

Paths of Growth

Growth is the essence of business. Decisions based on growth infuse companies with energy and vigor. Companies that grow reveal their purpose of facing the unknown. Deliberately taking the path of growth is a manifesto for corporate self-confidence and, at the same time, an outspoken challenge against complacency.

For investors, it's an essential dimension. Adequately accounting for growth opportunities constitutes the primary criterion separating successful and unsuccessful investments. Growth anticipated in valuation and then not delivered means definite capital loss upon the implacable adjustment of frustrated expectations. Growth not anticipated by the market and effectively delivered comprises the holy grail of the asymmetry every investor seeks.

As our dear readers know, our investment approach here at *Dynamo* can be defined as essentially bottom-up. The starting point and final goal of our analyses are the companies and their environs. We have no other proven recipe we consider relevant to help us in this dry task of understanding such complex realities. Nevertheless, we continue to pursue mental models that can serve as valid support for our analysis. As an exercise of this constant search, lately we've been revisiting the topic of growth. The relevance of this topic, as we see above, justifies the effort. The unpretentious proposal of this Report and the next consists of sharing what we've learned along the way with those who join us on our journey.

For our itinerary, we'll begin this Report by reviewing an important bit of theory from the literature and scanning through a few results from empirical studies. Next, we'll discuss the culture of company growth, its determining factors and implications, and conclude with a brief description of the classic alternative strategies for expanding businesses. In the following Report, informed

by other disciplines' contributions to this topic, we will study the standard format of company growth over time. Next, we'll discuss the more recent phenomenon of digital companies and how they escape from the traditional growth model. We will conclude with some more "systemic" notes, where we comment on our ESG perspective about this topic.

Theory

Unfortunately – or fortunately –, traditional economic theory has scant few useful things to tell us about the world of companies. Classical economists, who are more concerned with economic development, have not delved deeply into the microeconomic reality of businesses. The neoclassical tradition, striving for mathematical rigor and elegance, laid its foundations on assumptions that are such oversimplifications as to be almost caricatures. A firm is a monolithic entity whose only purpose consists of maximizing the results of the production of homogenous goods. Based on known facts regarding its endowment with certain factors, production roles, and demand levels, it is up to the company to find its "ideal" size and then simply remain at rest, in "balance."

Believe it or not, it wasn't until 1959 that we first saw a work devoted exclusively to studying the fundamental dimensions of company growth. *The Theory of the Growth of the Firm* (TGF)¹, by Edith Penrose (EP), became a seminal thesis that any conceptual discussion about this topic must consider. Penrose distanced herself from the neoclassical tradition and inaugurated an approach that was later named "resource-based theory." For Penrose, a firm is defined as a "collection

¹ As usual, all references cited in this Letter and the next can be found on our site at the following link: <https://www.dynamo.com.br/pt/biblioteca>

of productive resources" (physical and human resources) that are organized under and coordinated by a coherent administration for the production of goods and services and their sale, on the market, at a profit. Though the pool of available resources is the starting point for the company's organization, the central elements of her analysis are individuals. How the administration organizes itself, how the individuals relate with one another, and how the company's executives read the business environment – these are the elements that determine each company's set of opportunities, and, as a result, its growth pattern. Growth opportunities derive from the subjective actions of the company's executives and, ultimately, from how the administration acquires knowledge over time. Under this perspective, growth is defined essentially as an evolutionary process involving the company's accumulation of collective knowledge. In this sense, EP's firm theory is a type of theory of knowledge, where the history of learning matters.

Realizing that new opportunities, whether on the market or within the organization's own borders, depend on the quality of the administration's "entrepreneurial faculties" is an important and very contemporary insight. More than being good operational managers responsible for the more routine business tasks, Penrosian executives must possess business vision and imagination and be well-trained at reading the set of opportunities available in their environment. This is an essential trait, especially in our capital market, which is increasingly inhabited by corporations and where reference shareholders no longer exist to single-handedly guide strategic business decisions. In addition to executive appointments, CEOs of dispersed owned companies are expected to have this tacit – and rare – skill of imaginative inspiration, which produces the spark of genuine business discoveries.

Just as human resources are ultimately responsible for inducing growth, so too are they the elements that inhibit it. For Penrose, experience acquired internally becomes essential for developing specific skills and "building authority" to carry out the necessary decisions. The more complex a company and its business, the more knowledge is needed for coordination and planning, making the seniority of the team of executives and founders more and more significant. The limits of decision-makers' internal capacity to assimilate knowledge, plan, coordinate, and supervise are a central constraint on the growth of firms (what has come to be called the Penrose effect). In other words, the speed at

which the firm can develop its managerial capabilities sets the limits to its growth.

For EP, organizational abilities are built as a group. An "administrative group" works like a "unit" and "is something more than a collection of individuals; it is a collection of individuals who have had experience in working together, for only in this way can 'teamwork' be developed." As something that is constructed collectively, in a sense the growth process should not be attributed to isolated contributions: as the firm grows and the management team expands, "the influence of 'temperament' and personal attitudes of individual men tends to decline and the role of 'group action' rises in importance." Nothing could be closer to our understanding of what constitutes well-designed internal organization, which is what we strive to pursue here at Dynamo.

"Growth is a process; size is a state." "Economies of size" are present when large firms gain efficiency by producing more. "Economies of growth" are the internal economies derived from the exclusive base of productive assets that create competitive differentiation for the firm when it expands into a new market or produces greater volumes of the same products. Economies of growth can exist for any size, and may bear no relation to the firm's size before expansion, nor to gains in manufacturing efficiency resulting from increased large-scale production. "Economies of growth" depend on the collection of productive resources, and the benefit derived from them is independent of the firm's size at that given time. Thus, efforts to expand without sufficient planning and preparation may not result in "economies of growth."

TGF is naturally set in the context of its time (1959), when resource mobility and knowledge transfer took place much more slowly. The prevailing understanding was that firms' specific talent requirements could not be easily met by the market. That is why EP suggested that one way of overcoming limitations on internal capabilities would be through the routinization of tasks, which would free up existing cognitive resources, allowing the organization to consider new sets of possibilities.

Organizational resources thereby learn and reconfigure themselves, formatting new production options to be explored by the firm. That's growth. EP explains that, "in the long run, the profitability, survival, and growth of a firm does not depend so much on the efficiency with which it is able to organize the production of even a widely diversified range of products as it does

on the ability of the firm to establish one or more wide and relatively impregnable 'bases' from which it can adapt and extend its operations in an uncertain, changing, and competitive world." This is a contemporary warning that long-term survival in a competitive and uncertain environment depends more on being able to adapt/innovate than on obsessing over costs, or as has been said, the "tyranny of efficiency."

Sixty years after TGF was published, we still lack a robust theory of company growth. From a speculative and conceptual perspective, it has been somewhat disappointing to see such a vacuum. After all, firms are the core units of productive organization, where innovation takes place and where knowledge is furthered. The company is what moves the gears of economic development, invariably spreading social welfare to the communities it reaches. Today, it is already known that differences between productivity and the wealth of nations can be largely explained by the different capacities of the companies that make up a given economy (Sutton, 2012).

Empirical Tests

Even without a well-defined theoretical direction, the empirical literature continues to produce abundant material. Companies leave perceptible quantitative traces, and this enormous volume of available data has been used by countless econometric studies in attempts to test variables that would explain companies' growth dynamics. For investors like us, this is an exercise that's easy to justify. Is it possible to identify, *a priori*, elements whose mere presence would increase a company's growth power? Setting aside any criticism of the econometric technique's capacity to effectively explain causalities, let's look at a brief summary of these studies' main results.

One of the pioneering efforts to try to understand the dynamics and organizational structure of certain industries was based on analyzing the statistical distribution of company size. After studying the distribution of the sizes of manufacturing establishments in France, Robert Gibrat postulated, in 1931, that the growth forecast for a given firm would be independent of its size at the beginning of the examined period, which became known as the Law of Proportionate Effect, or Gibrat's Law. The law, in its milder version, would entail that the growth of firms can be modeled as a stochastic process

of passive absorption and accumulation of external shocks. Growth is said to take place idiosyncratically, at the sole discretion of their individual histories, without systematic scale effects, and should therefore follow a random path. In other words, the size of a company at any given moment does not in itself provide any insight into its future growth trajectory. A significant part of the empirical tests produced after Gibrat have intended to confirm – or refute – this claim.

And there are results for both sides. Many have found evidence reinforcing the perception that Gibrat's Law applies to companies above a certain size. Others have found stronger evidence that size and growth are negatively correlated, which is more in line with the reasoning that smaller companies tend to grow more. Also, intuitively, tests indicate that the bigger the company, the less variance there tends to be in its growth curve. Age, which is certainly correlated with size, has also been tested, with similar results: most studies show strong evidence that age and growth are inversely related; older companies tend to grow less. But some have indicated the opposite (Das, 1995).

As for the question of how much past growth explains current growth, known as serial correlation or autocorrelation, the results also seem quite fuzzy. *"To summarize these regression-based investigations, then, it would appear that decades of research into growth rate autocorrelation can best be described as yielding 'conflicting results'"* (Coad, 2007).

Another candidate/suspect that has been broadly probed is innovation. And, here, an entire Report could be written on the subject. In this case, the theory points to a consensus. There is a pervasive understanding that companies that innovate tend to display higher growth rates. However, the empirical evidence is not so clear-cut. This may be due to the challenge of measuring causality with the two main proxies selected, R&D expenditures and patents. Irrefutable evidence is found in tech companies that grow at accelerated rates². But in traditional manufacturing companies, the association is not so obvious. When growth is measured in terms of employment rather than revenue, the relationship between innovation and growth becomes even more

² In fact, as we will see in the Letter to come, in digital environments innovation is the main fuel for growth.

opaque, since many process innovations tend to increase productivity per employee and may cause layoffs.

Financial conditions, notably in the form of investment capacity, have also been investigated. The hypothesis here is that, in a competitive environment, firms compete for scarce growth opportunities, and those with superior financial performance should be better able to capture them. Again, good literature reviews point to inconclusive results: *“A common finding in these approaches, however, is that financial performance does not seem to be an important determining factor of firm growth, whether this latter is measured in terms of investment or sales growth”* (Coad, 2007).

The same argument of competitive pressure suggests one more variable to be tested: relative productivity. Under this hypothesis, more productive companies should grow at higher rates. Once again, the evidence does not support the premise. Here, perhaps, the best explanation is that while some companies become very productive by growing, others achieve high levels of efficiency by downsizing. And then there are those niche companies that remain highly efficient and profitable, focused on their markets, with no desire to expand.

The analysis of incentives and capital structures has also received a great deal of empirical research. The hypothesis here is that professional executives with private agendas involving ambition for power (“empire building”) or maximizing compensation (“financial incentives”) should be more inclined to promote growth. Again, the empirical results are not entirely conclusive: in some comparative studies, owner-controlled companies showed higher growth than those where executives were in control. Studies focusing on growth via diversification do suggest that growth tends to be higher where executives have the ultimate decision-making power. In contrast, these discrete growth spurts usually come at the expense of the company’s financial performance.

Another more recent line of research has sought to go further and investigate not just whether firms grow, but what elements would make them grow “persistently.” And here the results have been even more dismal. *“We do not find evidence of any systematic difference between high-growth and persistent high-growth firms, nor in terms of operating efficiency, neither in terms of the other considered dimensions”* (Bianchini *et al.*, 2015). In other words, most of the elements that could supposedly explain growth—productivity, profitability,

innovation – are not usually correlated with persistent growth. This corroborates the previous empirical findings that concluded that the growth of firms seems to be much “lumpier” than imagined by traditional models (Dosi *et al.*, 2019), or the suspicion that high-growth firms are just “isolated successes” (Daunfeldt and Halvarsson, 2015). From a statistical point of view, later econometric studies have reinforced Gibrat’s initial suspicion that the frequency distribution of the growth of firms would be skewed to the right. This reflects the fact that a very large number of firms grow only a little, and those that do grow quickly for a short period of time.

The fact is that our skim through the literature of econometric studies was not able to identify with any reasonable degree of assertiveness the elements responsible for inducing the growth of firms. We investigated some suspicious elements (size, age, financial performance, innovation, past growth, industry-specific aspects) that, intuitively, should provide valid clues, but the explanatory power of these regressions invariably proved to be quite low. Considering how difficult it is to identify the determining factors for growth, just imagine making projections for the future. This explains why the almost centennial aphorism, of growth being a random statistical phenomenon, is still so present in the literature of empirical tests.

Determinants, Desires, and Challenges

The limitations of quantitative techniques to explain causality in complex phenomena are well known. Not everything that can be measured matters, and what matters cannot always be measured. Nevertheless, statistical results interpreted in the light of subjective elements bring clarity. We saw, for example, that the financial performance variable proved to be statistically insignificant in explaining growth. The ability to grow differs from the desire to grow. Sometimes the conditions are in place, but companies prefer not to grow. On the other hand, there are cases where the financial situation does not recommend it. Even so, many companies opt for the adventure of expanding by stretching the rope of leverage.

Various arguments make growth desirable. Growth accommodates ambitions and relieves internal tension. Companies that grow are usually imbued with a more vibrant and self-confident atmosphere. Horizons expand, and with them comes the purpose of self-improvement,

the work becomes more exciting, and the chances of becoming complacent or falling into a rut are reduced. It becomes easier to obtain commitment toward corporate goals, to unite aspirations toward a future point, to recruit an owner-entrepreneur mentality, to resolve conflicts between competing perceptions, and to form a culture around imagining what can be achieved. Growth is also closely associated with the interests of those who promote it, bringing financial reward, power, prestige, privileges, promotions, and mobility in the hierarchy. From a strategic point of view, growth can be associated with gains from economies of scale and scope, benefits from a larger market share, displacing competitors, retaining talent, or diluting specific risks of a given market, in the case of diversifications.

On the other hand, growth also brings challenges and drawbacks. Growth requires constant learning, redoubled focus and discipline, and coordinated group efforts from the entire company. Growth takes change. Often, it demands adjustments to the business model, to the value proposition for clients/consumers, or to the talent pool, moving the company out from its comfort zone, from its equilibrium. The sense of security gained from predictability gives way to the discomfort of uncertainty. In order to deal with the new, growth is intensive in process, controls, and systems. As companies grow, they tend to have more operational complexity and coordination problems. New layers of hierarchy are needed, creating bureaucracy and increasing fixed costs/administrative overhead. It is always easier to add people than to remove them. Size can become an internal enemy that is difficult to fight. Fiefdoms are formed, crystallizing ideas and spawning “this has never worked here” syndrome.

The closeness and benefits of the “founder’s mentality” are gradually diluted, giving way to the “curse of the matrix,” where “energy vampires” laze around inventing meetings and firing off spreadsheets (Zook and Allen, 2016). Larger companies often become less attractive environments in which to work. They tend to become less dynamic and adaptable. Responses become slower and effective decision-making power becomes more diluted. Agility and independent decision-making give way to the need for reports, rites, protocols, and processes. Entrepreneurial eagerness, shared purpose and team spirit are stifled by operational imperatives, by a culture imposed from above, and by personal competitions to occupy boxes on the organizational chart.

External elements – institutional, regulatory, competitive – are often determining factors in decisions about whether or not to grow. Some smaller companies benefit from remaining within a bracket for tax incentives. Other, medium-sized companies see in growth the chance to gain political clout and access to important channels with the public power. There are also those that decide not to grow their revenue in the short term and instead opt to keep prices low in order to hold back their competitors. Some entrepreneurs prefer not to grow their business. And they justify this decision, which increasingly infrequent, with a fear of losing control and quality in their operations. In fact, growth requires some level of tacit knowledge transfer, with the risk of losses in this translation process.

Successful companies become islands of prosperity and pioneering spirit. In developing countries such as Brazil, companies often need resources or infrastructure that are not yet available in order to carry out their intended growth. Investments need to be made outside of the company’s walls, whether in physical assets or in training and developing partner companies, in order to overcome structural deficits in the environment, bringing clear external benefits for society. Thus, countless companies in the industrial sector have had to build stretches of road, bridges, railroads, or port terminals in order to make new manufacturing units feasible. Renner has developed multiple levels of suppliers by creating a seal of approval. Mercado Livre has organized a logistics and shipping system that complements the federal Post Office. MRV has redesigned civil engineering methods, bringing greater efficiency and important developments to the construction sector production chain.

Since EP, growth is understood to be a deliberate and intentional process. It results primarily from human desire, from a business decision made by the management, and is not a passive response to external shocks, nor even less a simple reaction to technological events. But just wanting to grow is not enough. Companies need to develop the ability to recognize genuine growth opportunities in an environment of continuous transformation. In this sense, each leap in growth is unique. To grow is to explore the unknown, an inherently uncertain process that always involves new iterations. Reallocating internal resources, expanding or creating routines, establishing new connections. Growth never repeats the same way. Maybe this is why it is so difficult to preemptively ensure every initiative is successful.

Growth is a dynamic phenomenon that extends over time, not an instant response to an opportunity the market offers at a given time. It is an eminently qualitative movement. Growing does not just mean getting bigger, growing involves important transformations in the company's internal gears. Growing necessarily takes the company out of its natural balance.

To simplify in the form of an allegory, the question of growth is like the sport of target shooting. On one side, we have the shooter's skill and preparation: the company's portfolio of internal capabilities. On the other, a constantly-moving target: the set of opportunities in a changing environment. A successful growth initiative occurs when these two sets of elements are coordinated. Most of the time, the shooter either is not properly positioned, has not properly calibrated the distance, or has not realized that the target has reached a good position. Other times, it happens that the shooter did everything right, but the target did not attain the proper trajectory and failed to offer an opportunity for the shot to be taken. Internal capabilities and external opportunities have not met.

As time passes and the target doesn't move, psychological pressures bear down more intensely on the shooter. These are the internal tensions within the company that translate into frustration and impatience, increasing the chances of an untimely shot. At the other extreme, when the bullet hits the target, the shooter's self-confidence score rises, and with it the chance of firing the next shot prematurely. All in all, an extremely challenging and complex operation that involves precisely coordinating elements that behave quite differently. And that is why statistical techniques, which are only quantitative measures of the shots, fail to adequately capture intentional patterns in these intertwined subjective ingredients and end up concluding that this is an exercise where positive results appear randomly.

Growth can occur by replication or diversification. It can be organic (internal) or inorganic (acquired). Replication is applying an already known format in another situation. It occurs when a retail company opens a store in a new region, or when an industry establishes a new factory for the same product or a new distribution channel. It's a type of expansion based on using a known resource base that is either identical or very similar, which offers operational synergies. There are various levels of replication. For example, after some

compliance problems, Intel decreed, as an industrial policy for processor production, the express order to copy the instructions in the manufacturing manuals exactly. On the other hand, retail chains try to adapt the product mix in each new store to each region's socioeconomic and weather conditions. By its nature, replication involves less implementation risk, since we are dealing with "shifting" known elements. Nonetheless, because the knowledge generated internally within companies is often tacit and difficult to transfer, there are risks of losses in these expansion moves. Replicating routines and processes is easier, but reproducing culture and involvement is another story.

Diversification involves expanding into new activities, usually related to the existing resource base. This idea entails the assumption that management is an "amorphous substance" that can be successfully applied to different business lines. Naturally, the farther from the company's core competencies, the riskier the diversification move will be. In the Penrosian view, diversification strategies should focus on how to best explore the possibilities of the firm's current resource base. Only after it has exhausted every alternative for recombining existing resources should diversification projects for adjacent lines or internationalization be considered.

Although diversification strategies are more closely associated with acquisition, and internal or organic growth with replication, in fact, an initiative to diversify can also take place organically. This occurs mainly when synergies between the company's activities and the target industry are high and when there is time to develop and integrate capabilities. On the other hand, when there is an urgent need to acquire new capabilities or incorporate critical management resources, acquisition proves to be the best option. Acquisition is also recommended when market shares are already more established and there is little room for a new player.

Empirical analysis of the effects of acquisition-based diversification strategies indicates that they have become more harmful than beneficial. Acquisitions are often expensive and generally fail to achieve desired objectives. There is evidence that executives' conflicting interests – and psychological biases – prevail over shareholders, leading to poor economic results.

Ansoff Matrix

Understanding growth is vital for businesses, so growth analyses have become enormously important within the strategic planning literature. Numerous frameworks have been proposed to describe the strategic alternatives and provide practical insights to guide companies along this uncertain journey. Our literature review has already gone too far and our goal here is not to dwell too long on this vast material. We have therefore selected just one of these models for the sake of illustration. For its simplicity and elegance, we will stick to a classic, the Ansoff Matrix³.

The matrix shows us, in a simple schematic, four possibilities of strategic growth for companies, divided into new or existing products and markets (see Figure 1). If the goal is to grow by doing more of the same, by offering products already in the portfolio at markets where the company already operates, this is a strategy of diving deeper, or pursuing greater *penetration*. When the decision is to offer the same product at a new market, we are looking at a *market development* strategy. When using the established customer base to test the viability of a new product, we are in the *product development* quadrant. Finally, if the idea is to reach a new consumer base with products that have not yet been launched, the strategy involves more novelty and greater risk, and is called *diversification*. Naturally, strategies are not mutually exclusive, and in practice companies move through all quadrants in search of opportunities.

Individuals – and companies – are naturally risk-averse. Not surprisingly, the preferred growth strategy for companies is to make existing products penetrate into familiar markets. Nothing is more seductive than reaping the benefits of growth while remaining in a familiar comfort zone.

Studies show that anywhere from 75% to 95% of corporate resources allocated to innovation are spent on projects that attempt to improve the performance of existing products or add only marginal improvements to the current product portfolio. Only 25% of capital is

		Products	
		Existing	New
Markets	Existing	Market Penetration	Product Development
	New	Market Development	Diversification

invested in projects that would take the company into a competitive territory where it still doesn't operate. However, evidence shows that strategies that devote significant resources to breakthrough projects obtain disproportionate gains. In other words, companies under-exploit the regions where the highest payoffs are found.

This seems to be typical of established companies in the traditional economy: limiting their innovative and exploratory campaigns to just the fringes of the territory that made them successful. Established organizations are designed to produce standardized, low-variance results through careful implementation in highly predictable scenarios. From this perspective, growth and innovation can be seen as inherently more confusing and "inefficient" initiatives. Unlike implementation, exploration is a high-variance activity. Culture, mindset, and processes focused exclusively on careful implementation do not provide adequate incentives to explore the unknown, and thus end up reducing the spectrum of strategic possibilities with drastic consequences for the profitability and survival of the business.

Not to mention the internal misconfigurations that lead to distortions and problems in group actions. Often, narrowminded implementation and an emphasis on measuring performance lead to defining isolated roles where each manager becomes responsible for only its "own" project. In the project manager's limited view, the closer they stay to the company's core competencies, the less risky "their" project theoretically becomes. This organizational design can prove to be a subtle trap. By

³ Igor Ansoff (1914-2002), an engineer with a doctorate in applied mathematics, worked in companies and eventually dedicated his career to academia, where his contribution is best recognized. He published *Strategic Management* in 1965, and is considered by many to be the father of strategic management. The Ansoff Matrix first appeared in 1957 in an article in HBR.

creating incentives for employees to slice risk-taking, companies end up missing relevant opportunities. In this case, a more “corporate” or systemic viewpoint should permeate the whole process.

Yet some companies underestimate the potential for penetration in their markets. They think like a monolith and fall hostage to diagnostics and perspectives conceived of in the past. After having built their own road to dependence, they can no longer see opportunities where they have been working for many years. Alpargatas is an example of how to continue extracting value from an apparently mature core market. In 2005, the company sold 136 million pairs of Havaianas sandals in Brazil, a market with a population of 184 million people. In theory, three out of four Brazilians bought a pair—an extraordinary ratio that seemed insurmountable for a consumer product seen as an “accessory.” But not at all. In 2019, the company sold 212.9 million pairs, reaching the equivalent of one pair per inhabitant. A more granular brand management, employing market segmentation and increasing the number of SKUs, allowed for sales of almost 65 million additional pairs during the period, or 44% growth over the baseline “ceiling” of 2005. And there appear to be even more opportunities. Maybe not by expanding volumes, but by extracting value over the distribution chain. Growth is still possible, but from now on, probably driven more by margin rather than revenue expansion.

After the possibilities for expansion in the core market are exhausted, the natural next strategy usually consists of scanning adjacent markets. In Ansoff’s matrix, we are now in the *market development* quadrant. At a time when accelerating technological innovations are disrupting business models previously thought to be impenetrable, relying exclusively on a single market can, more than ever, prove as frustrating as a ticket to the Titanic. Markets where dominance is exerted become prime targets for new players, and incumbents are under continuous attack. What’s more, moving into adjacent segments reflects a willingness to adapt that is critical to escaping the complacency and inertia that typically afflict market leaders.

Despite the general perception that this is a lower-risk strategy, studies show that over 70% of attempts to win adjacent markets result in failure; i.e., practically the same success rate as other innovation projects. The

explanation for such a disappointing statistic might be a certain corporate arrogance of relying too much on the similarity of the markets and believing that adjacent expansion will be a natural result of success in the core market. In fact, investing in adjacent markets requires a meticulous penetration strategy and precise implementation. The store opening and geographic expansion processes of Renner and RaiaDrogasil are benchmarks of successful strategies in this quadrant.

Sometimes, the market development strategy involves redefining the scope of the addressable market. In this concept, by expanding the boundaries of a certain industry, an 80% market share turns out to actually be less than 20%. In other cases, it can be a matter of reinterpreting the purpose, and consequently the scope, of the product/service offered. Thus, Starbucks reconfigured the coffee business and Cirque de Soleil brought a new concept of entertainment to the traditional circus. Changes in culture and consumer behavior, which are increasingly present in our social fabric, also reveal this quadrant’s opportunities for attentive companies. For example, Localiza has posted significant revenue growth owing to daily rentals for app drivers and for individuals who have decided to go carless. The company was attentive to these transformations and has recently started offering a new leasing option for individuals.

The most-tested growth strategy for companies consists of taking advantage of their current customer base and offering them new product/service lines. It may be a common strategy, but it also requires careful planning and management skills, for it involves bringing together rare elements such as in-depth knowledge of customer needs, a sophisticated creative process that includes designing, developing, and evaluating a product whose value proposition has to be quite unique, in addition to a go-to-market implementation that does not allow for backsliding. The case of Nike, which gained space in the competitive sportswear market from its position in the sneaker segment, has become a reference in each and every one of these aspects.

Weg is another extraordinarily successful example of how a company expanded its product portfolio, starting with its core business of manufacturing a groundbreaking electric motor. A hallmark of Weg’s strong corporate culture has been an in-depth understanding of its customers’ needs. From the beginning, in ever-expanding concentric circles, the company has added

adjacent businesses such as large machine manufacturing, motors operators, transformers, industrial paints, and automation.

Winning new markets with new products is the riskiest strategy, but at the same time the one that offers the most distinctive payoffs. *Diversification* requires a specific mindset. The company culture needs to be particularly prepared, which includes a certain degree of unattachment to the merits of what has already been built, as well as the humility to recognize that what will bring future prosperity is probably not yet at the company. There are various motivations to embark on the route to diversification: overcoming technological obsolescence, distributing risk, making use of idle resources, reinvesting profits, gaining access to higher-quality management, reinvigorating the brand/product portfolio, among others. Diversification can be organic, if it is promoted from the company's internal production resources, or inorganic, if it is implemented by means of mergers, acquisitions, or incorporations.

As we have seen, in Penrose's view, firms are made up of indivisible, specialized, and specific competencies. As such, they should prefer organic diversification, which better explores the idiosyncrasies of their existing resource bases. Larger companies, however, have often pursued inorganic diversification strategies. One explanation lies in an obsession with large projects, where the prevailing view is that numerous smaller initiatives only scatter the business's focus and control capacity. The mantra is to not waste time on small things. Associated with the mentality that "bigger is better" is the ingrained perception that executives have to prove the value of an idea before committing resources to it. The combination of "big bets" and the need for "proven evidence" pushes companies toward a preference for M&A, which seem more controlled and predictable. In theory, acquisitions make sense when there is an interest in participating in businesses where market shares are already stable and there is little room for a new player. On the other hand, acquisitions have higher implementation risk and usually involve non-trivial issues related to integrating people, culture, processes, and systems. In fact, empirical evidence shows that the declared synergies are often overestimated and that the number of unsuccessful acquisitions outnumbers the successful ones.

Still, a McKinsey study (Baghai *et al.*, 2007) analyzing the growth pattern of large companies in the United States in the years 1999-2005 found interesting results. The authors dissected each company's growth by explaining it in three categories: i) markets where they operate, which they called "portfolio momentum"; ii) mergers and acquisitions; and iii) market share. Overall, each category accounted for 43%, 35%, and 22%, respectively. In other words, 78% of growth would be explained by where the business chooses to compete (portfolio momentum + M&A) and only 22% by increased market share. The authors concluded that strategic decisions would be more significant than implementation to determine business growth.

The most extreme model of an acquisition-oriented strategy is found precisely in companies that make diversification their core business. These are the holding companies, the best known of which is Berkshire Hathaway. Originally a textile company in the 1960s that later went bankrupt, under the long and incomparable leadership of the Buffett/Munger duo, Berkshire Hathaway has become a factory of successful acquisitions and one of the world's largest companies by market value. Buffett, who knows the challenges inherent in corporate reconfigurations, recently wrote in a letter to his investors about some advice he received from a Berkshire board member, a simple lesson that is especially useful for anyone who wants to play the acquisitions game: "To achieve a reputation as a good manager, just be sure you buy good businesses." In a

Dynamo Cougar x IBX x Ibovespa Performance up to November 2020 (in R\$)

Period	Dynamo Cougar	IBX	Ibovespa
60 months	207.4%	144.9%	141.3%
36 months	112.4%	55.3%	51.3%
24 months	87.6%	24.9%	21.7%
12 months	30.9%	1.7%	-0.6%
Year to date	19.9%	-5.2%	-5.8%

NAV/Share on November 30 = R\$ 1.595,0572862

DYNAMO COUGAR x IBOVESPA

(Performance – Percentage Change in US\$ dollars)

Period	DYNAMO COUGAR*		IBOVESPA**	
	Year	Since Sep 1, 1993	Year	Since Sep 1, 1993
1993	38.8%	38.8%	7.7%	7.7%
1994	245.6%	379.5%	62.6%	75.1%
1995	-3.6%	362.2%	-14.0%	50.5%
1996	53.6%	609.8%	53.2%	130.6%
1997	-6.2%	565.5%	34.7%	210.6%
1998	-19.1%	438.1%	-38.5%	91.0%
1999	104.6%	1,001.2%	70.2%	224.9%
2000	3.0%	1,034.5%	-18.3%	165.4%
2001	-6.4%	962.4%	-25.0%	99.0%
2002	-7.9%	878.9%	-45.5%	8.5%
2003	93.9%	1,798.5%	141.3%	161.8%
2004	64.4%	3,020.2%	28.2%	235.7%
2005	41.2%	4,305.5%	44.8%	386.1%
2006	49.8%	6,498.3%	45.5%	607.5%
2007	59.7%	10,436.6%	73.4%	1,126.8%
2008	-47.1%	5,470.1%	-55.4%	446.5%
2009	143.7%	13,472.6%	145.2%	1,239.9%
2010	28.1%	17,282.0%	5.6%	1,331.8%
2011	-4.4%	16,514.5%	-27.3%	929.1%
2012	14.0%	18,844.6%	-1.4%	914.5%
2013	-7.3%	17,456.8%	-26.3%	647.9%
2014	-6.0%	16,401.5%	-14.4%	540.4%
2015	-23.3%	12,560.8%	-41.0%	277.6%
2016	42.4%	17,926.4%	66.5%	528.6%
2017	25.8%	22,574.0%	25.0%	685.6%
2018	-8.9%	20,567.8%	-1.8%	671.5%
2019	53.2%	31,570.4%	26.5%	875.9%

2020	DYNAMO COUGAR*		IBOVESPA**	
	Month	Year	Month	Year
JAN	-0.1%	-0.1%	-7.1%	-7.1%
FEB	-13.0%	-13.0%	-13.1%	-19.3%
MAR	-41.2%	-48.9%	-39.3%	-51.0%
APR	10.6%	-43.5%	5.6%	-48.3%
MAY	9.9%	-37.9%	8.6%	-43.9%
JUN	12.1%	-30.3%	7.8%	-39.5%
JUL	18.0%	-17.8%	13.9%	-31.1%
AUG	-3.5%	-20.7%	-8.2%	-36.7%
SEP	-5.4%	-25.1%	-7.0%	-41.1%
OCT	-1.3%	-26.1%	-3.6%	-43.2%
NOV	22.9%	-9.3%	25.5%	-28.8%

Average Net Asset Value for Dynamo Cougar
(Last 12 months): R\$ 5.361,5 million

(*) The Dynamo Cougar Fund figures are audited by Price Waterhouse and Coopers and returns net of all costs and fees, except for Adjustment of Performance Fee, if due.

(**) Ibovespa closing.

holding company, the art of managing well is intertwined with the art of knowing what and how to buy.

Here in Brazil, one holding company that has chosen the path of diversification is Cosan. From its initial sugar and ethanol business, the company capitalized on opportunities to accelerate growth by becoming a holding company with investments in fuel distribution, lubricants, power generation, a natural gas distributor, and has already spun off investments in logistics. With this, Cosan was able to dilute the volatility typical of a commodity (sugar) from its initial business by building a more robust and resilient investment portfolio. The recent market crisis caused by COVID-19 provides a graphic example of the benefits of successful diversification. Cosan's stock suffered a smaller drawdown than its peers São Martinho (sugar and ethanol), Ultrapar, and BR Distribuidora (fuel distribution), much because of its diversified business base. The portfolio effect of its investments gave investors the perception of superior risk management.

On respect of our readers' time, we now pause these initial notes on business growth. In our next Report, we will resume this discussion, seeking valid support among other disciplines. From there, we will identify a pattern of business growth in the traditional economy and then be in a position to discuss growth in the digital environment.

Rio de Janeiro, December 23, 2020.

Please visit our website if you would like to compare the performance of Dynamo funds to other indices:

www.dynamo.com.br

This report has been prepared for information purposes only and it is not intended to be an offer for sale or purchase of any class of shares of Dynamo Cougar, or any other securities. All our opinions and forecasts may change without notice. Past performance is no guarantee of future performance. According to the Brazilian laws, investment funds are not guaranteed by the fund administrator, nor by the fund manager. Investment funds do not even count for any mechanism of insurance.

DYNAMO

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