they have a habit of making acquisitions, we prefer that they make smaller acquisitions.

Thus, our *framework* suggests analyzing this project year by year. We consider the capital outflow as the investment made, which is the subtraction between: i) the investment made in the acquired company (Enterprise Value) and ii) the NPV from the goodwill to be amortized for IRPJ/CSLL purposes; while we consider

[12] https://hbr.org/2018/10/one-reason-mergers-fail-the-two-cultures-arent-compatible

[13] https://www.mckinsey.com/industries/oil-and-gas/our-insights/the-importance-of-cultural-integration-in-m-and-a-the-path-to-success#/

the annual "cash" inflows as the operating result, which is the product of: i) the marginal IRPJ/CSLL tax rate (generally 34% in Brazil) and ii) the sum of the operating result of the acquired company plus the estimated synergies year by year (except the synergy from goodwill recognized and amortized for IRPJ/CSLL purposes). We consider the weighted cost of capital by the capital structure used in the *deal*.

We then analyze the return on the investment made and compare it with the cost of capital of the transaction, year by year. The positive trend of the *ramp-up* of expected synergy capture should imply that this return is growing, and at a constant cost of capital, we will have a positive trend toward value creation — in other words, a positive EVA momentum. This occurs by construction of the model, given that we assume synergies exist. If there are no synergies, or if they are difficult to measure and we do not include them in our assessment, the value creation for the buyer starts from the discount it achieved in purchasing the *target*.

The purpose of this step in our analysis is primarily to understand the reasonableness and risk that the value creation previously calculated as "NPV of the *Deal* for the Buyer" is implicitly carrying. If the value creation (ROIC – WACC) is well ahead in our investment horizon, this calculated NPV may implicitly be riskier. From there, supported by the previous phases of our *framework*, we are better equipped to critically assess the *deal*. Below, we have a numerical example in which we see the project "ramping up" with the capture of operational synergies and, from year T4 onwards, the project would already be generating returns above the cost of capital.

Premissas	
EV Transação	4,000,000,000.00
NPV Ágio	1,000,000,000.00
WACC da transação	10%

ROIC (SFA)	**T1**	**T2**	**T3**	**T4**	**T5**
Sinergias post-tax (SFA)	0.00	52,800,000.00	87,120,000.00	120,225,600.00	138,259,440.00
Projeção do Ebit Vendedora	200,000,000.00	230,000,000.00	264,500,000.00	304,175,000.00	349,801,250.00
Ajustes Ebit	0.00	0.00	0.00	0.00	0.00
Alíquota Marginal	34%	34%	34%	34%	34%
Nopat ex-Sinergias	132,000,000.00	151,800,000.00	174,570,000.00	200,755,500.00	230,868,825.00
Nopat (SFA)	**132,000,000.00**	**204,600,000.00**	**261,690,000.00**	**320,981,100.00**	**369,128,265.00**
IC (EV da transação - NPV Ágio)	**3,000,000,000.00**	**3,000,000,000.00**	**3,000,000,000.00**	**3,000,000,000.00**	**3,000,000,000.00**
ROIC Transação (SFA)	**4%**	**7%**	**9%**	**11%**	**12%**
WACC Transação	10%	10%	10%	10%	10%
Geração de Valor?	**-6%**	**-3%**	**-1%**	**1%**	**2%**

Above we can see the company's perspective. But it is worth noting that the shareholder's view may differ on account of leverage. ROE may exceed the Cost of Equity of the transaction before the same occurs from the company's perspective, for example.

Conclusion

The decision of how managers and executives allocate available cash — generated operationally or raised through financing, whether proprietary or third-party — is a key factor for their respective companies to continue gaining a prominent position in a competitive market and generating value for their shareholders. We like good businesses run by executive teams with an owner's mindset and long-term alignment. Therefore, we seek, among other things, these characteristics when we invest.

We also like processes. Processes bring consistency. That said, the idea of using a *framework* for M&As is not to rigidify our interpretation or reduce our curiosity or questioning, but rather the opposite: to bring greater critical capacity to the analysis of the *deal* as a whole. The *framework* also contributes to having a value-creation view of the investment, which we appreciate more than simply considering EPS *accretive* or that the new company will trade at the acquirer's multiples — generally higher — and from this conclude on the transaction and the strategy adopted.

It is important to emphasize that the choice of inorganic growth is one of the most complex from which to extract value when it comes to acquisitions with certain characteristics, especially when they are large and transformational transactions. The challenges are many, the market is not standing still, and integration requires time and focus to extract the maximum possible synergies relative to the premium offered by the selling company.

At SFA, capital allocation plays an important role in our company analysis methodology. Through this letter we were able to demonstrate a little of how we address this topic. Analyzing businesses in depth is at the core of what we do and is the foundation for good investment decisions.

We thank you for your trust,

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