

Melius Cras

In the last Report, we gave a quick overview of the trajectory of Mercado Libre, as well as the circumstances under which we first interacted with the Company around the time of its IPO. We then laid out the reasons that led us to acquire a significant stake in 2016. In this Report, we go on to analyze the environment around Meli and its business model, highlight some of the major risks we envision in this investment and take the opportunity to reflect on the difficulties inherent in directly applying traditional metrics or notions of valuation to this sort of business.

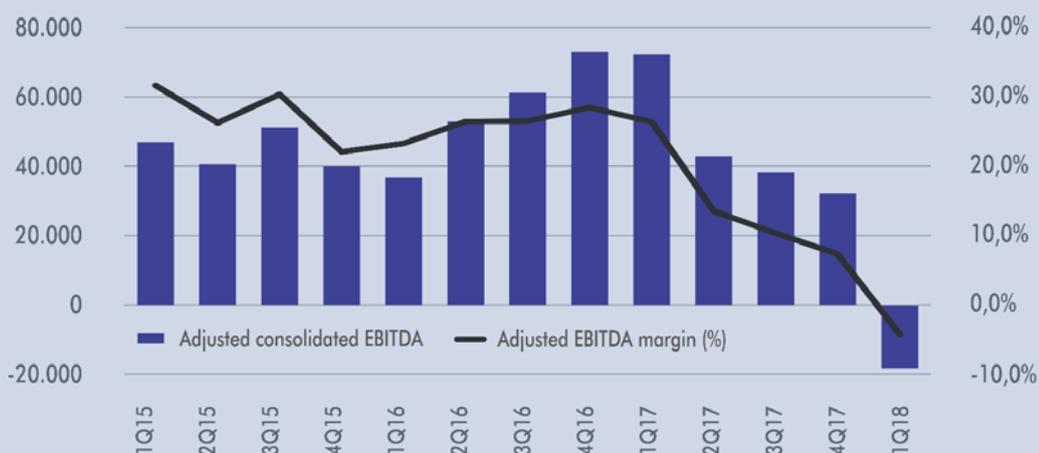
As we've seen, the foundation for our investment in Meli was the perception that we were looking at a remarkable group of executives prepared to meet the staggering challenges and countless opportunities that would present themselves to those looking to build a continent-sized, pioneering e-commerce platform in Latin America from scratch. We also understood that providing a better experience and building user engagement with the platform were the fundamentals ballasting Meli's narrative over time. The Company's DNA, its corporate culture, the timing behind the launch of internal projects, the hierarchy

of short-term operational priorities and long-haul strategic decisions – it all seems to revolve around this central axis, seeking to forge and strengthen relations with users that are both recurring and profitable. Now we'd like to give a more detailed explanation of the importance and interdependent relationship between these two pillars.

We closed out the last Report by stating that when we made our investment in 2016, their operational margins were on a downward trend that became steeper in subsequent quarters, as seen in the Graph 1.

In the traditional supply-side business model, slipping operational margins send up a flare for trouble. There may be multiple reasons, emerging in isolation or all together: a slowdown in growth, a business in decline, stiffening competition, product obsolescence, deteriorating brands, low relevance, reputational issues, a lack of innovation, few internal projects, an inability to readjust prices, slipping market share, out-of-control costs, brain drain, and so on and so forth.

Graph 1 - Adjusted EBITDA (US\$ Million)



Source: Meli and Dynamo

In Meli's case, despite declining margins, none of that was happening. On the contrary: the Company was seeing high rates of growth, took the lead in the main countries where it's active, innovated constantly, created new segments and business verticals, built up an increasingly recognized and admired brand, and was able to retain its original executives and attract plenty of new talent. The Graph 2 illustrates this dynamism through annual data on market share and gross billings.

Moreover, the value proposition offered by the Company was increasingly attractive to users, as seen in an improvement in metrics for buyer and seller engagement. Indeed, over this period, items sold on the platform, the number of unique users and the recurrence of their activity only grew, as we can see in the Table 2.

This apparent paradox begins to disappear in light of the considerations in the recent Dynamo Reports, 95 and 96. We're in the world of platforms, networks, the logic of connectivity, increasing returns, and positive feedback mechanisms. Just as a refresher:

Networks are forms of decentralized organizations and their power comes from both the variety and the intensity of their connections. Networks have their own dynamics. As they expand, more connections are formed and curious things begin to happen. As the number of connections grows arithmetically (n), the value of the network grows exponentially (2^n). The arrival of new members improves the experience of the other members. It is a generous mathematics where what is taken out acquires more value than what is put in. We are in the realm of increasing returns,

an exception to the rules of traditional economics, where diminishing returns prevail. The gears of the traditional economy are based on scarcity. Increases in supply eventually face higher production costs, and additional demands find disutility in consumption. More is worse. But the logic of networks is diverse. With each new member, the value of the network increases. And the greater the value of the network, the more new members are attracted to it, forming a mechanism of self-reinforcement that compounds its impacts. It is the logic of abundance, following the logic of opportunity. As more connections are established, the more opportunities are conceptually proliferating, paving the way for unintended consequences.

Networks have always existed, and they manifest themselves in a number of configurations. In tandem with technology, they've become ubiquitous, and are now the main expression through which our social and economic relations are organized. As we've seen, platforms are business organizations structured in network form which use technology to connect a variety of users. There are so many possibilities in the format that we find significant differences even amongst digital platforms. Some see steep growth and come to reach millions in a short span of time. This group would include Facebook, YouTube, and WhatsApp, which blew past the 500 million-user mark in their first six years. Others expand differently. They start out as a solution for a limited group of users and improve their services over time so as to broaden their "addressable market." Examples here would be Netflix – which started out as a DVD rental business model and evolved into a global streaming platform with a unique

Graph 2 - Brazil: Market Share and Gross Billings Growth



Source: Meli and Dynamo

Table 1

	2013	2014	2015	2016	2017	CAGR 2013 - 2017
Recurrence Figures						
Items Sold/Unique Buyer yoy change	4,1	4,6 12,1%	5,4 18,2%	6,5 20,2%	8,0 22,5%	18,2%
Items Sold/Unique Seller yoy change	11,9	14,3 20,3%	16,5 15,4%	19,3 17,1%	26,7 38,7%	22,5%
Operational Figures						
Items Sold ('000) yoy change	83.000	101.300 22,0%	128.400 26,8%	181.200 41,1%	270.100 49,1%	34,3%
Unique Buyers ('000) yoy change	20.200	22.000 8,9%	23.600 7,3%	27.700 17,4%	33.700 21,7%	13,7%
Unique Sellers ('000) yoy change	7.000	7.100 1,4%	7.800 9,9%	9.400 20,5%	10.100 7,4%	9,6%

Source: Meli and Dynamo

supply of proprietary content – and Amazon, which began as an online bookseller and expanded its selection and variety, growing into its present incarnation, having even moved past the slogan “the everything store” and now offering services that range from cloud computing to voice-activated virtual assistance (Alexa).

In the first group, the early “explosion of growth” for these platforms stems from the extraordinary combination of two rare traits: i) the presence of pure digital elements – messages, texts, videos, apps; and ii) the fact that they touch on a fundamental (and hence universal) expression of human life – namely, social interaction. Add to that the possibility of offering a free product or service, and these platforms were able to overcome any physical or budget restrictions. That’s how they quickly took in a vast span of users across the globe who were now willing to spend a growing portion of their days “sharing” (as if this were an intransitive verb).

These networks gained density at such a clip that their strategic value crystallized even before “monetization” initiatives could come to fruition. Hence most observers’ perplexity at the sums involved in these businesses’ transactions. In 2006, when it acquired YouTube – then an 18-month-old company – for \$1.65 billion, Google became one of the pioneers in the movement of “pre-mature” acquisitions of platforms. Facebook followed the

same path in 2012 by paying \$1 billion for Instagram, a then-revenueless company which had begun operations two years earlier. In 2014 it was five-year-old WhatsApp’s turn to be acquired for \$19 billion.

These transactions, heretical in the eyes of traditional value investors, ultimately became some of the biggest bargains of all time. Yet another confirmation of Darwin’s maxim that *without speculation there is no good and original observation*. What set Google and Facebook apart was a deep understanding of the nature of network phenomena. This insight allowed them to see clearly that those companies’ value lay in their considerable user bases, and in the massive volume of connections that the platforms might take in. Under the aegis of abundance, once those connections were made, monetization opportunities would snowball. By way of example, specialized sell-side research peg both YouTube and Instagram as worth around \$100 billion. Even with a dose of skepticism, and using the “discount” that this sort of exercise begs, it’s still clear that we’re looking at some of the most profitable acquisitions in corporate history, whether in terms of the internal rate of return or cash on cash.

The platforms in the second group, meanwhile, have a completely different growth model. When we apply the same criteria to a marketplace like Meli, it exemplifies the differences. First, when it comes to human priorities,

buying things and making transactions are a step below our desire to communicate and relate to one another. Second, marketplaces involve financial tradeoffs for both sellers and buyers. Sellers have to evaluate whether the fees charged by the platforms – commissions and operational costs – make it possible for them to turn a profit on their sales. Buyers, meanwhile, face the budget restrictions inherent to the act of consumption. On YouTube, by way of comparison, both uploaders and content consumers are using the product free of charge. Finally, operating a marketplace means going beyond the digital elements. Countless sorts of goods are traded there, involving a variety of physical processes such as pickup, handling, storage, packaging, transport, etc. Hence the need to deal with the restrictions of the “physical world,” which calls for people, training, planning, and capital, and obviously can’t scale up at the same speed as video and photo platforms.

These restrictions and operational challenges make the launch of a diversified, geographically far-reaching platform unfeasible from a financial and operational standpoint. We know that network environments, given their dynamics of growth and competition, behave like living beings; this is why they’re often called ecosystems. The best metaphor for an understanding of the economics of these platforms comes not from physics, but rather biology. Here, we find extremely pertinent parallels in the work of Geerat Vermeij.¹ He writes that when the total energy budget (in this case, financial and human capital) available to a given individual is limited, then evolutionary tradeoffs favor specialization. In this case, organisms would be better-off starting out small and focused, utilizing the energy available to them intelligently in order to begin the process of expanding and conquering. In light of this analogy, it’s no wonder that Amazon began as a bookseller and Meli as a used-products auction site. The ambitions of both were much grander from the start, but they had to move forward gradually. We shouldn’t lose sight of the fact that we’re still in the realm of increasing returns; the difference is in the dynamic and speed of growth. And while we won’t see the same explosive expanse as with pure digital networks, gradual progress makes for robust achievements. In competitive terms, rupture doesn’t come about suddenly. Rather, it comes

about bit by bit, steadily working away at the addressable market. The growth of e-commerce as a percentage of total commerce is a great illustration of the phenomenon.

From an initial concept/product (auctioning used products), one can reach a limited group of consumers interested in what’s being offered. Next comes a cycle of continual improvements to the platform as a centrifugal force, converting more and more clients. What’s relevant here is to understand that with each improvement in the functioning of the platform, its addressable market – the potential group of people who might appreciate the purchase experience – broadens. To take Meli as an example: the introduction of *MercadoPago* made the platform usable for consumers concerned with secure payments, *MercadoEnvios* solved an issue for consumers who wanted safer deliveries, the *Lojas Oficiais* introduced an option for consumers who didn’t feel comfortable buying from small and mid-sized vendors, and more recent solutions, like fulfillment tied to expedited shipping, are expanding the platform’s ability to meet the needs of consumers who need products quickly. From this angle, Meli’s story is about the continuous growth of its addressable market, thanks to refinements and innovation. As the Company’s CFO, Pedro Arnt, puts it: “constant innovation is the lifeline of any consumer-facing internet company.”

It so happens that improvements to a platform may require the employment of many resources (software development, for example), and these investments are not even considered intangible assets by international financial reporting standards. They are recorded as expenses, leaving no trace on the balance sheet. By IAS Rule 38, intangibles are “non-monetary assets which are without physical substance and *identifiable*”² (our emphasis). An intangible asset becomes identifiable when it can be separated from the rest of the company’s assets and negotiated with third parties without losing value. As a platform, Meli comprises a collective of countless interconnected elements, each representing one of many superimposed refinements. Who would want to buy just the “one-click” button that’s made it so much easier to conclude financial transactions via *MercadoPago*? Who can say how much *MercadoEnvios Coleta* is worth in isolation? A platform is a network where, by definition, everything is connected. Connection is the logic behind it; separating things out simply doesn’t make sense. The whole is what is valuable, not each part in isolation. Networks are synthetic, but

¹ Vermeij is an evolutionary biologist who researches how species adapt and “scale” in restrictive environments. Blind from the age of three, he has developed a unique sense of touch. He is fascinated by mollusks, and his sensitivity allows him to interpret both evolutionary traits and specific events in the lives of these animals through their grooves, scars, textures, and morphological variations.

² To be considered an intangible asset, future economic benefits must also be probable, and the costs of the asset must be able to be measured reliably.

accounting is analytic. At least on these terms, they can't communicate. Traditional accounting takes it upon itself to sweep investments into the next column over, hurting the P&L and leaving an empty chair in the assets room.

Another type of investment that fails to find a place in traditional accounting is the capital employed in acquiring new customers. But, one may think, how can customer acquisition be considered an investment? Wouldn't this just be a Silicon Valley spin on our so-called "creative accounting", so common recently among Brazilian politicians? We think not. To explain why, we have to go back to the concept that the network's value resides in the size of its user base, and in the proliferation of connections that it generates. It was precisely the insight that a platform's client base comprises its greatest asset (here, in the economic sense as a unit that furnishes its proprietor future monetary benefits) that led Google and Facebook to make the acquisitions we referenced above. And when you get down to it, this isn't so different from traditional concepts in a number of fields of business. How many times have acquisitions in the traditional economy been justified by a focus on the client base of the acquired companies? The difference is that for platforms, the client base is the main asset, not just *another* asset. In Meli's case, the bigger the customer base, the more attractive the platform is to each individual seller, since they become more likely to make a sale. And the bigger the seller base, the greater the value for each individual buyer, since it becomes more likely that they'll find the product they're looking for at competitive prices. Hence the brilliant definition attributed to Bill Gates, a formulation that speaks perfectly to the counterintuitive nature of platforms when seen through traditional lenses: *"A platform is when the economic value of everybody that uses it exceeds the value of the company that creates it. Then it's a platform."*

Once we've established the concept of the client base as the platform's main asset, we might ask how the dynamics of investment and return work in practice. First, we should note that internet traffic is concentrated on Google and Facebook's platforms, which together account for about 60% of the global market for digital advertising. That means that new platforms, especially those in "group 2" (the ones that aren't completely digital), have to look for most of their clients through these spaces, using targeted ads. Here, we get into the well-known mathematical relationship between the customer acquisition cost (CAC), the average sum spent on advertising to attract clients who ultimately carry out transactions, and customer lifetime value (LTV), which represents the average present value of the profit that the platform will make from transactions made by these clients it acquired. Calculating

LTV involves a few additional metrics, including: i) average transaction value; ii) gross margin per transaction; and iii) purchase recurrence. In short: the higher any of these factors, the greater the client's LTV, and the more significant the present value of the investment (LTV - CAC) put towards acquiring clients. Hypothetically, if the CAC is R\$100, the average transaction is R\$200, the gross margin on GMV is 5%,³ recurrence is two purchases per year – and, just to simplify things, we assume perpetuity and a real discount rate of 9%^{pa} – the LTV will be R\$222 and the NPV for the investment will be R\$122 (R\$222 - R\$100). Another way of looking at it would be to say that for an average investment of R\$100 per client, the marginal profit will be R\$20/year, for a rate of return of 20%^{pa}. This hypothetical exercise helps us understand the following:

- i) The greater the recurrence, the greater the return on investment, and/or the greater the company's ability to attract new clients, even at a higher CAC, while remaining profitable. Suffice to say that in this example, if recurrence doubles from two to four purchases per year and all the other factors remain the same, the company could spend twice as much on acquiring clients (a CAC of R\$200) while maintaining a rate of return of 20%^{pa}.
- ii) The greater the gross margin per transaction, the greater the company's ability to attract new clients, even at a higher CAC, without affecting its profits – the same logic as the previous item.
- iii) The acquisition of a new client, even at a high rate of return (in this case, 20%^{pa}), will be booked as a loss on the company's P&L. Since investments are calculated as marketing expenses here, when we look at the results for the year we'll only see a loss of R\$80 (R\$20 in gross profit minus R\$100 in marketing expenses).

In light of the concepts above, it's clear that successful platforms take the path of boosting their user base's recurrence and engagement, using strategies that lead to greater monetization (pushing up the take rate, gross margin, or average transaction), and making increasing investments (not to mention accounting losses!) to acquire clients. However, it's not an easy path to follow. While focusing on a niche of consumers and working off of a streamlined platform makes it possible to launch an operation with limited resources, both recurrence

3 With an average value of R\$200 and a take rate of 10%, revenues will be R\$20. With R\$10 in operational costs, the platform is left with R\$10 – 5% gross margin on GMV, or 50% gross margin on revenue.

and monetization opportunities are similarly limited. For example, a marketplace that starts out by intermediating purchases for housewares (bed and bath, say), will have its economics (average transaction value and purchase frequency) limited to a commission on every transaction and bounded by the volume and frequency of purchases in that one category. In the absence of refinements, opportunities for growth will be limited. The way to vault this hurdle is to prioritize a technical push toward the development of new functions and attributes that will, first of all, increase the potential monetization and recurrence of the platform's current base. Once those functions are in place, the company should then invest in broadening its customer base. In our example, that might happen through an advertising service for sellers (monetization), and then broadening its offerings by introducing a new category and cutting down on delivery times (initiatives that broaden the addressable market). With these new functions up and running, the platform will be ready to take on a bigger customer base. Once they're on board, the process starts all over. If this process is well executed, a new virtuous cycle of growth will begin.

Companies that are unable to develop this virtuous mechanism, whether for strategic reasons or because of flawed execution, won't attain the growth they desire. Or, if they have access to plentiful financial resources, they'll burn through their capital without building a valuable asset base. In other words, clients acquired by a platform that doesn't offer an experience in line with their expectations won't become repeat users. The LTV - CAC relation will be negative. In this case, the balance sheet will be telling the truth: the resources spent on attracting clients really were expenses. The P&L and cash flow statements will be an accurate picture of the company's economic losses.

In light of this dynamic of investing in platform functionalities and customer acquisition, the paradox of decreasing margins plus healthy business indicators melts away. We're definitely not looking at a deteriorating business here. On the contrary, in Meli's case, decreasing profits reflect nothing more than a counterbalance to what may be the biggest wave of innovations and investments the Company has ever made in such a short span of time. The evolutions in the *Pago* and *Envio* systems – especially the start of free shipping, *Coleta*, fulfillment (*MercadoFull*), the loyalty platform (*MercadoPontos*), the *Lojas Oficiais*, and *MercadoCrédito* are all initiatives that improve the experience for users and bring in more users (both buyers and sellers), making Meli increasingly robust from a competitive standpoint and increasingly profitable from an economic standpoint. In a world of increasing

returns, decreasing margins aren't necessarily a sign of economic deterioration.

And yet, resembling Borges' "labyrinth of labyrinths," where past and future run in parallel and intertwine, as Meli worked through the cycle of investment in its marketplace, it began an offensive in the world of "fintech" and payments. As we noted in our last Report, the MPOS business, the introduction of a payment solution via QR codes and its investment platform (*Mercado Fondos*⁴) represent a commitment to the belief that the tech industry can truly democratize access to financial products for the unbanked in Latin America. Just like other initiatives, the development of the financial platform represented an additional demand in terms of human and financial resources at a time when Meli was quite busy with investments in its marketplace. We might ask: where does all this drive and ambition come from, leading the Company to tackle an opportunity potentially several times larger than its own marketplace, but with a considerable risk of execution?

Here, we'll turn to Brian Arthur, an engineer and economist who's taught at Stanford and the Santa Fe Institute, and who has been studying the phenomena of increasing returns, non-convexities, positive feedback and economic path dependence since 1979. In his 1996 classic, *Increasing Returns and the New World of Business*, Arthur provides a perfect description of the psychological and behavioral traits of true digital "tycoons": "*Competition is different in knowledge-based industries because the economics are different. If knowledge-based companies are competing in winner-take-most markets, then managing becomes redefined as a series of quests for the next technological winner—the next cash cow. The goal becomes the search for the Next Big Thing. In this milieu, management becomes not production oriented but mission oriented.*" That is to say: in an environment of instability, in order to obtain increasing returns and asymmetrical payoffs, the best trait an entrepreneur can have is foresight, the ability to correctly read the next wave and maneuver into a position to take advantage of it. Arthur evokes the image of a casino – not in the sense of games of chance, but as a place with a broad array of choices (tables), where you are unfamiliar with the rules of the business (the games) and haven't met your competitors (the other players). In the "Casino of Technology" you have to know how to play well, but you also have to

4 For the time being, the investment platform is only active in Argentina. We believe that if it proves successful, the natural path will be to expand it across the other markets.

choose wisely when selecting your table. Entrepreneurs must have specific psychological attributes, among them resourcefulness and the courage to pursue one's convictions. As Arthur sums it up: *"High technology, pursued at this level, is not for the timid."*

When it comes to Meli, we see these traits in both the founder, Marcos Galperin, as well as in the other members of the management team that has been building the company from the start, including Stello Tolda, Daniel Rabinovich, Oswaldo Gimenez, and Pedro Arnt. With the benefit of following various companies over the years, we recognize we are before a group of skillful and differentiated executives. Moreover, we share the Company's vision that Latin America has a vast addressable market whose needs are still to be met, since there are many places where banks either don't have a foothold (cash is still preferred in many areas) and/or offer limited services (we can look to Argentina and Mexico, where credit card usage is still far behind Brazil). When we look at the trajectories of similar successful international initiatives, such as PayPal in the United States (later acquired by eBay) and Ant Financial in China (developed by Alibaba) we see that a large, structured marketplace like Meli may prove an excellent starting ground for such projects. Indeed, we believe that given the scope of its marketplace and the solidity of the payment services offered through its platform, the Company is looking at a unique opportunity to make digital wallets and financial products at scale. Of course, this also means overcoming clients' inertia. But if it works, we'd be talking about another Meli (within Meli).

The paragraphs above reveal a recurring perception in our internal discussions at Dynamo, which has become a sort of inside joke: "what most excites us about Meli is that it has lots of projects, and what worries us the most about Meli is that it has lots of projects." With that segue, let's dive into the analysis of the greatest risks we envision for this investment. The first is precisely the degree of difficulty and execution risk faced by a multi-business, multi-projects, multi-country company. Over the past five years, Meli has gone from 2,200 to 5,600 employees. Any company that manages to expand that quickly will find it a challenge to preserve its original vibe, its "garage mentality," and its cultural identity. Managerial complexity is like a free radical in the corporate organism, triggering oxidation and unwanted mutations in the metabolisms that produce innovation and an entrepreneurial spirit. When that growth is taking place over multiple spaces, those difficulties are multiplied. Classic tensions between centralized control and greater decision-making autonomy for each country start to crop up. This leads to

debates over whether to expatriate "home-base" executives or recruit them locally. Here, the question is even more pertinent, since the most complex and challenging country of the lot, where Meli has been performing quite well, has been commanded by an extraordinary leader: Stello Tolda, Meli's COO and CEO in Brazil. Likewise, Argentina, home to the company's headquarters and its founding partners, has been seeing consistent progress. But in other countries in Latin America, especially in Mexico, our analysis came across errors in execution, mainly in terms of expanding the Company's fulfillment structure and in the sluggish growth of the MPOS business.

This issue is aggravated by the fact that in whichever field or country where Meli is present, it has to tackle competitors, whether focused local businesses or global tech giants now starting to expand into Latin America. In Brazil, for example, B2W (Americanas.com, Submarino, Shoptime) and CNova (Grupo Pão de Açúcar, Via Varejo) are companies born from traditional retail businesses, bolstered by shareholders with deep pockets. Similarly, Magazine Luiza, a traditional appliance retailer, is trying to make the critical transition from 1P to 3P – from selling its own products to becoming a marketplace – with all the hurdles that the process entails. While these companies' actions validate Meli's strategic stance, they also stiffen the competition in the marketplace arena. In the credit segment it's stiff enough already, with a number of sophisticated players: banks themselves, armed with plentiful resources, and more agile local platforms, such as PagSeguro and Nubank.

Dynamo Cougar x IBX x Ibovespa Performance up to July 2018 (in R\$)

Period	Dynamo Cougar	IBX	Ibovespa
60 months	95,6%	65,8%	65,8%
36 months	47,6%	50,4%	52,3%
24 months	21,3%	38,2%	38,9%
12 months	11,1%	19,8%	21,0%
Year to date	-0,2%	2,4%	2,8%

NAV/Share on July 20 = R\$ 779,848325600

In terms of the “digital giants,” the leading risk is no stranger: Amazon, which entered Brazil in 2012 and has been expanding its activities ever since, increasing its verticals, hiring, and putting resources toward its own infrastructure, such as its Cajamar distribution center. There’s been no sign so far that it will act as aggressively as in India, where Amazon has pledged to invest \$5 billion (and numerous analyses indicate that it’s already spent more), but this is certainly a risk we can’t underestimate. Indeed, the two companies are already competing in the Mexican market, where Meli has significantly more local sellers but Amazon balances out that advantage in terms of GMV using its competitive advantage of cross-border transactions with the United States. This is an enormous boon for the range of products and the quality of the service it can offer, given the scale of its home-base infrastructure.

Size matters in this business. Amazon, with a market value 58 times that of Meli’s, with operational profits of \$4.1 billion and 566,000 employees in late 2017, poses a permanent and potentially lethal threat. In any case, Amazon will look to build expertise in the region. That will mean facing the challenges that arise when leaving one’s original territory: having to invest in the brand, decentralize the decision-making process, customize systems and vendor contracts, develop strategic partnerships with suppliers, understand the needs of a consumer with a different socioeconomic profile, deal with institutional and cultural idiosyncrasies, as well as bureaucracy, informality, and so on and so forth. Nothing impossible for the second-biggest company in the world. But at the end of the day, the game will belong to whoever offers the best user experience, and we have no doubt that Meli’s steady 18-year history makes it an exceptionally well-placed competitor, giving the Company a unique strategic boost. Moreover, given the rising penetration of e-commerce in a large, diverse region with a wide range of consumer profiles and aspirations, there certainly could be room for two capable, specialized players.

Likewise, another potentially dangerous competitor is Alibaba. The Chinese giant offers retail and wholesale platforms in Brazil, but it still has no local operations, and even uses Meli’s payment solution services. Although they’re also talking about expanding into other countries, in practice Alibaba seems more focused on maintaining and/or expanding its hegemonic position in the profitable, promising domestic market. Even so, it also merits careful monitoring. Similarly, Wish, the cross-border platform founded in 2011, is already among the world’s biggest e-commerce platforms and has been growing in Brazil.

Putting aside the competitive environment and operational complexity, our risk radar will swivel back to the Company itself. Here, a still-present risk is Meli’s logistical dependence on the Brazilian postal service, Correios, in what is its main market. Its unexpected first-quarter hike in rates this year made it all too clear how much of an issue this may pose. In the short term, the price increase not only led to a direct rise in the Company’s overhead, but it also affected sales growth. Where it previously made sense to offer free shipping in some product categories, regions, and routes, it no longer did at the new price levels.

Furthermore, Meli’s delivery speed – like in a traditional production line – is determined by the least productive critical path in its supply chain, which, in this case, is Correios. Though it’s still the biggest provider of mixed cargo freight in the country, and it has the largest network of pick-up locations, the notorious financial strains of recent years have significantly compromised its operational performance. Low last-mile investment (hiring delivery people and vehicles), recurring strikes, and increasing rates of delayed deliveries are some of its low points. When we compare Meli’s rates of growth to Correios’ service capacity, the gap is even more worrisome. Meli will have the difficult task of structuring an alternative logistics network that will allow it to diversify part of its volume and support the expansion of the marketplace.

Accelerated growth also poses risks to control content on the platform. As we saw in the first Report, open platforms’ biggest benefits are their quick growth and range of content. On the other hand, they have to deal with unwanted participants who use their functionalities to infiltrate themselves into the crowd, camouflaged by the good faith of the rest and the good reputation that these companies have built up. Every day, there’s more news about how the world’s biggest digital platforms are being used inappropriately, be it racist videos posted on YouTube, fake news and profiles on Facebook, or counterfeit and stolen products on Amazon’s marketplace. Unfortunately, the network structure, which is so powerful when it comes to spreading knowledge, brings far-flung friends together and offers opportunities for up-and-coming entrepreneurs, like YouTubers and marketplace sellers, can also become an incredibly potent weapon in the hands of a new group of digital offenders.

Meli, with its over 10 million sellers and 30 million buyers, hasn’t been immune from these very problems. A visitor to the marketplace could come across intellectual property violations or even sellers or products of questionable origin. Though the problem is far from being solved, a number of safeguards are already in

place and working to control this. They range from the platform's traditional feedback mechanisms and rankings to more recent initiatives, such as the *Intellectual Property Program* (PPI) and the *Guaranteed Purchase* feature. The PPI, along with Meli's APIs, establishes a channel through which intellectual property holders can report violations that affect them. The *Guaranteed Purchase*, meanwhile, provides reimbursements if the product never arrives or is not as described. These issues will be gradually diminished as fulfillment becomes a larger part of the Company's volume. Meli's ability to exert control and ensure compliance will be significantly increased once inventory is held at one of its distribution centers. Finally, on an electronic platform, transactions are recorded, making it possible for authorities to track and analyze irregularities. The São Paulo state treasury department, through ordinance CAT 156/2010, has decreed that data on the transactions of all vendors who have made over R\$60,000 in sales in a given quarter must be sent to the authorities.

The fact is that the influence of platforms on our everyday life will only grow, as will government and societal scrutiny of their activities – as became all too clear in the case of Cambridge Analytica and Facebook. Since this is a risk inherent to the open platform model, we believe that Meli's efforts to refine its control and compliance mechanisms will also become a permanent part of the Company's ongoing endeavors.

E-commerce is moving forward at a solid clip. Free of the limitations of brick-and-mortar stores, it opens up a potentially infinite range of products; on the other end of the device (mobile or computer) is a consumer with all of his or her needs on the table. By constantly working to address friction, the value proposition of the digital environment has been able to grow at rates that far outstrip physical retail's potential to improve. And the differential between the quality of those experiences is poised to widen even further. Each hurdle vaulted – not enough trust, infrastructure issues, payment issues, a lack of credit – brings in an extraordinary volume of transactions, underpinning vertiginous and prolonged growth.

Today, Mercado Libre is a relevant investment in our portfolio. Getting here was no simple task. It called for drawn-out analysis and collective concentrated effort, since we're feeling our way around in a business environment unlike those we're used to dealing with. As we've seen in previous Reports, technology brings about profound transformations that shift us into a completely different dynamic of growth and risk/opportunity. As asset

managers, we're going through that critical period of reconfiguration at a molecular level that precedes a state change. There's no going back, and something altogether different will emerge. In order to understand these transformations, we need to get up to date – and that entails putting a few traditional parameters into context.

Though we've run down the difficulties that some traditional investors have faced when looking at the value of these platforms, we believe that the concept of value investing remains exactly the same; but the expression of that value has changed. As we've seen, value no longer stems from manufacturing capacity or control of supply and distribution. It's shifted to the other side of the border, to the experience of the consumer/client/subscriber/member/user. The metrics we have to pay attention to now are the intensity of that relationship, engagement, and loyalty. From there, we can address the company's ability to explore other verticals of these clients' many needs. Traditional multiples, snapshots of profits and losses, must be contextualized. Standard accounting doesn't accurately grasp how past and present investments sow seeds that may create considerable value in the future. The present value of future flows now comes from the bottom up, from the economics of the company's existing clients and its ability to bring in marginal clients. The value of the business lies in its ability to generate interactions and strengthen relationships. Despite recent high-growth years, Meli now finds itself with a broader portfolio of opportunities than at the time of the IPO. Our excess of caution at that time became a lesson learned through introspection and decanted with much effort into our research work ever since.

Back then, we were looking at what was truly a very young company with not much of a track record, valued at \$790 million, poised to take advantage of a huge opportunity in Latin American e-commerce. Now we find a company that's leading in its major markets, with a consistent record of execution and strategic positioning in the spirit of Brian Arthur's idealized businessmen. The figures show that when it comes to e-commerce, we still have a long way to go.⁵ What's more, we see Meli well placed to make its entry in what is probably the biggest corporate profit pool in the region, the financial product industry. Is its \$15 billion market value, given the size of the opportunities out there and the probability that the Company will take advantage of them, greater or less than at the time of the IPO? To put it more simply: are

⁵ It may help to recall that online consumption as is still just 4.9% of total consumption in Brazil and Argentina, and only 3.1% in Mexico.

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	DYNAMO COUGAR*		IBOVESPA**	
	Month	Year	Month	Year
JAN	8.6%	8.6%	16.3%	16.3%
FEB	-3.1%	5.2%	-2.0%	13.9%
MAR	-4.5%	0.4%	-2.4%	11.2%
APR	-5.2%	-4.8%	-3.7%	7.1%
MAY	-12.7%	-16.9%	-17.0%	-11.1%
JUN	-6.3%	-22.1%	-8.1%	-18.3%
JUL***	12.1%	-12.7%	10.2%	-10.0%

**Average Net Asset Value for Dynamo Cougar
(Last 12 months): R\$ 3,201,884,976**

(*) 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.. (***) Performance up to July, 20.

the shares cheaper or more expensive today? This is an intellectual exercise with no objective answer, of course, but, over time, our understanding of the scope of that opportunity has evolved further than our suspicion in relation to the pertinence of that valuation.

A marketplace that offers countless categories and “sells almost everything” has enormous potential. And if this omni digital market is put to the service of a region with structural shortcomings, leaving consumers with countless unmet needs, the opportunities only multiply, and the potential for value capture is considerable.

If this treasure map happens to fall into the hands of a group of capable, experienced pioneers who know how to work together, know the region very well and have learned along the way to adapt their tools, who got a good head start and built a solid advantage, then it seems only reasonable to believe that they are quite qualified to keep on leading the pack as they move on ahead.

“Entrepreneurship means taking risks and never giving up,” Galperin often says. The definition is practically a biography of Mercado Libre. We’re aware of the risks involved in the investment, but we’ve also seen how the Company’s skillful execution is the best synthesis of its tenacity. We can’t look into the Borgesian Aleph that opened the last Report and gaze upon all the variables and initiatives that will determine the end result of this journey through e-commerce in Latin America. But to judge from what we’ve seen so far, we believe that the guys from the Saavedra garage have a firm hand on the wheel, and that the future promises to be even better (*melius cras*).

Rio de Janeiro, July 24, 2018.

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

www.dynamo.com.br

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DYNAMO

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