CFA Institute

CFA Institute Research Challenge

hosted by CFA Society Brazil

Team 3

VIVARA

The crown jewel at B3

Investment Summary

We issue a BUY recommendation for Vivara (VIVA3), with a 32.90% upside and a twelve-month target price (EoP 2023) of R$35.70 per share. The valuation was based on the Discounted Cash Flow (DCF) methodology and supported by relative valuation. Our recommendation lays on the following investment pillars: **(I)** verticalization of Vivara's business model, combined with the company's scale, which enables clear and sustainable advantages related to tax benefits and margin gains; **(II)** superior brand and product positioning relative to domestic and international competitors operating in Brazil, and; **(III)** clear viability of an expansion plan with superior profitability to existing stores, mainly under Life's brand, to underpin a 10-year EPS of 17.1% 2021A-2031F.

From manufacture to point of sale

Vivara controls virtually the entire value chain of the jewelry market, except for the mining of precious metals and gems. Having its own factory confers robust gains in terms of margins, putting it ahead of competitors. The company achieves a series of advantages by having a verticalized business model, mainly related to cost control, which is essential for the company's high profitability - especially in bad macroeconomic scenarios. Moreover, by having its factory located in the Manaus Free Trade Zone, Vivara enjoys robust fiscal benefits, which boosts its margins even more. At the end of the value chain, the commercialization of products 100% through its own stores allows the company to have more control over the buying experience offered to the consumer, which is very important in the high-income market.

Strong brand recognized by consumers

An essential point for the success of any brand is to have a strong positioning in the market and to be recognized by the target audience. In this report, we analyze subjective aspects among the company's main competitors, looking in more detail at the jewelry stores that sell similar products at a price point compatible with that of Vivara. In our vision, Vivara's operations in Brazil can beat national and international competitors, as the company positions itself with a high-quality product, a competitive price, and tremendous brand recognition.

Life expansion – the ball is rolling

The biggest move by the company's management in the last decade was, without a doubt, launching a brand focused on silver products to complement the core portfolio, which was composed almost exclusively of gold items. The product proved to be a success, gaining strong representation in the company's revenue composition and reaching 30% of total revenue in 5 years. On the one hand, the sharp growth illustrates Vivara's expertise in developing desired products and building successful brands. On the other, it shows how well it can manufacture its products in-house and distribute them on an unrivaled scale through stores located throughout the country. We expect Life to be the main growth avenue for the company in the coming years, combining a high ROIC with a growing market share, boosting its sales and profitability.

Valuation

Our target price is based on a DCF model, projecting 10 years of cash flow, considering growth in perpetuity of 4.8% and a cost of capital (WACC) of 14.71%. The price reflects the fact that Vivara has been delivering a solid performance in the past years, along with the expected outputs from its growth plan. We view that the company is climbing toward a more profitable business model, resulting in an increase of 6.2 p.p in the adjusted EBITDA margin from 2022 to 2026. This is mostly a result of the Life expansion since the gross margins from selling silver are much higher and it is a less expensive operation when compared to the brand Vivara. Furthermore, our relative analysis supports the attractiveness of VIVA3, given that the paper is trading at attractive multiples when compared to top picks in Brazilian retail.

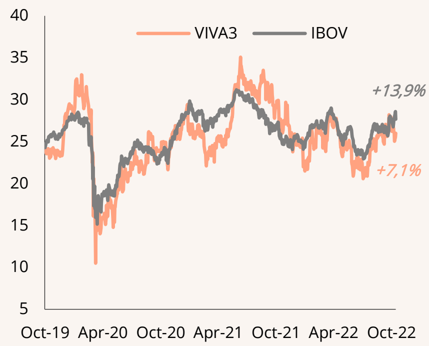
Investment risks

The main downside risks to our analysis refer to **(I)** business and operational risks, which relate mainly to how the company's expansion plan will carry out, as well as the unit economics of new Life stores, which can affect our top-line growth forecasts; **(II)** market risks, related to significant changes in the competitive environment, especially when looking to the competitiveness and expansion plan of Vivara's main competitor, Monte Carlo and; **(III)** macroeconomic risks, related to the deterioration of economic conditions, considering that Vivara is exposed to consumers' purchase power, metal prices, and the Brazilian currency exchange rate.

Recommendation	**BUY**
Date	03/11/2022
Ticker	**VIVA3**
Current share price	R$ 26.86
12M Price Target	R$ 35.70
Upside	**32.9%**

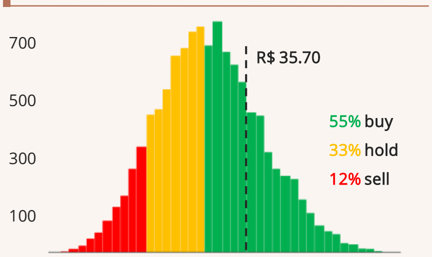
Stock Data	
Industry	Jewelry retail
Stock Exchange	B3
Market Cap	R$ 5.98 Bn
% Free Float	41,9%
Average Daily Volume (3M)	R$ 1.2 Mn

Exhibit 1: Historical share price vs. IBOV



Source: FactSet

Exhibit 2: Monte Carlo simulation



Source: Team 3

Highlights	20'	21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
Top line estimates												
Net revenue	1,047,506	1,466,386	1,889,474	2,331,936	2,787,030	3,255,994	3,788,433	4,131,776	4,431,136	4,666,055	4,887,426	5,102,799
Adjusted EBITDA	263,311	366,595	529,603	695,843	872,612	1,054,781	1,267,320	1,414,506	1,535,128	1,623,504	1,703,375	1,777,412
Net earnings	146,632	298,658	328,170	475,717	611,780	752,161	954,052	1,077,757	1,183,627	1,263,162	1,352,969	1,443,065
Margins												
Gross margin	68.5%	67.6%	68.6%	69.5%	70.3%	71.0%	71.7%	72.0%	72.2%	72.3%	72.4%	72.4%
Adjusted EBITDA margin	20.6%	20.6%	25.7%	27.8%	29.4%	30.7%	31.9%	32.9%	33.5%	33.7%	33.9%	34.1%
Net margin	14.0%	20.4%	17.4%	20.4%	22.0%	23.1%	25.2%	26.1%	26.7%	27.1%	27.7%	28.3%
Profitability												
ROE	12.5%	21.4%	21.0%	26.2%	28.6%	29.7%	31.5%	32.3%	32.1%	31.2%	30.5%	29.8%
ROIC	10.0%	16.3%	16.5%	19.0%	21.1%	22.3%	24.1%	24.5%	24.5%	24.2%	23.7%	23.1%
Operational												
Vivara stores	208	229	244	259	274	289	299	304	309	314	319	324
Life stores	13	33	68	103	138	168	198	218	238	248	253	258
SSS (B&M + E-commerce)	-12.2%	32.1%	33.2%	24.2%	20.1%	17.8%	17.2%	11.0%	7.3%	5.9%	5.0%	4.4%

Business description

Vivara is a 60-year-old company that produces and sells jewelry in Brazil. The business has been managed by the Kaufman family since its foundation in 1962 and has presented a rapid expansion in the last decade under the management of Márcio Kaufman, grandson of founder David Kaufman. Vivara went public on the stock exchange (B3) in October 2019, with a price of R$24.00 per stock and a market value of R$5.7 bn – nowadays, the stock trades at R$ 26.86, representing an appreciation of 12% since the IPO.

A complete portfolio of products

Vivara and Life – the flagships brands: the company's core business is composed of two brands: Vivara and Life, which were the main contributors to the company's 2021 net revenue of R$1.47 Bn (Exhibit 3). Vivara is viewed as a more high-end luxury brand, while Life is positioned in a more accessible luxury segment of the industry. "Life by Vivara" – how this brand is officially called – was launched in 2011 and the products were initially sold inside Vivara stores and kiosks, sharing space with other pieces. It was only in 2014, after resounding success, that the company decided to open exclusive Life stores at shopping malls.

Brand	VIVARA	Life
Product	Necklaces, earrings, rings, watches	Bracelets, pendants, rings, earrings
Material	Gold 10K, Gold 18K, Diamonds, Gems	925 sterling silver
Average ticket (2022)	R$2,520	R$272
Channel	Vivara stores	Vivara stores, Life stores, Kiosks
SKUs	4,653	2,431

Source: Vivara's IR, Team 3

Other business segments complementing revenue: Vivara Watches was launched in 1980 with the purpose of selling classic and elegant watches from its own confection and from outsourced brands. Currently, its portfolio is composed of own brands (Vivara and Akium), brands for which it has exclusive rights for distribution in Brazil (such as Tommy Hilfiger and Lacoste), and brands that it distributes without exclusivity (such as Guess and Tag Heuer). Vivara Fragrances, created in 2015, is the youngest brand and has a different distribution strategy, engaging in corporative sales (B2B). Last, but not least, Vivara Accessories is eclectic and more accessible and offers a variety of owned and outsourced products, such as pens, wallets, sunglasses and leather bracelets.

Company strategy – the key to success on all fronts

Keeping an eye on production: Vivara adopts a verticalized business model and produces around 80% of what it sells at its factory. The company dominates the production chain, from the design of collections to the production, distribution, marketing, and sale of products, which makes Vivara more agile, flexible, and efficient than its competitors. The factory is located at the Manaus Free Trade Zone (AM), an industrial area created by the Brazilian government to economically develop the Amazon region, by attracting companies due to the better fiscal conditions offered.

Always concerned about the customer: the company opts for a direct distribution model through its own stores, presenting three main layouts: **(I)** Vivara stores, which is segmented into 4 clusters according to the region's income bracket, offering the customer a complete experience by selling all products in the company's portfolio; **(II)** Life stores, dedicated exclusively to the sale of Life products (silver); **(III)** Kiosks, which focus mainly on watches and Life products, and serve to test new locations and understand the viability of opening a new store in that place.

Store layout	Vivara	Life	Kiosk
Number of stores (Oct/22)	232	53	22
Average size (m2)	90	70	7
Sales/m2	67	29	263

Source: Vivara's IR, Team 3

Setting the bar high: Vivara is located at shopping malls across the country, being present in 26 out of the 27 states in Brazil (Exhibit 4). The choice of store locations shows some patterns: **(I)** the distribution of stores per region reflects the country's GDP (Exhibit 5); **(II)** 84% of units are concentrated in cities with over 300K inhabitants. This reveals that it's more profitable for Vivara to be present where it can make high-value sales.

Taking it up a notch: with the funds from the IPO, Vivara intends to continue expanding its store footprint – especially when it comes to the Life brand, for which the company has an aggressive growth plan. From 2019 to 2021, the number of exclusive Life stores more than quintupled, from 6 to 33. During the same period, 70 Vivara stores were opened, an increase of 44%, reflecting the layout maturity. Exhibit 6 shows the evolution of both Vivara and Life stores over the past 6 years. Due to its maturity, the Vivara brand is expected to enter lower-tier markets (tier 2 malls), while the Life brand should still expand into more premium malls (tier 1 malls, with higher income clients and a high flow of people), mostly in locations that already have an established Vivara store.

Everlasting growth: besides from opening new stores from already existing brands, the company has perspectives to grow into new market segments and new regions in the future. To do so, Vivara could use two different strategies:

A) M&A: to create a competitive brand targeting the A+ audience, it would demand too much time and money. Hence, in order to grow into this public, Vivara may acquire an already established brand, that has already gained customers' trust and recognition.

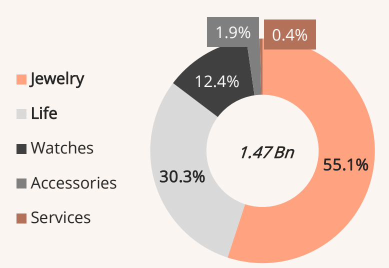
B) Brand internationalization: Vivara has been studying the opportunity to expand its footprint globally, to other countries in Latin America (beginning with Mexico, according to guidance). This would increase the company's addressable market and, in turn, escalate its growth potential.

Industry overview

The jewelry industry in Brazil is deeply fragmented and has presented low growth in the last few years, suffering a shortfall during COVID-19 (Exhibit 7). These falls of 15.2% in 2020 and 2.5% in 2021 were caused more by structural constraints of the jewelry industry to sell online than by economic conditions, as we will

Exhibit 3: Revenue breakdown per product

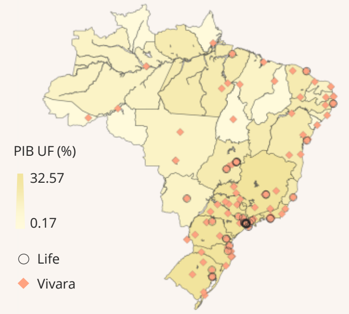
% of total gross revenue; 2021



Source: Vivara's IR

Exhibit 4: Vivara's store footprint

Distribution of Life and Vivara stores, % of country's GDP in each state



Source: Vivara's IR, IBGE, Team 3

Exhibit 5: Distribution of stores in Brazil

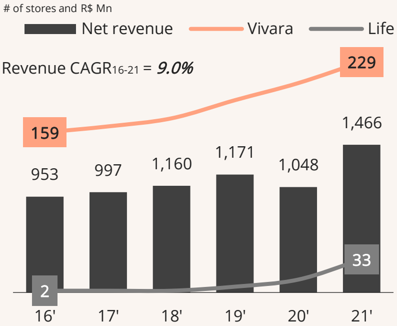
Brazilian regions; % of existing stores; % of country's GDP in that region

Region	Vivara stores	GDP
SE	52%	53%
S	17%	17%
MW	11%	10%
NE	15%	14%
N	5%	6%

Source: Vivara's IR, IBGE

Exhibit 6: Stores and revenue growth

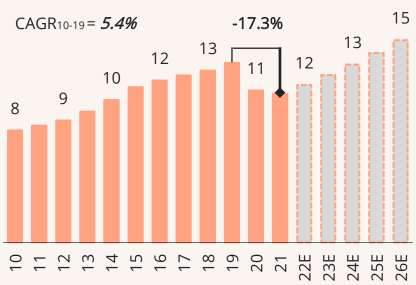
of stores and R$ Mn



Source: Vivara's IR

Exhibit 7: Jewelry Market Size

R$ Bn



Source: Euromonitor

further detail. The industry CAGR was 5.4% between 2010 and 2019, which is lower than the Brazilian annual inflation in the period, recorded at 6.5%. Although we don't believe in secular growth for jewelry retail, we see some trends and structural factors that can benefit Vivara, such as a soaring jewelry spending, a growing formalization in this industry, resilience in crisis periods, and a higher consolidation of the market happening here in comparison to other countries.

Brazil still presents a low spending in jewelry: according to our calculus with data from Statista and World Bank, Brazil' spending in jewelry in proportion to GDP, in 0.13%, is far below world average of 0.29% (Exhibit 8), and below World ex-India spending of 0.21%. Therefore, although income growth should be a major driver for jewelry industry growth in Brazil, we can also expect some growth from the closing of this gap of spending in proportion to income between Brazil and the rest of the world.

Stealing sales from the informal economy: future market growth could also come from the formalization of the jewelry market. Estimations from the Brazilian Gems Institute (IBGM) indicate that the informal market generates approximately R$11 Bn in annual revenues, which is very close to the formal market. Hence, a formalization, driven by the entry of formal players into other regions, greater inspection from the government, and the high-purchasing-power customers' desire for product reliability, may result in the formal jewelry market stealing sales from the informal market, with a potential to increase its size considerably in the medium-long term.

Crisis resilience: looking back in time, we see the jewelry industry as a resilient sector against unfavorable economic conditions – although also vulnerable to mobility constraints, which is the reason for the suffering of this sector during the pandemic. This dynamic can be explained by two main reasons: **(I)** the high worth of products makes it harder for consumers to easily trust online shopping and increases their need to taste the products in person; **(II)** small players, which represent most of this highly fragmented market, had poor or none e-commerce infrastructure at the beginning of the pandemic, being unable to quickly transition to online selling. In contrast, we looked at the industry performance during the 2015-2016 crisis and found out it showed great resilience in the period with economic, but no mobility constraints (Exhibit 9). These dynamics happened because of a high-net-worth client base that is less sensitive to economic fluctuations and less dependent on credit for consumption, which drives a much more solid demand in hard times.

The largest players verticalize: in this industry, the largest retailers are usually verticalized, while smaller ones tend to buy ready-made products from manufacturers, due to the low returns from producing jewelry at a small scale. For the largest players, we can mention that Vivara, H.Stern, Monte Carlo (whose production started recently), and Pandora are verticalized or partially verticalized. The difference between them is the percentage of products that are manufactured in-house – and Vivara is the one with the highest portion, as we further explore in detail. For international players, such as Pandora, fiscal factors are a challenge, since they produce outside Brazil and pay import tariffs that can reach as high as 120% of the production price. In summary, Vivara's business model has advantages both over local large players, international players, and smaller players – implying in higher margins for the company. H.stern, the only Brazilian competitor with some financial data available, had a gross margin of 39.2% in 2020 and 37.8% in 2019, which is much lower than Vivara's gross margin of 68.0% in 2019 and 2020.

Consolidation of a fragmented industry: to quantify how fragmented the Brazilian jewelry market is (Exhibit 10), we estimated the Herfindahl-Hirschman Index (HHI) in this industry. On a scale that goes from 0 (perfect competition) to 10.000 (monopoly), this index is positioned lower than 205 – showing an extremely high fragmentation. That reinforces Vivara's consolidation potential, which should increase its leadership in the market, something we already saw during the pandemic, when Vivara's share increased 6.5 p.p from 2020 to 2021. However, the lack of international examples of consolidated jewelry markets with leading companies in developed countries (Exhibit 11) raises a question about this argument. In our vision, structural characteristics of Brazil should lead to a different pattern when compared to other countries. Brazil has high barriers to external players due to heavy import tariffs and the complexity of our tax system. As a result, the market is less attractive to foreign companies, because they are either forced to charge higher prices than what is practiced locally or reduce their margins to make their operations economically viable. This problem could be mitigated with the construction of a local factory in the country, but the market size of Brazilian jewelry discourages international players from doing that. This dynamic is well exemplified by the recent Pandora store closures and will be explored in more detail in this report. Given this scenario, Vivara enjoys less competition against international players than the market leaders in other countries do, which makes us believe in a stronger consolidation in Brazil.

E-commerce favoring large players: as mentioned before, we see jewelry retail as a less adapted segment to e-commerce. Despite that, some growth in this sales channel could be expected, as we see a low penetration of online shopping in this sector when compared to other countries (Exhibit 12). In this environment, Vivara is the most benefited player, as it **(I)** pioneered the e-commerce (2012) and omnichannel (2016) adoption; **(II)** has the largest scale for investments in UX, logistics and advertising (usually way higher online due to the difficulty of capturing shoppers), and; **(III)** is a nationally-known brand, a fundamental aspect to raise consumer's trust when selling high worth pieces.

Competitive positioning

Cost control: a risk that became a major competitive advantage

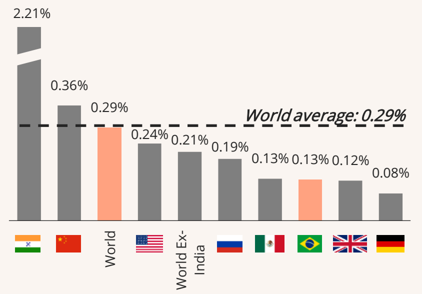
One of the main risks companies face when operating in the jewelry sector is the one related to the volatility of metal prices. Companies' cost of goods sold is highly impacted by gold and silver price changes, as well as by the fluctuation of the country's currency, since those raw materials are priced in US dollars. However, when the company faces significant increases in the price of its raw materials, as occurred during the pandemic, it can maintain its gross margin relatively flat (Exhibit 13), which is something incredible when we consider that in 2020 gold and silver prices skyrocketed. Two main advantages can explain Vivara's unique cost control: **(I)** the ability to quickly change the product mix in challenging macroeconomic environments; and **(II)** the possibility of keeping an inventory equivalent to one year of sales, combined with a smart strategy to gradually build it.

(I) By reducing the percentage of gold products in its portfolio and increasing the presence of silver, Vivara can protect itself in times of cost pressure, producing cheaper and more accessible pieces for its consumers. This was the strategy adopted in the economic crisis that happened in 2015 and 2016 – with the worsening of economic conditions in the country, Vivara increased the participation of silver, which is a cheaper raw material (Exhibit 14). Also, the company manages to change the composition of its pieces by adding gems with lower added value or reducing their thickness, a strategy that can minimize cost pressures too.

(II) The company has a natural hedge against increases in the price of gold and silver, given that it holds an inventory of approximately one year of sales. Vivara gradually purchases raw materials, acting at times when metal prices are cheaper and buying less or none when there is a significant price increase. In fact, we observed a correlation of –0.76 between fluctuations in gold prices and inventory changes (Exhibit 15). Thus, the company can keep an inventory with an average price of raw materials that is lower than the price practiced in the market, which allows it to not be suddenly impacted by spikes in its costs. This natural hedging strategy allows a more efficient price transfer to consumers, as the company can wait months to increase the price of its products after an increase in the cost of its raw materials, a strategy that cannot be easily replicated, given the high working capital requirement of maintaining a huge inventory.

Exhibit 8: Jewelry spending worldwide

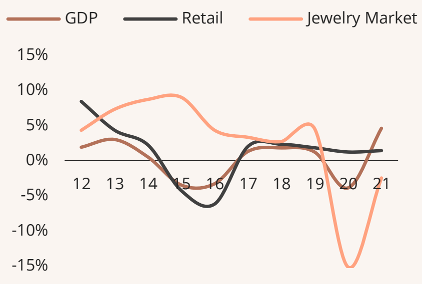
Jewelry spending divided by total GDP



Source: Statista, World Bank, Team 3

Exhibit 9: Growth comparison

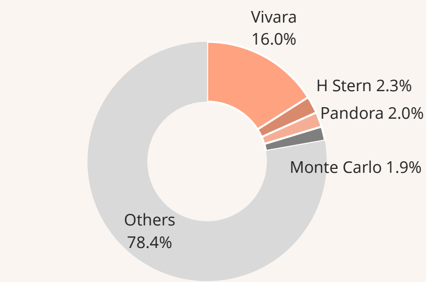
Year over year change in %



Source: IBGE, Euromonitor

Exhibit 10: Jewelry market share

% of total 2021 jewelry retail revenue in Brazil



Source: Euromonitor, Team 3

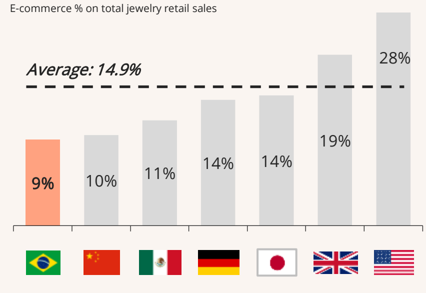
Exhibit 11: Share of top companies by country

Company	Country	Share
Cartier	Switzerland	11.1%
PANDORA	UK	12.9%
TIFFANY & CO.	Japan	15.2%
周大福 CHOW TAI FOOK	Hong Kong	17.9%

Source: Euromonitor

Exhibit 12: E-commerce penetration

E-commerce % on total jewelry retail sales



Source: Bloomberg, Vivara's IR

Fiscal benefits took the company to another level

The location of the factory matters: one of Vivara's main competitive advantage is not generated by its operations itself, but by its location. Due to the establishment of its factory in the Manaus Free Trade Zone, the company enjoys two extremely relevant tax benefits that boost its margins: **(I)** the reduction of the ICMS (tax on the circulation of goods and services); and **(II)** the reduction of the IRPJ (corporate income tax).

(I) The ICMS reduction tax benefit generated savings of R$ 131 Mn for the company in 2021, equivalent to 9% of its net revenue. The tax burden was renewed in 2021 and is valid until 2032.

(II) The IRPJ reduction tax benefit generated savings of R$ 45 Mn to the company last year, equivalent to 3% of its net revenue. The benefit is valid until 2024 but we expect to also be renewed, as other companies like M Dias Branco (B3: MDIA3) and Equatorial (B3: EQTL3) had their benefit renewed.

This advantage could be seen as a risk by many investors, considering that a part of the company's profitability is generated by something that could be impacted by political decisions, reforms and new governments. For that reason, we did a study to understand the risks related to the fiscal benefits advantage and could conclude that they do not represent a threat to the company, as we explain further.

Great margins generate a comfortable competitive positioning: tax advantages provide relevant margin gains for the company. Vivara has a gross margin of around 68%, well above the industry average of 55% (Exhibit 16), which we estimated by conducting a field analysis and talking to people involved in the jewelry sector, given the lack of financial data in the industry. The margin advantage that Vivara has can be explained by its efficiency in cost control and by its privileged positioning in relation to the taxation of its revenue. This scenario allows Vivara to have more fat to trim in its margins, which is an incredible competitive advantage at times of high volatility in metal prices, especially if the increases of raw material prices continue for a long time.

Fiscal benefits are here to stay: given the relevance of those tax benefits, we talked to tax law professionals to understand which variables can impact the renewal of the fiscal incentives that Vivara enjoys. We realized that three main factors are relevant when analyzing the possibility of the perpetuation of the ICMS and IRPJ tax reductions: **(I)** the elected government, **(II)** the approval of a tax reform in Brazil, and **(III)** the importance of the Manaus Free Trade Zone to the state of Amazonas. After researching the mentioned topics (Appendix 13), we concluded that both tax benefits are very likely to be consecutively renewed, continuing to boost the company's margins for a long period, which is reflected in our model.

Internalizing is not trivial: competitors don't have the necessary scale to justify the internalization of their production, which would involve high fixed costs, causing them to opt for purchasing goods from manufacturers and re-selling them to the final public. In this business model, players enjoy lower margins, as the manufacturer takes part in profitability. When talking to jewelers in the sector, we also discovered an important point that helps to explain the difficulty of small players to gain scale and the huge informality in the jewelry sector too. Most small and medium-sized companies that sell jewelry in the country are included in "Simples Nacional", a tax regime in Brazil with more advantageous tax rates. However, when the company reaches over R$3.6 Mn in revenue in one year, the tax paid starts to be based on another regime, which is more costly. For that reason, many companies do not declare sales when they exceed this upper bound, meaning part of their revenue remains in the informal jewelry market. If they wished to internalize production, it would certainly be much harder to have part of its operations not declared for fiscal purposes, so we understand this fiscal issue as a barrier to firms trying to achieve scale gains.

In-house manufacturing is the key: internalizing production gives brands the power to control part of the value chain and have better cost management. The companies that have this capability are normally larger, such as H.Stern, Monte Carlo, and, obviously, Vivara. The big difference between them is how much one can manufacture in-house. Vivara produces today around 80% of what it sells, which increases the basis of calculation for the IRPJ fiscal benefit (corporate tax reduction applies only on the EBT originated by the sale of products produced inside its factory). Thus, as the company increases the internalization of its production, it decreases the effective tax rate paid (Exhibit 17), having a positive impact on its net margin. Also, when the main part of its products comes from its own factory, the company can implement strategies related to cost control and adjust the product mix more easily.

However, this advantage won't last forever, as there are already signs of competitors catching up: in 2021, Vivara's biggest competitor, Monte Carlo, announced the opening of its factory in the Manaus Free Trade Zone. The company stated that it intends to end 2022 with 20% of its production internalized in this factory (Source: Valor Econômico), which still leaves the company far behind Vivara when it comes to the benefits previously mentioned. However, some questions arise: what is the production capacity of Monte Carlos's factory? Is the factory able to support internalization of 100% the company's sales? Due to the lack of data available about Monte Carlo, we tried to answer those questions by our own.

As we state in more detail in Appendix 14, we estimate that the factory will have the capacity to produce 500k pieces per year, while we also estimate that the company sells 400k pieces per year. Therefore, we conclude that most likely this new factory will support the full internalization of Monte Carlo's production – although we can't state how long it will take for it to happen. Still, we do not claim that if this scenario materializes, Vivara will lose its advantages related to cost control and tax benefits. The company will continue to enjoy them, but with its main competitor enjoying them too.

But even with this scenario, is Vivara's #1 position in the jewelry sector threatened? No, not at all. There are two competitive advantages of Vivara that Monte Carlo cannot replicate: brand and scale gains, as we explain below.

From the consumer's perspective: how does Vivara differentiate itself?

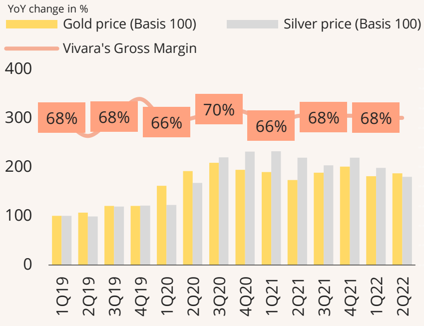
Customers' preferences: in a fragmented market, the possibilities when choosing a brand are numerous. The jewelry sector contains a variety of players, ranging from small informal ones to nationally known brands. Considering this diversity, we conducted an analysis to understand what makes a consumer choose a jewelry brand. After collecting 533 answers though a survey (Appendix 15), we saw that consumers positioned between clusters A- and C+, Vivara's main targets, considered three most important points when choosing a jewelry store: A) design and quality; B) price; and C) brand recognition (Exhibit 18). We then tried to understand how Vivara positioned itself when compared to other players regarding those topics.

A) Design and quality of the products: after analyzing a variety of different pieces from jewelry brands positioned in the same clusters that Vivara operates, we concluded that there is just a mild differentiation between them. Looking at more sophisticated pieces, we could see a wide variety of designs, but couldn't get to a conclusion as to whether Vivara has the best design or shape, as we show in Appendix 16.

B) Price positioning: despite having the opportunity to offer a better price than most of its competitors, Vivara follows a different strategy. We observed that the company seeks to market itself as neither the cheapest nor the most expensive one in the clusters in which it operates (Appendix 22). We consider this strategy the most appropriate one. Positioning itself as a cheap brand could negatively impact the perception that Vivara's clients have about the company. In addition, the company does not put pressure on its margins by not charging the lowest price possible. On the other side, positioning itself as the most expensive brand would limit its sales to high-income clients, reducing the company's addressable market.

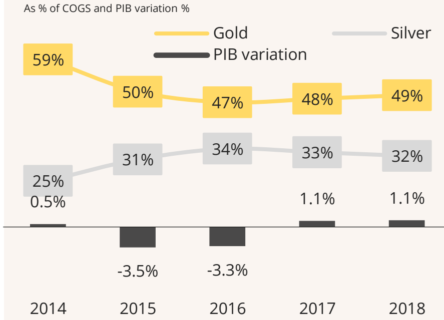
But if Vivara does not differentiate itself either in design or in price, how does it stand out?

Exhibit 13: Gross margin vs. Metal prices



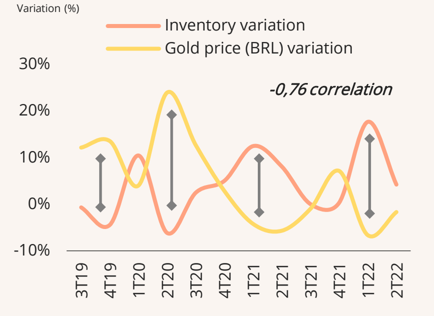
Bloomberg, Vivara's IR

Exhibit 14: Vivara's product mix composition



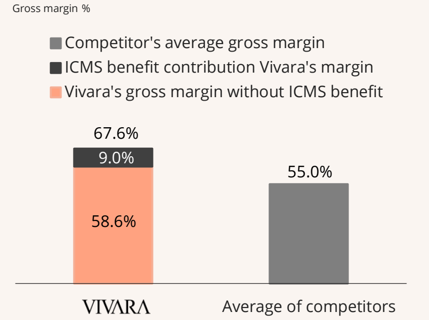
Source: Vivara's IR, Team 3

Exhibit 15: Inventory x gold prices



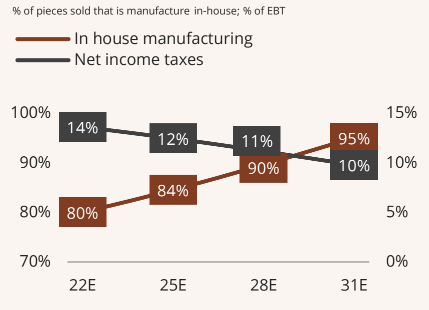
Source: Vivara's IR, Team 3

Exhibit 16: Gross margin comparison



Source: Vivara's IR, Team 3

Exhibit 17: In-house manufacturing effect



Source: Team 3

Brand recognition: the key to success

C) Brand recognition is what brought Vivara to the top: Vivara is the top-of-mind player in the Brazilian jewelry sector. Through a survey, we asked what is the first jewelry brand name that came to mind, and Vivara was far ahead of its competitors (Exhibit 19). The company came to a point where consumers desire the products it sells, which is hard to accomplish in any retail segment and is a game changer. Also, being a nationally recognized brand, Vivara can convey confidence to its public, which is a relevant attribute in this market. To understand how it got here, we analyzed a series of strategies that together drove the company to the top.

From low to high-end: Vivara positions itself in different income clusters, catering from the low to the high-end audience and being well-known by people in distinct social classes. Brands that are positioned only in high-income clusters, such as H.Stern or Tiffany, limit themselves to a specific group of consumers, reducing addressable market and national exposure. By offering products with different price points (Exhibit 20), Vivara has become a nationally known and desired brand. This strategy increases the company's addressable market and acts as a protection in adverse macroeconomic scenarios, since **(I)** part of Vivara's consumers is not so sensitive to price changes and **(II)** when prices go up a lot, clients that are indeed price sensitive can buy a lower-cost piece inside Vivara instead of choosing a different brand.

Stores positioning: the position of stores inside malls also plays a major role: due to its high bargaining power with shopping owners, conferring better negotiating conditions to Vivara, the company manages to be in corner locations, the peak of visibility, in almost 88% of the malls that we analyzed (Appendix 17) – attracting much more flow and driving brand awareness up, as we identified by talking to people at the entrance of shopping malls (Appendix 18).

The queen of marketing

To better understand how companies have been sustaining brand awareness, we evaluated the communication that Vivara and its main competitor, Monte Carlo, have with their public, based on the digital presence of each company.

The jewel of cover models: Vivara counts on two well-known models and influencers: Gisele Bündchen and Marina Ruy Barbosa. Gisele has been the face of the company for over fifteen years and Marina was the chosen one to represent Life. Monte Carlo is also strong in marketing, counting with two main faces: Grazi Massafera and Isis Valverde. We analyzed the number of followers and the engagement of all influencers hired by Vivara and Monte Carlo. This analysis showed us that Vivara and Life's influencers, together, have a better reach and engagement when compared to Monte Carlo and Jolie ones (Exhibit 21).

Hello, followers! We also analyzed the Instagram account of each company and saw that Vivara has almost 3 million followers, 7 times that of Monte Carlo, and far more engaged followers too (Appendix 19). High engagement is essential to an effective marketing strategy: high numbers mean that more people are interacting with the posts, which brings more visibility and, at the end of the day, a better sales conversion to the company. Currently, social networks have become a channel to display products, alert customers of the arrival of new collections in stores and create a strong brand image that generates trust from the public.

Scale leads to a huge marketing advantage: those results are not caused by accident or luck. Vivara has been constantly investing in marketing and influencers during the past years and decades. Also, given its scale, the company manages to invest a lot more than its competitors, reaching shocking numbers. Vivara can invest in marketing the equivalent of a great part of the revenues of the largest jewelry players in Brazil (Exhibit 22). This social media exposure is essential to the success of the brand and its sales: we talked to several salespeople and realized that a great part of clients arrives at Vivara's stores asking for a specific collection (around 15-25%) that they saw online, proving that social networks serve as a virtual showcase.

The numbers speak for themselves: summing up all the aspects analyzed, we can see that Vivara is indeed standing out, which was confirmed by our top-of-mind survey. Brand positioning, store location, and highly efficient marketing have clear results that can be seen when looking at the digital environment. When we check the Share of Search, which measures brand visibility in organic searches made on Google, we can see that Vivara owns 31.7% of searches (Exhibit 23), far ahead of the second most searched, Pandora, an internationally recognized brand. When looking at the Share of Traffic, which indicates the traffic that Vivara's websites own out of the total traffic that occurred in all sites analyzed, we also identified a large difference between Vivara and its competitors (Appendix 20). Those metrics reveal that the strategies being implemented by the company are yielding results.

Ok, a well-recognized brand…but a well-rated brand too? Having great recognition also involves the post-purchase moment. When analyzing consumer satisfaction among different jewelry brands to understand how Vivara performs on this topic, we could conclude that the company has one of the highest scores (Appendix 21), something that helps build loyalty in its client base and drive purchase recurrence. Also, we analyzed the comments left on Vivara's Instagram and saw that the majority are positive.

Analyzing all the results of our competitive analysis, it becomes clear that Vivara is ahead of its competitors. This positioning is only possible due to the scale that the company has reached today, which is several times larger than the second player in the market, ensuring the implementation of the series of advantages mentioned above. Thus, we see the company prepared to maintain its leadership position in the jewelry industry and become even greater as time goes by, especially now with the rise of its brightest jewel: Life.

Life is Vivara's next big bet

An essential point of the company's growth thesis is the organic expansion of the Life brand. With Life, the company can offer better prices and a very giftable product, even positioning itself as a competitor to clothing and footwear stores. Additionally, Life is a more profitable brand than Vivara, which means that its expansion has a positive impact on margins.

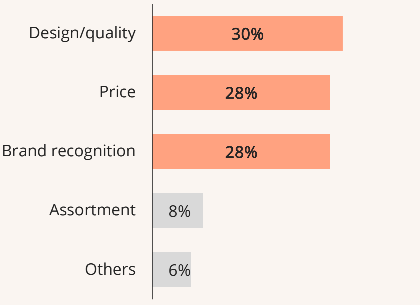
Catering to young consumers: through the dedicated Life channel, the company manages to capture a younger audience, which is not the main target of the Vivara brand. Specific products, such as bracelets, charms, and pendants, attract the public between 15 and 25 years old, making them consumers of the brand from an early age. When the consumer is already a client, it is easier for the company to upsell in future moments, and it is likely that, at a given time, this Life customer will also become a Vivara customer.

A more affordable option: we have already mentioned that one of Vivara's advantages is the fact that it positions itself in different income clusters, offering diverse prices. However, lower price products represent a small portion of the total offered by Vivara (Exhibit 20). We believe that Life is perfect to improve this gap, since most of its new products range from R$100 to R$1,000 (Exhibit 24), positioning itself in clusters that Vivara hadn't focused on yet. We came to this conclusion by further analyzing the main items of the two portfolios, which we explain in more detail in Appendix 25. This strategy, combined with a dedicated store that is more attractive from the perspective of low to medium-income consumers, allows the company to better take advantage of opportunities in clusters that are not targeted by the Vivara brand. As Life expands, the company can also increase its brand awareness, as it reaches a more diverse public.

Well positioned when the matter is giftable products: Life can also offer giftable options for people, expanding its addressable market. When people are looking to gift someone, most of them don't want to spend a lot. Thus, Vivara ends up distancing itself from the gift proposal. However, considering the variety of low-price products, Life is able to offer several options at similar prices to clothing and footwear stores,

Exhibit 18: Consumers' top priorities

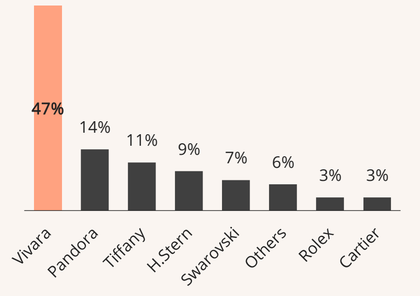
First priority of consumers interviewed



Source: Team 3

Exhibit 19: Top of Mind Company

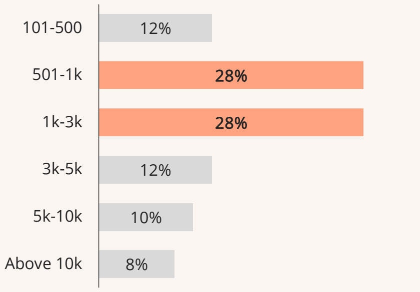
First company that came to mind of consumers interviewed



Source: Team 3

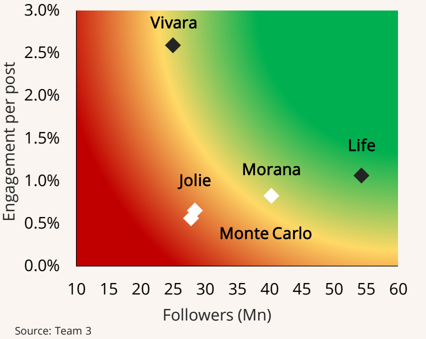
Exhibit 20: Vivara's price point

Percentage of all products in the company's portfolio



Source: Vivara's website, Team 3

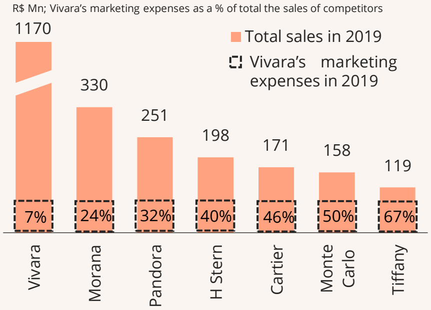
Exhibit 21: Brand's influencers on Instagram



Source: Team 3

Exhibit 22: Vivara's marketing numbers

R$ Mn; Vivara's marketing expenses as a % of total the sales of competitors



Source: Vivara's IR, Team 3, other companies's information competing directly (Exhibit 25). This way, the company can explore a bigger market and benefit from commemorative dates, such as Christmas.

The icing on the cake: by only selling products made with silver, Life manages to have higher profitability than the Vivara brand. While gold products have a gross margin close to 65%, this number for silver products is close to 80%. Also, Life has a better ROIC than the Vivara brand, because of its lower need for employees, lower Capex, and almost equal sales per m2. Aside from that, we see little cannibalization between Vivara and Life stores. The specific numbers and the impacts on the company's financials due to the expansion of Life are further explained with detail in the Financials section.

And what about competition? To carry out a competitive analysis regarding Life, we decided to compare some aspects with its main competitors, Pandora and Jolie (Monte Carlo's silver brand). We chose not to include the design aspect in our analysis, as we believe that this is not a reason for differentiation between the brands, considering that the products they sell are quite similar (Appendix 16). Instead, we explored the strength and name of each brand, price positioning, and the variety of products.

Brand strength, price and portfolio: who is the winner? When comparing each company's (I) brand strength, it becomes clear that Pandora is far ahead of Life and Jolie. The company is known worldwide and was the one that started the trend of bracelets with charms and pendants that its competitors are investing heavily nowadays. As for the battle between Life and Jolie, we see a clear advantage for Life. The company relies on the Vivara name to expand, being named "Life by Vivara", which gives it confidence and brand awareness. Regarding **(II)** price competition, we see Pandora with a price point much above its competitors, which is caused for reasons that we explore further in the report. Life and Jolie compete in price and are similar in this aspect, which puts both companies much better positioned than Pandora, as we can notice in the scraping that we made to collect each brand's portfolio of products and prices (Appendix 23). The last aspect that we analyzed was the **(III)** assortment of products. Considering that the clients of Life, Pandora and Jolie look for collectible items, a diversity of charms to build personalized bracelets, and so on, we understand that is really important for these brands to maintain a wide array of products, catering to clients' different desires. With that in mind, a brand's assortment of products plays an important role in attracting consumers. Using scraping to collect each brand's number of SKUs per type of product, we see that Life comes on top regarding assortment, as it has approximately 30% more SKUs than Pandora and 80% more than Jolie, which we consider a great advantage (Appendix 24).

Wrapping up, we see Life well positioned among its main competitors, as it manages to utilize Vivara's name to increase brand awareness, has a low price point, and is the top company when it comes to assortment.

Promising expansion plans

Vivara's main plan to increase its national presence is the opening of new stores, which will allow it to achieve more capillarity and brand awareness. We made our own analysis about possible locations to open new Vivara and Life stores – the outputs were in line with the management's plan, which we believe to be a feasible goal.

Over and above: we mapped all shopping malls in Brazil that cater to the AB public and do not have a Vivara store yet. Among these malls, we filtered for locations in cities with over 100K inhabitants. That being done, we concluded that Vivara still has the opportunity to open stores at 95 malls in Brazil (Appendix 27) – 74% of which are projected to be opened by the end of 2026 (Exhibit 27). By doing so, the brand could achieve a shopping mall penetration of 52% by 2031 (which is close to 38% today).

Life represents a huge growth avenue opportunity: the company's guidance is to, at first, open new Life stores at locations where Vivara is already established. Hence, to determine Life's opportunities for expansion, we began by mapping all Vivara units that don't contain a Life store within a radius of 1km – yielding a total of 175 locations (mostly tier 1 malls) to which Life can clearly expand. Besides that, we mapped points where there is either a Monte Carlo or a Pandora store (or both), but there are no Vivara stores, representing another opportunity to open a Life unit (Exhibit 26 and Appendix 27). Gathering the outputs from both pieces of research, the conclusion is the opportunity to open 230 more stores for Life in the next 10 years. Consequently, Life is expected to reach a total of 243 stores by 2031, achieving a shopping mall penetration of 39% (which is currently around 11%). Considering that Life could also open stores outside of shopping malls in the future (given that its products are of lower value and demand less security), we realize that the brand's opportunity for expansion is even greater.

The downfall of a giant: after years of accelerated growth under the tenure of former CEO Rachel Maia, Life's main competitor in Brazil, the Danish Pandora, has stated in its quarterly reports that it is reducing its operations in Latin America, including Brazil. At the beginning of 2021, the company closed 30% of its stores in the region. From now on, Pandora intends to direct its resources to North America, especially the United States, its biggest and most profitable market in the world.

But what made such a renowned brand experience a sales decline in the Brazilian market? We observe 3 main causes for this, being **(I)** dependence on only one type of product, **(II)** cost structure in foreign currency and import tariffs, and **(III)** distribution strategy misaligned with the value proposition. In short, with the increase in the cost of silver and the depreciation of the Brazilian real, Pandora started to sell much more expensive products than its peers. This, combined with a flawed distribution strategy through dealers, inattentive to the customer experience, has resulted in a loss of revenue over the years (Exhibit 28). Meanwhile, Life was able to replicate its competitor's most successful product at a much lower cost, given the cost structure in national currency and production in Brazil.

Making lemonade out of lemons: we used a Google Maps API to obtain coordinates for Life and Pandora stores and calculate the distance between them. With that, we concluded that there is an overlapping of 30% between Life and Pandora within a radius of 1km (39 stores). In the event of massive Pandora store closures, the flow can be directed to those Life stores. Still, this gain in volume of sales related to Pandora's exit from the market was not incorporated directly in our projections – if it were, there would be a risk of double counting, considering that Life's share gain already implicitly stems from 'stealing' competitors' clients.

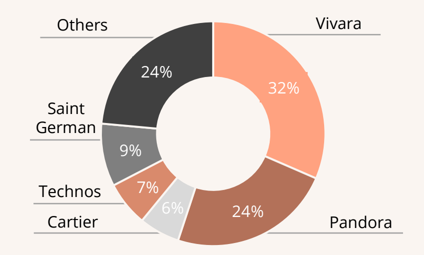
Will this expansion plan translate into share gains? Considering our projections, Vivara will achieve around 33% of market share in Brazil by 2026 (using Euromonitor's forecasts for market size). That number may seem to be aggressive, considering the average share of big players globally, as presented beforehand. However, if we take into account that the informal jewelry market in Brazil (which is pretty relevant) is not included in the total market value, this number is reasonable.

Environmental, Social and Governance

We see the ESG analysis in Vivara's case as a source of both gain opportunities and risks. For opportuinites, we analyzed a survey commissioned by Platinum Guild International about ESG Practices in fine jewelry, which concluded that consumers of these products are willing to pay 15-20% more for all sustainability aspects. Although sustainability wasn't their top priority when buying jewels, it was ranked above price in this survey. On the other hand, in the risks side, the jewelry industry is known for being involved in corruption schemes and for buying raw materials (mainly gold and diamonds) from illegal mines, which also are known for having inhumane working conditions. As Vivara isn't evaluated in ESG aspects by the central rating agencies, we created our own ESG Index (Exhibit 29). More detail on the criteria and grades are given in Appendix 29.

Exhibit 23: Share of search

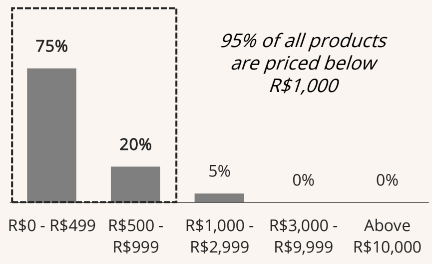
% of total organic searches made on Google



Source: Conversion

Exhibit 24: Life's price range

Percentage of total Life's SKUs



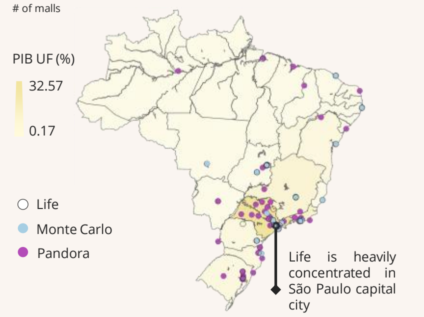
Source: Vivara's IR, Team 3

Exhibit 25: Gift options comparison

Source: Companies' websites, Team 3

Exhibit 26: Distribution of jewelry stores

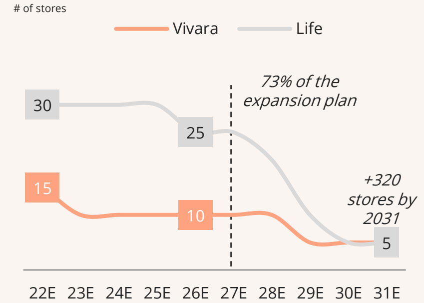
# of malls



Source: Company's websites, IBGE, Team 3

Exhibit 27: Projected store openings

# of stores



Source: Team 3

Environmental

Relentless supplier auditing: although the S&P ESG Risk atlas (Exhibit 30) ranks the Retail industry as having a medium-low Environmental and Social risk, the jewelry retailers must buy their raw materials from mining companies – those ranked as the riskiest in ESG impacts. Therefore, supplier auditing becomes even more important for Vivara – and so far, they are fulfilling their role. The company buys 100% of its gold from the Brazilian operations of Anglogold, the third-biggest gold producer in the world and certified by the London Bullion Market Association (LMBA) for responsible practices. Vivara's silver comes from Latin American mines, bought from a supplier certified by the Responsible Jewelry Council (RJC). Regarding the diamonds used, the company follows the Kimberley process to ensure that it is not buying from conflict zones, and Vivara also stopped buying diamonds from Russia in February 2022.

What would be the impacts of a carbon taxation? Public information leads us to believe that suppliers are the most relevant source of carbon emissions for Vivara. In the company fillings, we found little-to-no references about this theme, but suppliers address these questions on their public websites. Therefore, in an event of carbon taxation, Vivara could be prejudiced by the higher costs that its suppliers would incur in mining. Although Vivara doesn't disclose its emissions, Pandora discloses that 92% of its emissions are on Scope 3 – which come from other sources outside the company operations, especially from its suppliers – indicating that most of Vivara's emissions should come from this source too.

Circular economy contributing to the supply of raw materials: the company is also a supporter and contributor to the circular economy. Vivara has initiatives called "Semana Prata ("Silver Week")" and "Semana Ouro ("Gold Week"), in which it receives back used products and gives clients gift cards for shopping in its stores. According to the company filings, 25% of its gold jewelry is produced with gold obtained through circular economy initiatives.

Social

Gender equality even more important: Vivara is a member of the Brazilian network from the UN Global Compact, contributing to the 2030 Agenda and establishing measurable actions in its purpose. One of the Sustainable Development Goals (SDG) that is one of greatest concern to the company is SDG 5, which addresses gender equality: 87% of the company's workforce is female. Moreover, half of its top management and 40% of seats on the Board of Directors are occupied by women.

Labor management as a top priority: the company also has a good labor management, with an independent channel for reporting unethical conduct, fixed (35%) plus variable (65%) remuneration for sellers, and a training program for workers. All these policies result in higher worker satisfaction, such as shown in Glassdoor assessments (Exhibit 31). In Appendix 30, we show a comparative analysis of labor relations broken by categories, such as compensation and stability, using combined grades from Glassdoor, Infojobs, and Indeed. We conclude that Vivara ranks higher than average in all aspects except for "work-life balance", which can be explained by the fact that employee compensation is deeply linked to performance.

Governance

Family-run business: since February 2021, the company's CEO is Paulo Kruglensky. Paulo substituted Marcio Kaufman, that happens to be his cousin, and Nelson Kaufman's son, which presided the company between 1974 and 2010. Marcio became the company's CEO in 2010, but after a mysterious resignation, he joined the board in 2021. Paulo's track record is dubious – before joining Vivara, he had been for 12 years the CEO of Etna, a retail company under the Kaufman family's control that closed its doors in 2022, after not resisting the impacts of the pandemic. At the same time, he divided the CEO chair with the COO role at Vivara, where he acquired a great knowledge of the company's operations and was a key person to its expansion. Despite all doubts and likely stories, the market had a good acceptance of the new CEO.

De-risking by selling shares: the founder family still owns 58% of the company, being led by Nelson Kaufman, with 29.7% of shares (Exhibit 32). Although this results in a long-term alignment in business decisions, it also represents a risk of arbitrary decisions being made against minority interests. In October 2022, changes in the shareholder agreement released 13.2% of the capital (held by the controlling family) to be sold in the market. Considering that more than 90% of these shares are detained by Marcio, we believe that this exit is motivated more by personal issues than by disbelief in the company's future – otherwise, the whole family would be selling its shares. In practice, what this movement means is that, after the sale, the Kaufman family will own less than 50% of ordinary shares, resulting in a lower risk of arbitrary and harmful decisions for minority shareholders.

Past decisions will not influence future ones: the chairman of the board, João Cox, has been recently involved in a legal and administrative battle with TOTVS while being an independent counselor at Linx before Stone's acquisition. Despite the public scrutiny involved, we don't see Cox intentionally harming the minority shareholder, as he was dragged into the process and had little decision-making power. Therefore, we do not see his actions against minority shareholders as a relevant risk for the investment.

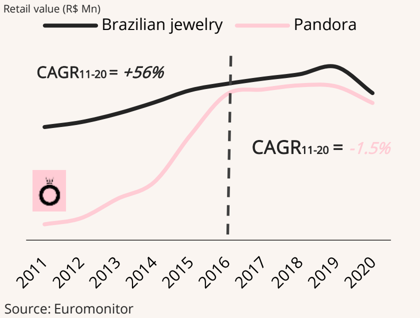
Highest governance standards: Vivara is listed in "Novo Mercado" of B3, the segment of listing that sets the highest possible standards of governance in Brazil and help protect minority shareholders.

Meritocracy in compensation: executives' salaries are deeply tied to performance, as the average proportion of variable compensation stands close to 45% (Exhibit 33). The company discloses that executive performance is measured both at the company level and in the respective area of the executive, with financial and operational goals to be achieved, aiming at the company's strategic planning. Although total comp for the management has been growing in past years, it still stands at lower levels than other Brazilian retailers, such as Renner (R$31.2 Mn), Arezzo (R$14.8 Mn), and Grupo Soma (R$ 19.3 Mn).

Financials

Previous consistent top-line growth without volume increase: Vivara has grown its gross revenue at a CAGR of 8.7% per year between 2016 and 2021, driven by same-store-sales (SSS), but also by the strong footprint expansion throughout Brazil. In the same period, 70 Vivara stores and another 31 Life units were opened (Exhibit 6), generating a 54% increase in the company's sales area. When we go further and analyze the historical sales growth of existing stores in the previous period using the SSS metric, and compare it with inflation growth, we can see that both go almost hand in hand. This indicates that the company does not grow its sales much more than inflation, i.e., there is no real gain in volume sold in existing stores, which is in line with intrinsic characteristics of the Brazilian jewelry market (Exhibit 34). Although there is no gain in volume, which is only seen when the company opens new stores, it does pass on inflation to consumers. However, it is a whole different story when it comes to abrupt year-on-year fluctuations in commodity prices. No matter how much pricing power Vivara has, it won't necessarily pass on sharp price increases to products. It doesn't have to, since it can efficiently manage inventories and adjust its production line in Manaus in order to control margins. Furthermore, at the end of the day, it is all about competitive positioning and keeping the brand's price point. In this sense, we decided to not include an increase in the volume sold by existing stores in our projections, but we did include price adjustments in sales/m2, which may differ according to the type of product whose sales are being forecasted. To guide our assumptions, we used 3 macroeconomic drivers: **(I)** Brazil's Consumer Price Index, **(II)** the USD/BRL exchange rate, and **(III)** gold and silver futures (GCM YY and SIN YY, respectively). Since forecasts for these drivers do not indicate steep movements, we decided to consider adjustments of 100% of YoY changes in drivers **(I)**, **(II)**, and **(III)**, as

Exhibit 28: Pandora's performance over time



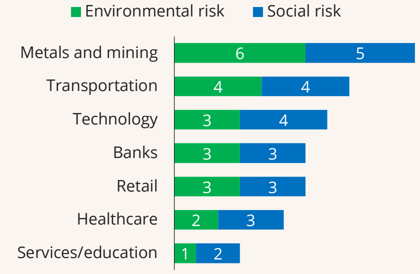
Source: Euromonitor

Exhibit 29: ESG Scoreboard

Company	ESG Score	E	S	G
VIVARA	2.3	2.4	2.2	2.3
MONTE CARLO	1.0	0.0	1.5	1.5
H.Stern	1.2	1.1	2.2	0.3
SWAROVSKI	2.3	3.0	1.4	2.4
PANDORA	2.7	3.0	2.0	3.0
TIFFANY & Co.	2.6	3.0	2.1	2.8
Cartier	2.6	3.0	2.1	2.8
AREZZO	2.7	3.0	2.2	3.0
RENNER	2.8	3.0	2.3	3.0

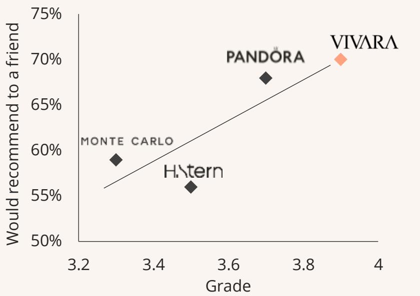
Source: Team 3

Exhibit 30: S&P ESG Risk Atlas (From 1 to 6)



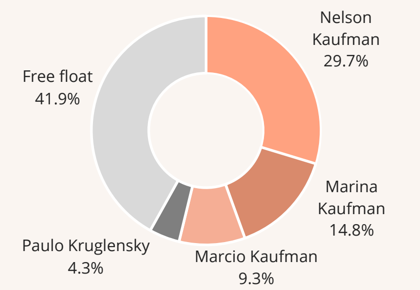
Source: S&P

Exhibit 31: Glassdoor assessments



Source: Glassdoor, Team 3

Exhibit 32: Shareholder structure



Source: Vivara's IR

shown in Appendix 8 and 11.

Operational leverage and product mix will have a great positive impact on margins: at first glance, margins seem to be escalating fast. And they are indeed, but that is motivated by two major factors, which we explain in detail right below: **(I)** higher markup products gaining relevance in Vivara's product mix, **(II)** major SG&A lines that don't make sense to grow hand in hand with revenue. As the expansion plan consolidates and most of the stores mature, we see margins stabilizing from 2027 onward.

A) Gross margin: we expect a solid increase in gross margins due to the higher participation of Life products, made of silver, which can be sold at a superior markup than gold items. To forecast how margins will behave, we decided to segment the company's revenue into four different product lines. Thus, we weighted the margin of each product, estimated based on management data, by its representativeness in the company's sales, as per Appendix 16. **(I)** We see the increase in Life sales having an impact of +5.1 p.p. Margins will continue to be positively impacted by the ICMS tax benefit that Vivara currently holds, which decreases gross revenue deductions from a usual 28% to 21%.

B) EBITDA margin: along with the gross margin growth, EBITDA margins (adjusted to consider operating expenses) will be affected by a substantial operational leverage gain coming from the leaner and more profitable layout of Life units, which operate with fewer employees. Regarding selling expenses, the gains arising from the existence of a fixed portion corresponding to 35% of the store employees' salaries, which we adjusted according to inflation and a real gain, and from rent expenses disconnected from the growth in the sales area, which we adjusted according to the IGP-M. However, the main leverage gain will come from expenses related to G&A. The first source is the headcount: we believe that the personnel in the area will double and that hiring will follow the pace of store openings, a plan that is 73% concentrated until 2026, and will maintain a 100% fixed salary, adjusted as mentioned above. The second, on the other hand, is expenses related to the payment of consulting services to study M&As (Appendix 4). The fact that some SG&A lines are not necessarily tied to revenue causes a strong dilution impact, given the rapid maturation of new stores. The fact that a store matures, generating peaks of revenue gains in the first years of the projection, should not generate the same peaks in expenses. **(II)** As a result of these factors, the SG&A burden on revenue will see a decrease from 48% to 42%.

C) Net margin: all aspects above, combined with a positive financial result as of 2026, due to unused cash sitting on the balance sheet and low financial leverage, and IRPJ tax benefits, will drive net margins to an uptrend (Exhibit 35). Another relevant impact that we consider in our projections is that the internalization of production will increase from 80% to 95%, in line with the company's expansion plan and the need to build a new plant. The internalization of production has a direct impact on Vivara's net margin as the IRPJ tax benefit depends on how much EBT is generated from the sale of products manufactured in Manaus. The higher this proportion, the higher the basis of calculation for the incidence of the IRPJ reduction – an effect that will bring down the effective tax rate paid by the company (Exhibit 17).

To expand it is necessary to invest: with an acceleration in Life openings in the past quarters, going from only 2 stores in 2018 to 53 now (set/22), the fraction regarding investments in new stores has risen in the CapEx structure from 36% in 2018 to 51% in 2021. In the short term, as we see a faster pace in store openings and substantial facility improvements, we still expect these lines to be the most representative ones of CapEx. In line with the data provided by Vivara's Investor Relations team, we used the same cost/m2 for both new Vivara and Life stores and adjusted it according to INCC forecasts. To account for the expected maintenance costs of a larger store footprint and the new facility, we forecasted a maintenance CapEx equal to the previous year's D&A expense plus inflation (excluding right-of-use assets depreciation). It is also known that Vivara is setting up a new production plant to fulfill the upcoming surge in demand for silver products. To account for this relevant expenditure, Vivara's IR team disclosed to us a R$50 Mn expenditure in 2023, which we considered in the facility line. In this sense, we also noticed that as the company opens new stores and internalizes its production, more pieces will be manufactured internally. However, the old facility will be shut down, as disclosed by Vivara's IR team, the total capacity will be around 5.2 Mn pieces (twice what it has today), a level that won't match the almost 8 Mn items of 2031. To account for the possibility of production line expansion, we considered a R$ 25 Mn expenditure in 2026 (half of the R$ 50 Mn to increase production by 50%), as shown in Exhibit 36. Along with CapEx, we forecasted the depreciation through a waterfall schedule, using a useful life of 7 years for PP&E added until 2025 and 6,4 years in the next periods, since it was the weighted average useful life of Vivara's assets according to the CapEx composition (a facility depreciates much slower than stores). The CapEx/D&A (excluding depreciation related to right-of-use assets) should decrease from 372% in 2021 to a 120% relation at perpetuity, as its expansion plan matures, and investments cool down, but don't necessarily come to a halt. This level of investment is important to support the long-term growth rate of 4,8% we see for Vivara.

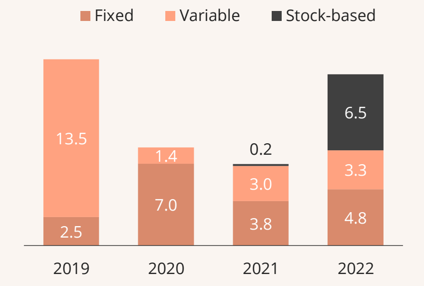
Unit economics differ greatly between two models: to understand the main source of value generation for the company in the coming years, we modeled the financial data for both a Life and a Vivara store. Following the unit economics approach, we found that there is a much superior return from the new layout that the company will put efforts into in the following years. Life stores are leaner units, with fewer employees and sales area. Beyond that, despite the similarity in sales/m2 of the two types of store, products are sold at a higher markup (~6x for silver, ~3x for gold, and ~2x for others) than the mix sold at Vivara, which includes 40%-gross-margin watches and 50%-margin accessories that are licensed from international brands, such as Tommy Hilfiger or Tag Heuer, and are just assembled in Vivara's facility. In addition, new Life units will be opened in tier 1 malls – located in premium regions –, allowing for the development of the brand's full potential. In summary, a combination of higher contribution margin and less capital required to build a new store makes Life units a success, resulting, at the same time, in an increase in top-line numbers and a decrease in the burden of SG&A expenses, mainly due to lower personnel expenditures, a double positive hit and a sharp difference between business units' performance (Exhibit 37).

Maturity curves – still uncertain but crucial for the thesis: while forecasting Vivara's results, we identified that the company valuation is very sensitive to the forecasted maturity curve of new units. The reason for that is the uncertainty linked to new Life units' performance: neither the management team nor we know if new stores are reaching their full potential faster, therefore having a very accelerated maturity curve, or if forecasts for sales of a mature store were too conservative and there is still room for growth. Although we take a conservative view and expect lower returns from future Vivara stores, we do not rule out the possibility of being positively surprised by their performance. Given that the stores will be opened in middle-income regions, it is reasonable to think that expenses, mainly related to personnel and rent, will be lower. In addition, the strategy of adapting the product mix according to the cluster each store, allocating more silver pieces – cheaper, but with higher margins – could improve results. We do not consider these points in numbers, but we see them as a plausible scenario that improves the risk-reward ratio of our thesis.

Working capital dynamics: according to Vivara, every jewel produced requires 3X the final piece weight in raw materials to be made. This is due to the casting process of gold and silver and workmanship afterwards, so companies that adopt an integrated business model with internal production must have a large amount of gold in their inventory. Additionally, jewelry is a low turnover product by definition – clients usually purchase it for special dates or even just once in a whole year. These two aspects together account for the much higher DIO than other business models, such as consumer staples, with 67, and apparel, with 107 days. Regarding DPO, we see that the company has a tight deadline to pay its suppliers, given the moderate bargaining power with them. Finally, when look at the days sales outstanding, it is clear the impact of pricey products, that forces consumers to pay in installments, as well as the company's policy of avoiding discounts – a measure that would unlock cash by reducing both DIO and DSO but could also harm the company's margins and brand equity. This suggests that Vivara adopts a very traditional policy regarding its WC,

Exhibit 33: Executives compensation

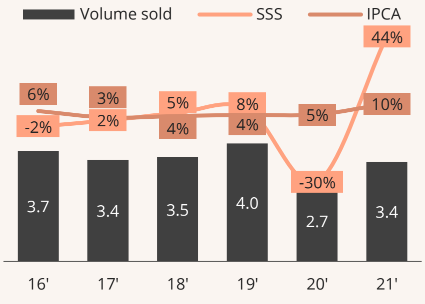
R$ Mn



Source: Vivara's IR

Exhibit 34: SSS compared to IPCA

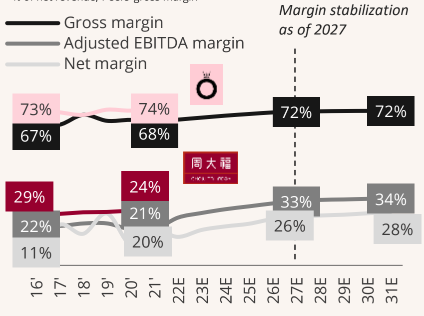
Mn units sold; %



Source: Vivara's IR, IBGE, Team 3

Exhibit 35: Margins forecast

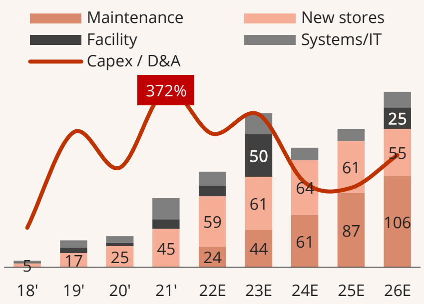
% of net revenue; Peers' gross margin



Source: Vivara's IR, Team 3

Exhibit 36: Capex breakdown

R$ Mn; % of D&A, excluding D&A related to right-of-use assets



Source: Vivara's IR, Team 3

Exhibit 37: 4-wall comparative

Payback in years; Sales/m2 and Capex/store in R$ thousand

	Vivara	Life
LT IRR	*24%*	*30%*
ROIC year 10	*27%*	*30%*
Payback period	6.6	4.9
Gross margin	67%	83%
4-wall EBITDA margin	24%	33%
# workers	9	7
Sales/m2 2022	63	67
Sales area (m2)	90	70
Capex/store	1,386	1,078

Source: Team 3

signaling that the company's strategy is not about doing a trade-off between fast revenue growth and cash conversion cycle quality, but to grow earnings steadily alongside financial health. For this reason, we kept the CCC flat in 392 days (Exhibit 38), in line with management's expectations.

Mild additional indebtedness is in the company's plans: in the past years, Vivara changed dramatically its capital structure, going from a 1.6 debt-to-equity ratio in 2016 to a 0.2 metric in 2021, mainly driven by debt amortization and fresh money coming from the IPO (Exhibit 39). As informed by management, they do not intend to move away severely from the current structure in the following years but do forecast a "light" increase in its financial leverage. To account for this, we considered a 20% increase in loans in 2023, simulating a new debt with payment conditions similar to Vivara's current average. Nevertheless, that won't move the needle in the capital structure, which will continue the same for all periods as of 2022 as we considered a leverage mechanism to always maintain a minimum loan balance and keep its weight on the capital structure flat. We also see that Vivara is very comfortable regarding financial leverage metrics, Looking more broadly at the financial leverage, we see that Vivara is in a very comfortable position, with net cash and the ability to pay almost 2 times what it has as current liabilities (Exhibit 40).

IFRS 16 has a considerable impact on financials: the new accounting methodology applied to Brazilian companies forced Vivara to register the leasing contracts it carries out referring to the space of its stores inside shopping malls as right-of-use assets (the most considerable item inside its PP&E), in addition to a liability referring to the payment of the contract's principal and its interest due. To represent the economic reality of Vivara more faithfully, we used the reconciliation methodology to analyze the company in our EBITDA calculations. We also decided to model the new leasing, interest, and depreciation contracts separately. New contracts were modeled according to the historical present value of rental contracts for each store type and adjusted by IGP-M. Also, we considered in our calculations the glove payment of R$850k for new Life stores, as oriented by Vivara's IR team. As for payments, we adopted the French-type amortization system (or Price) with constant annual installments. As they mature, we projected their renewals.

Valuation

We reiterate our BUY recommendation for Vivara, with a 2023 target price of BRL 35.70 per share fully diluted, representing an upside of 32.9%, obtained through a 10-year nominal DCF model. More details on valuation and the sensitivity analysis can be found in Appendix 32 and 33, respectively.

Key assumptions to base case scenario

New store openings: to find reasonable numbers for store openings, we considered the study presented in the section "Promising expansion plans", whose conclusions were useful to cross-check management's expectations, which seems feasible to us. While the management team sees 320 Vivara and 230 Life stores in 2026, we followed a more conservative approach and adopted in our forecasts a target for the same year of 299 and 198 respectively, representing the opening of 73% of all stores projected. From 2026 onwards, we see the expansion plan slowing down, as premium locations are exhausted and other growth avenues will have to be explored, such as street stores, new countries, or dealers - possibilities that we have not added in any of our cases. In 2031, we see a total of 582 stores of the two brands combined, in line with the capacity available in Brazil today. Not all stores will be equally profitable, given their location. For new Vivara stores, we consider that they will sell only 80% of what they would normally sell ("Tier 2 malls" variable). The effect was also applied to Life stores opened from 2027 onwards.

The "Life effect": in our projection, we considered that Life will be the great growth driver of the company in the coming years, accounting for 71% of store openings. With the gain in representativity of the brand in Vivara's total sales, we expect to see a generalized efficiency gain in the company's statements. This is because **(I)** silver products can be sold at a much higher markup than gold pieces, substantially increasing the combined gross margin (79% for silver and 65% for gold). In addition, **(II)** fewer workers are needed to run a Life unit store, which reduces sales expenses of the new model. Finally, **(III)** although sales/m2 of both store models are similar, we understand that new Vivara stores, given the already strong presence in tier 1 malls in Brazil, will need to be opened in less profitable locations. We consider that these new stores will sell 80% of what previous stores sold (Appendix 9), therefore reducing the overall channel profitability.

Cannibalization is under control: an important point for the thesis's success is to keep cannibalization at low levels. As disclosed by the company's IR, the Life brand will continue to be sold within the company's main sales channel, Vivara stores. To account for this effect in our model, we considered a cannibalization rate (a kind of "theft" of sales) of 7.8%, which was applied over Life sales. To arrive at this number, we considered that 3% (rate provided by the IR team) of sales from Vivara stores where there is also a Life store (we calculated the intersection between both layouts) were being transferred to Life stores, which corresponds to ~8% of the channel's sales. At the beginning of the projection, given that there are still few Life stores. i.e., the transfer of sales from one store to another is not representative but gradually increases as new Life stores arise and sales grow (Exhibit 41).

Maturity curves: in talks with market participants, we identified that the sector is indeed known for stores reaching their full power by year 3 (Exhibit 42). In contrast, sales in the first two years may vary a lot, since it heavily depends on marketing efforts and location factors. We give special attention to this topic because the sales/m2 of a mature store is dependent on what is the maturity curve behavior. When it comes to Vivara, there isn't much to be discussed, since most stores are older than the 3-year maturity period, so it is reasonable to use the 2019 average sales/m2 as a proxy for further calculations (we chose 2019 as it is the most recent year without the COVID-19 pandemic effect on sales). On the other hand, for Life, things get a little bit tricky. We saw that the weighted average age of stores in 2019 was 1,3 years (Appendix 12), given the very recent expansion of its dedicated units. In this sense, depending on the performance of the first two years, the whole projection of Life sales/m2 is affected, having a substantial impact on Vivara's valuation (Exhibit 43). Given that we still have a very short track record of new units and poor industry benchmarks, we followed a more conservative perspective, considering that both channels will have the same maturity curve, given the high-income market characteristics, privileged POS locations, and brand recognition by the target public.

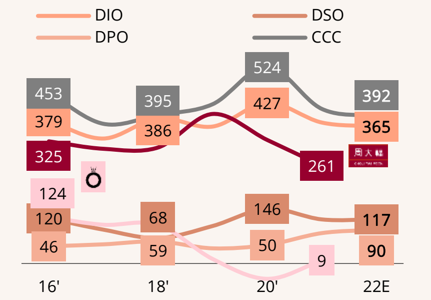
E-commerce adoption as a possible driver: higher penetration of online shopping among jewelry consumers is not easy to achieve. Still, we identified that Vivara does not let itself be defeated and has invested heavily in the digital front. One of the aspects is its website, which is being migrated to the VTEX Platform and has presented substantial results in traffic indicators and page redirection. The other is the assisted sales program "Joias em Ação" ("Jewel in Action"), through which idle salespeople at the point of sale provide personalized service via WhatsApp for clients who wish to buy online but are not yet completely comfortable finalizing the purchase. The program was quickly implemented during the pandemic and is a success, representing 28.5% of digital sales (2Q22), as well as being a powerful sales converter for more expensive products. We estimate that the channel's representativity will stabilize around 11% (Appendix 5), a level seen today and lower than in 2021 – a year still impacted by lockdowns. With the return of customer flow to the physical environment, we expect a loss of engagement of sellers in the channel and, thus, of jewelry representativity in e-commerce. Given the different characteristics of consumers according to each product line, we project a lower e-commerce penetration for jewelry than the rest of the mix.

DCF methodology

Cost of capital: we considered a WACC of 14.7%, a combination of three elements: a 15.3% cost of equity, a

Exhibit 38: Cash conversion cycle

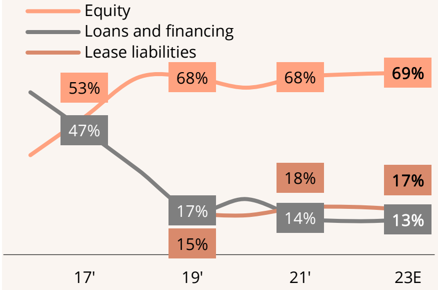
Number of days; Peers' cash conversion cycle (CCC)



Source: Vivara's IR, Team 3

Exhibit 39: Capital structure

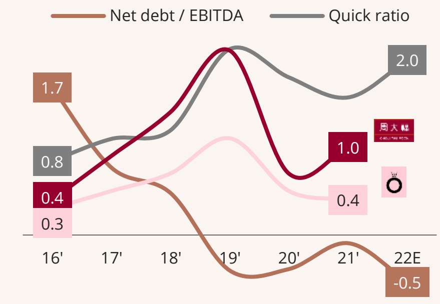
As a % of the total financing structure



Source: Vivara's IR, Team 3

Exhibit 40: Financial leverage analysis

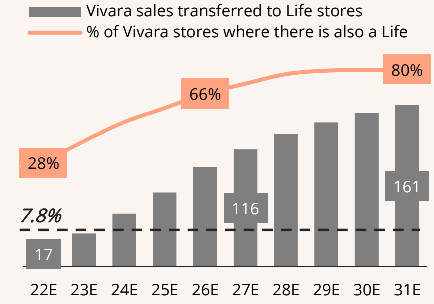
In X; Peers' net debt/EBITDA



Source: Vivara's IR, Team 3

Exhibit 41: Life cannibalization

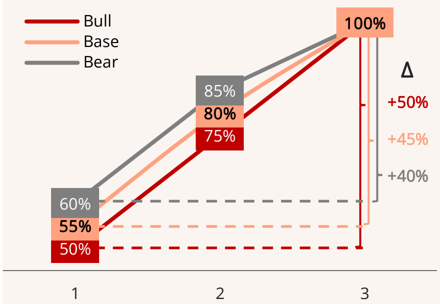
R$ Mn



Source: Team 3

Exhibit 42: Life maturity curve

% of mature total sales



Source: Team 3

6.81% cost of debt and finally a lease discount rate of 11,59%. To arrive at the Kd, we used a long-term CDI forecast of 8.3%, combined with a weighted average default spread of current loans outstanding of 2.1% and the 34% marginal tax rate for Brazilian companies. The cost of equity was calculated using the CAPM formula considering a 3.83% risk-free rate based on the US 10-year Treasury Bond yield, combined with a 7.2% equity risk premium and Brazil's 2.9% country risk premium, which we obtained in Aswath Damodaran's publicly available worksheets. Vivara's 1.1 beta was built using an average unlevered industry beta, which was re-levered using the industry average capital structure. Finally, to bring the Ke to BRL terms, we added the 0.49% inflation differential between Brazil and the U.S. In our forecasts, we see a sharp gain in the overall profitability of the business as more stores with lower payback and higher returns are built. Yet, in the last years, we see a negative impact on ROIC due to the positive and growing financial income, a gain that is not captured by NOPAT, but raises invested capital in the form of equity (Exhibit 44).

Growth and perpetuity: as for the growth, we combined an LT inflation rate with real GDP growth, arriving at a 4,8% rate, which translates into 51% of the total enterprise value being in perpetuity. Beyond that, we considered current fiscal benefits in perpetuity, since we strongly believe in further renewals. Thus, by taking the EV obtained in perpetuity, we arrive at a 2031 implicit EV/EBITDA multiple of 7.1x. Both WACC and growth rate were sensitized to understand the different outputs of our model (Exhibit 45).

Multiple analysis: setting Vivara's P/E 2023 multiples side by side with national retail top-picks and international jewelry retail players, and comparing with estimates on EPS growth, we see Vivara's stock as underpriced. The company has similar multiples to international players (except for Pandora), but higher growth prospects, but while when compared to Brazilian players, Vivara has higher growth prospects and lower multiples (Exhibit 46). Therefore, relative valuation supports our BUY recommendation, as we expected that Vivara's multiple gap should diminish with the materialization of Life's expansion plan, leading to a higher multiple (re-rating) or to a similar multiple but higher EPS.

Investment Risks

Business and operational risks [B]

Reputational damage [B1]: Vivara's business model depends on the strength of the brand, and several reasons damage its image, such as employee complaints, customer dissatisfaction or legal charges, which can impact the company's sales. An attention point that materialized recently in the jewelry industry was an episode involving money laundering. In 2017, a money laundering scheme involving Vivara's peers, H.Stern and Antonio Bernardo, and former Rio de Janeiro governor Sérgio Cabral, was unveiled by the Lava-Jato operation. Mr. Cabral used contacts inside the companies to buy overpriced jewelry in cash, without a bill of sale, in order to launder bribe money that he collected through corruption schemes as governor. At the time, H.Stern was ordered to pay R$ 18 Mn in fines and the brand's image was indeed tarnished, as its president and commercial director knew all about it. We understand that no company is immune from being impacted by similar episodes and conniving with illicit acts described in laws 9.613/98 and 12.683/12. As a form of prevention, in 2021, Vivara revised its money laundering prevention policy, through which it verifies the amounts received in cash and informs the Financial Activities Control Council of payments over R$ 30 k.

Lower sales potential per mature store than expected – [B2]: according to the maturity curve used in our forecasts, the mature store sales/m2 varies largely. In case new Life stores are indeed maturing faster than expected, meaning that what they sell now is close to what a mature store will sell in the future, there isn't much room for growth. This would have a severe impact on Vivara's valuation as it represents a lower sales potential for all stores that will be opened in the future.

Higher cannibalization between Life and Vivara – [B3]: there is no doubt that life stores will be the big growth driver of the future. Still, that depends on two fundamental aspects: **(I)** that new stores will be more profitable per m2 than Vivara stores and **(II)** that this profitability doesn't come at the expense of old stores' sales. In other words, new stores must sell to a different public, in a larger addressable market, so sales are not transferred between stores located near each other. This would be the same as taking money out of one pocket and putting it back in the other. Since we have little track record of new Life units and few disclosure on how Vivara stores are performing when a Life unit is opened close to it, we decided to sensitize this variable in our model. Cannibalization rates of around 15% would start to become worrisome for our thesis.

Market risks [MK]

End of fiscal benefits – [MK1]: considering the importance of tax benefits for the company's profitability, we consider the end of them to be a risk of great impact. We believe that the fiscal incentives are unlikely to end, in view of the discussion in Appendix 13. However, in a scenario where they are withdrawn, this would represent a negative impact on Vivara's margins, substantially affecting its intrinsic value (Appendix 34).

Change in the competitive environment – [MK2]: today, Vivara is the dominant player in the jewelry sector, with no players that could threaten its leadership. However, the establishment of a strong global player in Brazil, with the construction of a factory here, is a considerable risk, given that they would no longer pay import taxes in Brazil and could reach sufficient scale to compete against Vivara. In addition, the strengthening of its main competitor, Monte Carlo, could also bring risks to the company. MC has been trying to carry out an expansion of its stores for a considerable time, facing difficulties. Recently, it started manufacturing part of its jewelry at ZFM, and this cost advantage could drive its expansion in the medium-long term. We also believe that a possible game changer could be the entry of a private equity fund to support this expansion, which would grant funding and expertise to scale and improve brand awareness.

Life disruption – [MK3]: is it not possible that a "new Life", such as the Jolie line, from the large competitor Monte Carlo, could do the same as Life did with Pandora products? In our assessment, this is not feasible. First, I) dependence on only one product - bracelets and charms, as it was the case with Pandora, which has more than 70% of its revenue coming from these two types of jewelry - does not exist at Life. Furthermore, II) the company's cost structure, with internalized production, gives it sustainable competitive advantages over international competitors. Finally, this cost advantage is combined with III) an important characteristic of the target public of these brands - a type of customer strongly concerned with the cost-effectiveness of the products, but also with the quality and safety promoted by the brand they are buying from. For the same reasons, we do not see plausible an invasion of Chinese products at very low prices either. Although with a low probability, the materialization of this risk would have a high impact.

Macroeconomic risks [M]

Deterioration of the country's economic scenario – [M1]: as Vivara is positioned in the fashion retail industry, a non-essential business, the company may end up suffering from the deterioration of the Brazilian economic scenario. An increase in inflation and a decrease in the purchasing power of the population could cause a slowdown in consumption and, consequently, on the company's sales. However, we do not see that scenario as a major risk for the company, since its customers are of higher income brackets and, hence, less affected by economic fluctuations. Another issue could be raised if Vivara had a considerable amount of financial leverage, which is not the case.

Long period with gold and silver prices increase – [M2]: even with a verticalized business model and strategies to fight metal price increases, a long period of high prices in raw materials could impact the company's margins, as its one-year inventory and strategies regarding the change in the mix of products are efficient only in the short and medium term. However, we identified that the company has a considerable pricing power, so the impacts of this scenario are minimized.

Exhibit 43: Upside sensitivity

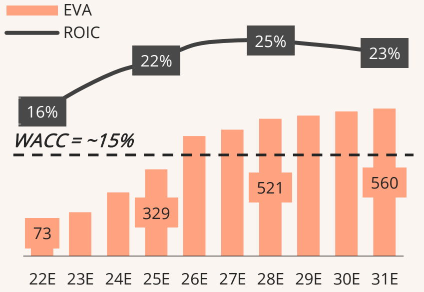
Upside from current price according to the forecasted maturity curve

2nd year maturity stage \ 1st year maturity stage	45%	50%	55%	60%	65%
70%	46%	41%	35%	31%	27%
75%	44%	38%	34%	29%	25%
80%	42%	37%	32%	28%	24%
85%	40%	35%	30%	26%	23%
90%	38%	33%	29%	25%	21%

Source: Team 3

Exhibit 44: Economic value added and ROIC

ROIC In %; Economic Value Added (EVA) to shareholders in R$ Mn



Source: Team 3

Exhibit 45: Growth vs. WACC sensitivity

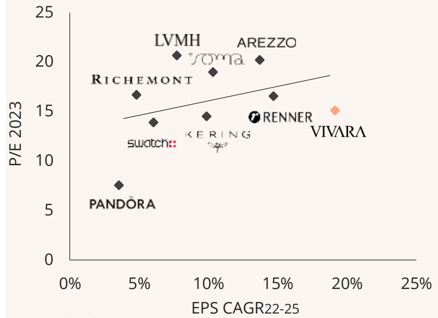
Upside over the current price

WACC \ Terminal growth rate	5,8%	5,3%	4,8%	4,3%	3,8%
13,8%	59%	53%	48%	43%	39%
14,3%	50%	44%	40%	35%	32%
14,8%	41%	36%	32%	28%	25%
15,3%	33%	29%	26%	22%	19%
15,8%	26%	23%	19%	16%	14%

Source: Team 3

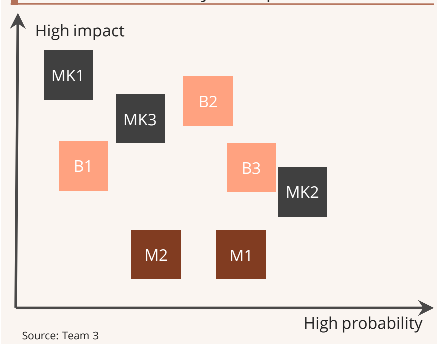
Exhibit 46: 1y Fwd P/E X EPS CAGR

P/E 2023; 3-year EPS CAGR (2022 – 2025)



Soure: Bloomberg

Exhibit 47: Probability vs. Impact matrix



Source: Team 3

Appendix 1 – Income statement

Income statement (BRL millions)	19'	20'	21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
Gross revenue	1,489,873	1,338,101	1,842,454	2,394,384	2,955,081	3,531,786	4,126,068	4,800,787	5,235,878	5,615,234	5,912,929	6,193,455	6,466,381
YoY	*10%*	*-10%*	*38%*	*30%*	*23%*	*20%*	*17%*	*16%*	*9%*	*7%*	*5%*	*5%*	*4%*
Deductions	(318,512)	(290,595)	(376,068)	(504,910)	(623,145)	(744,757)	(870,074)	(1,012,354)	(1,104,103)	(1,184,098)	(1,246,874)	(1,306,029)	(1,363,582)
% of revenue	*-21%*	*-22%*	*-20%*	*-21%*	*-21%*	*-21%*	*-21%*	*-21%*	*-21%*	*-21%*	*-21%*	*-21%*	*-21%*
Net revenue	1,171,361	1,047,506	1,466,386	1,889,474	2,331,936	2,787,030	3,255,994	3,788,433	4,131,776	4,431,136	4,666,055	4,887,426	5,102,799
YoY	*10.5%*	*-10.6%*	*40.0%*	*28.9%*	*23.4%*	*19.5%*	*16.8%*	*16.4%*	*9.1%*	*7.2%*	*5.3%*	*4.7%*	*4.4%*
COGS	(373,615)	(330,064)	(474,909)	(593,158)	(712,087)	(827,231)	(943,330)	(1,071,907)	(1,156,228)	(1,231,568)	(1,291,510)	(1,350,015)	(1,408,365)
YoY	*20.3%*	*-11.7%*	*43.9%*	*24.9%*	*20.1%*	*16.2%*	*14.0%*	*13.6%*	*7.9%*	*6.5%*	*4.9%*	*4.5%*	*4.3%*
Gross profit	797,746	717,442	991,477	1,296,316	1,619,849	1,959,799	2,312,664	2,716,526	2,975,548	3,199,568	3,374,545	3,537,411	3,694,434
Gross margin	*68.1%*	*68.5%*	*67.6%*	*68.6%*	*69.5%*	*70.3%*	*71.0%*	*71.7%*	*72.0%*	*72.2%*	*72.3%*	*72.4%*	*72.4%*
Operating expenses	(436,119)	(512,404)	(696,712)	(863,468)	(1,046,140)	(1,243,536)	(1,441,987)	(1,630,446)	(1,776,243)	(1,901,117)	(2,006,863)	(2,101,071)	(2,192,585)
YoY	*-11%*	*17%*	*36%*	*24%*	*21%*	*19%*	*16%*	*13%*	*9%*	*7%*	*6%*	*5%*	*4%*
Earnings before interest and taxes (EBIT)	361,627	205,038	294,765	432,848	573,708	716,263	870,677	1,086,080	1,199,305	1,298,451	1,367,682	1,436,340	1,501,849
EBIT margin	*30.9%*	*19.6%*	*20.1%*	*22.9%*	*24.6%*	*25.7%*	*26.7%*	*28.7%*	*29.0%*	*29.3%*	*29.3%*	*29.4%*	*29.4%*
Financial result	2,803	(41,542)	(31,420)	(53,022)	(25,443)	(14,268)	(11,524)	(1,474)	19,928	33,808	46,820	70,930	97,559
Earnings before taxes (EBT)	364,429	163,496	263,345	379,826	548,266	701,995	859,153	1,084,606	1,219,233	1,332,259	1,414,502	1,507,270	1,599,407
EBT margin	*31.1%*	*15.6%*	*18.0%*	*20.1%*	*23.5%*	*25.2%*	*26.4%*	*28.6%*	*29.5%*	*30.1%*	*30.3%*	*30.8%*	*31.3%*
Net income taxes	(40,914)	(16,865)	35,313	(51,656)	(72,548)	(90,215)	(106,992)	(130,554)	(141,476)	(148,631)	(151,340)	(154,301)	(156,342)
%	*-11.1%*	*-10.3%*	*13.4%*	*-13.6%*	*-13.2%*	*-12.9%*	*-12.5%*	*-12.0%*	*-11.6%*	*-11.2%*	*-10.7%*	*-10.2%*	*-9.8%*
Net income (loss)	323,515	146,632	298,658	328,170	475,717	611,780	752,161	954,052	1,077,757	1,183,627	1,263,162	1,352,969	1,443,065
Net margin	*27.6%*	*14.0%*	*20.4%*	*17.4%*	*20.4%*	*22.0%*	*23.1%*	*25.2%*	*26.1%*	*26.7%*	*27.1%*	*27.7%*	*28.3%*
EBITDA	408,571	263,311	366,595	529,603	695,843	872,612	1,054,781	1,267,320	1,414,506	1,535,128	1,623,504	1,703,375	1,777,412
(-) Rental expenses (IFRS16)	(47,640)	(47,032)	(72,647)	(43,073)	(48,291)	(52,718)	(56,027)	(56,923)	(55,627)	(51,526)	(51,555)	(44,289)	(37,642)
(+/-) Non-recurring	(88,796)	0	7,520	0	0	0	0	0	0	0	0	0	0
Adjusted EBITDA	272,135	216,279	301,468	486,530	647,552	819,894	998,754	1,210,397	1,358,878	1,483,602	1,571,949	1,659,086	1,739,771
Adjusted EBITDA margin	*23.2%*	*20.6%*	*20.6%*	*25.7%*	*27.8%*	*29.4%*	*30.7%*	*31.9%*	*32.9%*	*33.5%*	*33.7%*	*33.9%*	*34.1%*

Appendix 2 – Balance sheet

Balance sheet (BRL millions)	19'	20'	21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
Total assets	1,879,529	2,140,697	2,563,869	2,842,842	3,297,320	3,760,376	4,338,682	5,049,682	5,499,058	5,968,609	6,390,214	6,839,081	7,334,877
Current assets	1,319,175	1,422,266	1,583,220	1,751,433	2,233,793	2,609,102	3,113,501	3,708,911	4,156,558	4,566,194	4,998,405	5,443,435	5,904,018
Cash and cash equivalents	435,844	492,609	325,588	574,589	892,531	1,051,349	1,310,263	1,627,746	1,839,894	2,044,543	2,305,976	2,599,453	2,919,095
Marketable securities and short-term investments	0	44,435	141,707	0	0	0	0	0	0	0	0	0	0
Trade receivables	425,833	410,263	531,777	569,349	659,197	777,211	911,537	1,064,212	1,195,693	1,309,512	1,404,151	1,487,024	1,563,050
Inventory	348,034	365,184	527,139	534,697	592,837	674,539	768,457	874,188	965,596	1,045,737	1,113,207	1,173,684	1,230,593
Recoverable taxes	95,247	94,745	47,627	61,369	75,739	90,520	105,752	123,045	134,197	143,920	151,550	158,740	165,735
Prepaid expenses	7,419	3,262	8,223	10,271	12,330	14,324	16,334	18,560	20,020	21,325	22,363	23,376	24,386
Derivatives	6,796	11,767	1,159	1,159	1,159	1,159	1,159	1,159	1,159	1,159	1,159	1,159	1,159
Non-current assets	560,354	718,431	980,649	1,091,409	1,063,527	1,151,274	1,225,180	1,340,771	1,342,500	1,402,415	1,391,809	1,395,646	1,430,859
Marketable securities and short-term investments	0	164,876	186,405	186,405	0	0	0	0	0	0	0	0	0
Deferred taxes	54,200	67,831	112,318	112,318	112,318	112,318	112,318	112,318	112,318	112,318	112,318	112,318	112,318
Other non-current assets	184,989	135,836	171,064	171,064	171,064	171,064	171,064	171,064	171,064	171,064	171,064	171,064	171,064
PP&E	311,423	340,757	480,988	582,426	718,018	793,290	854,142	952,488	946,416	997,037	971,670	968,772	998,222
Intangible assets	9,743	9,131	29,874	39,195	62,127	74,602	87,656	104,901	112,702	121,996	136,757	143,492	149,255
Total liabilities and equity	1,879,529	2,140,697	2,563,869	2,842,842	3,297,320	3,760,376	4,338,682	5,049,682	5,499,058	5,968,609	6,390,214	6,839,081	7,334,877
Current liabilities	458,813	589,043	674,296	610,608	720,719	833,781	951,494	1,102,708	1,193,536	1,277,307	1,332,831	1,391,513	1,451,906
Labor liabilities	65,175	49,922	78,046	98,499	122,819	148,636	176,088	206,748	223,077	238,623	251,899	264,645	277,541
Suppliers	36,421	53,198	157,556	145,631	153,073	169,772	191,206	216,415	238,523	258,068	274,597	289,455	303,461
Taxes payable	86,778	92,177	113,491	163,690	236,280	302,531	370,260	467,421	525,440	574,149	609,593	649,572	689,279
Loans and financing	190,934	277,821	127,176	0	0	0	0	0	0	0	0	0	0
Other liabilities	32,407	30,768	50,074	50,074	50,074	50,074	50,074	50,074	50,074	50,074	50,074	50,074	50,074
Rentals payable	14,856	10,435	17,141	17,141	17,141	17,141	17,141	17,141	17,141	17,141	17,141	17,141	17,141
Lease liabilities payable	24,119	39,887	59,920	64,681	70,440	74,735	75,833	74,017	68,389	68,359	58,635	49,733	43,518
Dividends payable	8,124	34,835	70,892	70,892	70,892	70,892	70,892	70,892	70,892	70,892	70,892	70,892	70,892
Non-current liabilities	330,992	380,178	496,842	667,213	761,828	790,638	856,346	915,255	963,948	1,009,436	1,012,358	1,013,563	1,034,085
Loans and financing	79,420	112,500	164,037	291,213	349,456	349,456	403,243	465,247	540,729	582,980	635,450	681,884	733,113
Lease liabilities payable	225,281	235,273	310,148	348,874	379,933	403,101	409,022	399,228	368,871	368,711	316,262	268,247	234,722
Taxes paid in installments	1,865	815	633	633	633	633	633	633	633	633	633	633	633
Other liabilities	0	0	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703
Labor liabilities	9,193	6,954	1,266	1,266	1,266	1,266	1,266	1,266	1,266	1,266	1,266	1,266	1,266
Tributary, labor and civil provisions	15,234	24,636	17,054	21,524	26,838	32,480	38,478	45,178	48,746	52,143	55,044	57,829	60,647
Shareholders' equity	1,089,724	1,171,476	1,392,731	1,565,020	1,814,772	2,135,957	2,530,841	3,031,719	3,341,574	3,681,866	4,045,026	4,434,004	4,848,886
Issued capital	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381	1,105,381
Capital reserves	(53,041)	(53,041)	(52,568)	-52,568	-52,568	-52,568	-52,568	-52,568	-52,568	-52,568	-52,568	-52,568	-52,568
Legal reserves	2,644	9,978	24,902	41,311	65,097	95,686	133,294	180,997	234,884	294,066	357,224	424,872	497,026
Statutory reserves	7,301	109,158	315,015	315,015	315,015	315,015	315,015	315,015	315,015	315,015	315,015	315,015	315,015
Profit reserves	27,439	0	0	0	0	0	0	0	0	0	0	0	0
Retained earnings	0	0	0	155,881	381,846	672,442	1,029,718	1,482,893	1,738,860	2,019,972	2,319,973	2,641,303	2,984,031

Appendix 3 – Cash flow statement

Cash flow statement (BRL millions)	19'	20'	21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
Cash flow from operating activities	44,528	252,052	219,939	427,202	543,101	666,046	813,393	1,017,095	1,157,483	1,302,514	1,416,356	1,538,821	1,647,114
Adjusted net income	283,730	246,253	397,042	472,466	651,457	826,488	998,291	1,198,914	1,352,153	1,475,228	1,573,440	1,667,078	1,759,088
Net income (loss) during the period	323,515	146,632	298,658	328,170	475,717	611,780	752,161	954,052	1,077,757	1,183,627	1,263,162	1,352,969	1,443,065
Depreciation and amortization	46,944	58,273	71,830	96,754	122,135	156,349	184,104	181,240	215,201	236,678	255,822	267,035	275,563
Charges on right of use assets	0	29,641	35,690	43,073	48,291	52,718	56,027	56,923	55,627	51,526	51,555	44,289	37,642
Provisions for labor, tributary and civil risks	0	11,345	9,704	4,469	5,314	5,641	5,999	6,700	3,568	3,397	2,901	2,785	2,818
Lease discounts	0	(16,491)	(5,735)	0	0	0	0	0	0	0	0	0	0
Other adjustments	(86,729)	16,854	(13,105)	0	0	0	0	0	0	0	0	0	0
Change in assets and liabilities	(172,820)	50,120	(91,595)	(2,192)	(60,065)	(107,724)	(128,871)	(124,896)	(139,043)	(121,188)	(105,529)	(83,968)	(74,333)
Trade receivables	(211,918)	15,793	(121,796)	(37,572)	(89,848)	(118,014)	(134,326)	(152,676)	(131,481)	(113,819)	(94,639)	(82,873)	(76,027)
Inventory	1,654	(18,593)	(168,193)	(7,558)	(58,141)	(81,702)	(93,919)	(105,731)	(91,408)	(80,141)	(67,470)	(60,477)	(56,910)
Recoverable taxes	(12,226)	38,305	15,787	(13,742)	(14,371)	(14,781)	(15,232)	(17,293)	(11,151)	(9,723)	(7,630)	(7,190)	(6,995)
Prepaid expenses	0	0	0	(2,047)	(2,059)	(1,994)	(2,010)	(2,226)	(1,460)	(1,305)	(1,038)	(1,013)	(1,010)
Accounts payable	(9,848)	16,777	104,358	(11,925)	7,442	16,699	21,434	25,209	22,108	19,545	16,529	14,858	14,006
Labor charges	0	(15,253)	22,436	20,453	24,320	25,817	27,452	30,660	16,330	15,545	13,276	12,747	12,896
Taxes payable	14,170	19,353	50,708	50,199	72,591	66,251	67,729	97,161	58,019	48,710	35,444	39,979	39,707
Other adjustments	45,348	(6,262)	5,105	0	0	0	0	0	0	0	0	0	0
Others	(66,382)	(44,321)	(85,508)	(43,073)	(48,291)	(52,718)	(56,027)	(56,923)	(55,627)	(51,526)	(51,555)	(44,289)	(37,642)
Interest added	0	(18,002)	(32,984)	(43,073)	(48,291)	(52,718)	(56,027)	(56,923)	(55,627)	(51,526)	(51,555)	(44,289)	(37,642)
Other items	(66,382)	(26,319)	(52,524)	0	0	0	0	0	0	0	0	0	0
Cash flow from investing activities	(32,430)	(269,313)	(207,589)	23,167	(690)	(147,259)	(169,304)	(212,860)	(147,760)	(181,393)	(186,974)	(197,028)	(208,987)
Marketable securities and short-term investments	14,070	(224,601)	(103,511)	141,707	186,405	0	0	0	0	0	0	0	0
Acquisitions of property and equipment	(40,917)	(40,782)	(80,704)	(99,835)	(153,001)	(120,923)	(140,758)	(178,562)	(120,893)	(152,027)	(159,148)	(177,795)	(190,107)
Acquisitions of intangible assets	(5,582)	(3,929)	(23,374)	(18,705)	(34,094)	(26,336)	(28,546)	(34,298)	(32,906)	(29,365)	(27,826)	(19,233)	(18,880)
Cash flow from financing activities	338,964	73,986	(179,372)	(201,326)	(224,469)	(359,970)	(385,176)	(486,751)	(797,575)	(916,474)	(967,949)	(1,048,316)	(1,118,485)
Capital increase	400,431	0	0	0	0	0	0	0	0	0	0	0	0
Dividends paid	(67,418)	0	(12,481)	(155,881)	(225,966)	(290,595)	(357,277)	(453,175)	(767,902)	(843,334)	(900,003)	(963,991)	(1,028,184)
New loans and financing	49,447	308,113	120,343	0	58,243	0	53,788	62,004	75,482	42,251	52,469	46,435	51,229
Amortization of loans and financing	0	(222,927)	(231,163)	0	0	0	0	0	0	0	0	0	0
Principal elements of lease payments	(47,640)	(12,540)	(29,795)	(45,486)	(56,746)	(69,374)	(81,688)	(95,580)	(105,155)	(115,391)	(120,415)	(130,760)	(141,530)
Net revolver	0	0	0	0	0	0	0	0	0	0	0	0	0
Increase (Reduction) in Cash	351,063	56,725	(167,022)	249,043	317,942	158,818	258,913	317,484	212,148	204,648	261,434	293,477	319,642
BoP Cash	84,781	435,844	492,568	325,547	574,589	892,531	1,051,349	1,310,263	1,627,746	1,839,894	2,044,543	2,305,976	2,599,453
EoP Cash	435,844	492,568	325,547	574,589	892,531	1,051,349	1,310,263	1,627,746	1,839,894	2,044,543	2,305,976	2,599,453	2,919,095

Appendix 4 – SG&A build-up

Operating expenses	19'	20'	21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
SG&A	(436,119)	(512,404)	(696,712)	(863,468)	(1,046,140)	(1,243,536)	(1,441,987)	(1,630,446)	(1,776,243)	(1,901,117)	(2,006,863)	(2,101,071)	(2,192,585)
Sales expenses	(360,069)	(331,679)	(457,531)	(578,773)	(706,092)	(838,195)	(974,872)	(1,127,732)	(1,222,981)	(1,309,087)	(1,377,662)	(1,441,870)	(1,505,278)
% of revenue	*-31%*	*-32%*	*-31%*	*-31%*	*-30%*	*-30%*	*-30%*	*-30%*	*-30%*	*-30%*	*-30%*	*-30%*	*-29%*
Personal	(175,324)	(158,850)	(224,883)	(282,457)	(351,605)	(424,326)	(500,120)	(584,055)	(634,104)	(680,481)	(717,372)	(751,534)	(785,585)
Variable	(113,961)	(103,253)	(146,174)	(189,962)	(234,446)	(280,200)	(327,348)	(380,878)	(415,396)	(445,493)	(469,111)	(491,367)	(513,020)
Variable as % of gross revenue	7.6%	7.7%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%
Fixed	(61,363)	(55,598)	(78,709)	(92,494)	(117,159)	(144,127)	(172,772)	(203,177)	(218,708)	(234,988)	(248,261)	(260,167)	(272,565)
# managers and salespeople	2,273	2,133	2,560	2,698	3,078	3,458	3,803	4,103	4,288	4,473	4,588	4,668	4,748
# personnel / store	9.0	8.0	8.9	8.6	8.4	8.3	8.3	8.2	8.2	8.1	8.1	8.1	8.1
Annual salary per worker	(27,0)	(26,1)	(30,7)	(34,3)	(38,1)	(41,7)	(45,4)	(49,5)	(51,0)	(52,5)	(54,1)	(55,7)	(57,4)
Rentals and common area maintenance fees	(47,860)	(35,268)	(45,889)	(49,624)	(51,690)	(53,499)	(55,104)	(56,757)	(58,460)	(60,214)	(62,020)	(63,881)	(65,797)
Lease discounts	0	16,491	5,735	0	0	0	0	0	0	0	0	0	0
Freight	(20,613)	(26,541)	(26,542)	(34,493)	(42,571)	(50,879)	(59,440)	(69,160)	(75,428)	(80,893)	(85,182)	(89,223)	(93,155)
Commission on credit cards	(25,530)	(22,155)	(33,230)	(43,184)	(53,297)	(63,698)	(74,417)	(86,586)	(94,433)	(101,275)	(106,644)	(111,703)	(116,626)
Outsourced services	(11,711)	(9,917)	(8,570)	(9,042)	(9,497)	(9,829)	(10,124)	(10,428)	(10,740)	(11,063)	(11,394)	(11,736)	(12,088)
Marketing/selling expenses	(54,317)	(63,629)	(76,269)	(159,972)	(197,433)	(235,963)	(275,668)	(320,747)	(349,816)	(375,161)	(395,050)	(413,793)	(432,027)
Other selling expenses	(24,715)	(31,810)	(47,882)	0	0	0	0	0	0	0	0	0	0
Selling expenses as % of net revenue	6.7%	9.1%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
General and Administratives	(137,997)	(131,544)	(161,246)	(187,941)	(217,914)	(248,992)	(283,011)	(321,475)	(338,061)	(355,353)	(373,378)	(392,166)	(411,744)
% of revenue	*-12.1%*	*-13.4%*	*-11.2%*	*-9.9%*	*-9.3%*	*-8.9%*	*-8.7%*	*-8.5%*	*-8.2%*	*-8.0%*	*-8.0%*	*-8.0%*	*-8.1%*
Personal	(72,376)	(55,685)	(79,297)	(101,437)	(127,076)	(154,975)	(186,173)	(221,732)	(235,326)	(249,536)	(264,387)	(279,905)	(296,115)
YoY	*40%*	*-23%*	*42%*	*28%*	*25%*	*22%*	*20%*	*19%*	*6%*	*6%*	*6%*	*6%*	*6%*
# personnel	508	586	523	600	677	754	831	908	936	963	991	1,018	1,046
Annual salary per worker	(142.4)	(95.2)	(152.3)	(169.1)	(187.7)	(205.5)	(224.0)	(244.2)	(251.5)	(259.1)	(266.8)	(274.8)	(283.1)
Rentals and common area maintenance fees	(390)	(728)	(1,714)	(1,854)	(1,931)	(1,998)	(2,058)	(2,120)	(2,184)	(2,249)	(2,317)	(2,386)	(2,458)
Outsourced services	(35,238)	(49,241)	(51,438)	(54,269)	(56,997)	(58,992)	(60,762)	(62,585)	(64,462)	(66,396)	(68,388)	(70,440)	(72,553)
Other General and Administratives expenses	(29,993)	(25,890)	(28,797)	(30,382)	(31,909)	(33,026)	(34,017)	(35,038)	(36,089)	(37,171)	(38,287)	(39,435)	(40,618)
Depreciation and Amortization	(45,495)	(55,749)	(68,598)	(96,754)	(122,135)	(156,349)	(184,104)	(181,240)	(215,201)	(236,678)	(255,822)	(267,035)	(275,563)
% of revenue	*-4%*	*-5%*	*-5%*	*-5%*	*-5%*	*-6%*	*-6%*	*-5%*	*-5%*	*-5%*	*-5%*	*-5%*	*-5%*
Depreciation and Amortization	(15,107)	(19,463)	(20,754)	(42,292)	(58,317)	(82,847)	(101,731)	(90,470)	(120,423)	(140,345)	(157,128)	(167,218)	(173,828)
Depreciation and Amortization - Right of use (IFRS16)	(30,388)	(36,285)	(47,843)	(54,462)	(63,818)	(73,502)	(82,373)	(90,770)	(94,778)	(96,332)	(98,694)	(99,816)	(101,735)
Share of profit (loss) of subsidiaries	(247)	0	0	0	0	0	0	0	0	0	0	0	0
Other Operating Expenses (Revenues)	107,690	6,567	(9,338)	0	0	0	0	0	0	0	0	0	0

Appendix 5 – Revenue breakdown per sales channel

Revenue breakdown per sales channel	19'	20'	21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
Total gross revenue	1,489,873	1,338,101	1,842,454	2,394,384	2,955,081	3,531,786	4,126,068	4,800,787	5,235,878	5,615,234	5,912,929	6,193,455	6,466,381
YoY	*9.8%*	*-10.2%*	*37.7%*	*30.0%*	*23.4%*	*19.5%*	*16.8%*	*16.4%*	*9.1%*	*7.2%*	*5.3%*	*4.7%*	*4.4%*
Retail	1,360,642	1,016,119	1,509,345	2,122,060	2,615,656	3,122,551	3,644,629	4,236,261	4,618,247	4,951,721	5,213,215	5,460,025	5,700,430
Vivara - after cannibalization	1,264,434	951,638	1,401,710	1,858,731	2,157,757	2,428,227	2,698,447	2,987,142	3,170,896	3,337,210	3,475,163	3,620,573	3,772,974
YoY		*-25%*	*47%*	*33%*	*16%*	*13%*	*11%*	*11%*	*6%*	*5%*	*4%*	*4%*	*4%*
% of retail sales	*93%*	*94%*	*93%*	*88%*	*82%*	*78%*	*74%*	*71%*	*69%*	*67%*	*67%*	*66%*	*66%*
Jewelry		523,020	818,617	1,085,750	1,265,210	1,431,486	1,596,707	1,758,643	1,874,005	1,984,283	2,066,309	2,152,769	2,243,385
Watches and acessories		153,493	207,293	274,800	315,919	345,914	372,392	403,079	422,641	440,902	459,128	478,339	498,474
Life inside Vivara	383,047	275,125	375,800	498,181	576,628	650,827	729,349	825,421	874,250	912,025	949,726	989,465	1,031,115
% of Vivara channel		*29%*	*27%*	*27%*	*27%*	*27%*	*27%*	*28%*	*28%*	*27%*	*27%*	*27%*	*27%*
Life, dedicated stores	9,851	18,441	62,919	216,645	407,444	641,030	890,418	1,189,936	1,386,450	1,552,051	1,673,987	1,773,732	1,860,033
YoY		*87%*	*241%*	*244%*	*88%*	*57%*	*39%*	*34%*	*17%*	*12%*	*8%*	*6%*	*5%*
% of retail sales	*1%*	*2%*	*4%*	*10%*	*16%*	*21%*	*24%*	*28%*	*30%*	*31%*	*32%*	*32%*	*33%*
Kiosks	86,357	46,040	44,716	46,685	50,455	53,293	55,764	59,183	60,902	62,460	64,066	65,720	67,423
YoY		*-47%*	*-3%*	*4%*	*8%*	*6%*	*5%*	*6%*	*3%*	*3%*	*3%*	*3%*	*3%*
% of retail sales	6%	3%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%
E-commerce	106,246	309,515	320,072	263,574	328,641	396,361	466,412	547,060	598,590	643,097	678,220	710,918	742,448
% of gross revenue	*7%*	*23%*	*17%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*
% of retail sales	*8%*	*30%*	*21%*	*12%*	*13%*	*13%*	*13%*	*13%*	*13%*	*13%*	*13%*	*13%*	*13%*
YoY		*191%*	*3%*	*-18%*	*25%*	*21%*	*18%*	*17%*	*9%*	*7%*	*5%*	*5%*	*4%*
Others / adjustment	22,985	12,467	13,037	8,749	10,784	12,874	15,027	17,466	19,041	20,416	21,494	22,512	23,503

Appendix 6 – Revenue breakdown per product type

Revenue breakdown per product type	Gross margin	19'	20'	21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
Life	82.5%	450,964	399,872	547,192	838,326	1,149,661	1,505,208	1,883,907	2,340,999	2,624,088	2,858,698	3,043,031	3,204,212	3,352,150
% of total gross revenue		*30%*	*30%*	*30%*	*35%*	*39%*	*43%*	*46%*	*49%*	*50%*	*51%*	*51%*	*52%*	*52%*
YoY		*5%*	*-11%*	*37%*	*53%*	*37%*	*31%*	*25%*	*24%*	*12%*	*9%*	*6%*	*5%*	*5%*
Jewelry	66.5%	749,669	692,382	1,001,550	1,204,163	1,401,569	1,584,472	1,766,215	1,944,344	2,071,243	2,192,549	2,282,777	2,377,883	2,477,561
% of total gross revenue		*50%*	*52%*	*54%*	*50%*	*47%*	*45%*	*43%*	*41%*	*40%*	*39%*	*39%*	*38%*	*38%*
YoY		*12%*	*-8%*	*45%*	*20%*	*16%*	*13%*	*11%*	*10%*	*7%*	*6%*	*4%*	*4%*	*4%*
Watches	42.5%	243,246	201,671	241,130	298,177	341,654	373,168	400,797	433,086	453,594	472,818	492,032	512,264	533,451
% of total gross revenue		*16%*	*15%*	*13%*	*12%*	*12%*	*11%*	*10%*	*9%*	*9%*	*8%*	*8%*	*8%*	*8%*
YoY		*8%*	*-17%*	*20%*	*24%*	*15%*	*9%*	*7%*	*8%*	*5%*	*4%*	*4%*	*4%*	*4%*
Acessories	52.5%	39,233	40,313	45,553	44,969	51,413	56,063	60,121	64,891	67,912	70,753	73,595	76,585	79,715
% of total gross revenue		*3%*	*3%*	*2%*	*2%*	*2%*	*2%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*
YoY		*30%*	*3%*	*13%*	*-1%*	*14%*	*9%*	*7%*	*8%*	*5%*	*4%*	*4%*	*4%*	*4%*

Appendix 7 – 4-wall build-up (stores opened in 2022)

Vivara	0	1	2	3	4	5
% of maturation		55%	80%	100%	100%	100%
Sales/m2 mature tier 2 malls		63	99	107	115	124
Gross sales		3,096	7,128	9,671	10,376	11,186
YoY			*130%*	*36%*	*7%*	*8%*
Net sales		2,443	5,625	7,631	8,188	8,827
YoY			*130%*	*36%*	*7%*	*8%*
Gross profit		1,647	3,793	5,155	5,542	5,989
Gross margin		67%	67%	68%	68%	68%
SG&A		(2,447)	(2,885)	(3,173)	(3,317)	(3,508)
% of sales		-100%	-51%	-42%	-41%	-40%
Adjusted EBITDA		-800	908	1982	2225	2482
YoY			*-214%*	*118%*	*12%*	*12%*
Adjusted EBITDA margin		*-26%*	*13%*	*20%*	*21%*	*22%*
Operating income		(1,017)	692	1,765	2,008	2,265
Taxes			(92)	(227)	(250)	(273)
Tax rate		-13.6%	-13.2%	-12.9%	-12.5%	-12.0%
NOPAT		(1,017)	600	1,538	1,758	1,992
D&A		217	217	217	217	217
Maintenance CapEx		(217)	(217)	(217)	(217)	(217)
Change in WC		(19)	(265)	(350)	(370)	(384)
Lease payment		(228)	(228)	(228)	(228)	(228)
FCF		**(1,263)**	**107**	**960**	**1,161**	**1,381**
Inventory acquisition	(1,444)					
Pre-operating expenses	(2,202)					
Initial CapEx	(1,386)					
Invested capital	5,031	5,267	5,749	6,316	6,902	7,503
Return metrics		10Y IRR	*24%*		10Y ROIC	*27%*
		NPV	*11,499*		Payback	*6.6*

Life	0	1	2	3	4	5
% of maturation		55%	80%	100%	100%	100%
Sales/m2 mature		67	74	81	87	96
Gross sales		2,580	4,146	5,642	6,104	6,728
YoY			*61%*	*36%*	*8%*	*10%*
Net sales		2,036	3,272	4,452	4,817	5,309
YoY			*61%*	*36%*	*8%*	*10%*
Gross profit		1,680	2,699	3,673	3,974	4,380
Gross margin		83%	83%	83%	83%	83%
SG&A		(1,236)	(1,534)	(1,804)	(1,986)	(2,188)
% of sales		-48%	-37%	-32%	-33%	-33%
Adjusted EBITDA		444	1165	1869	1988	2191
YoY			*163%*	*60%*	*6%*	*10%*
Adjusted EBITDA margin		*17%*	*28%*	*33%*	*33%*	*33%*
Operating income		275	996	1,700	1,820	2,023
Taxes		(37)	(132)	(219)	(227)	(243)
Tax rate		-13.6%	-13.2%	-12.9%	-12.5%	-12.0%
NOPAT		237	865	1,482	1,593	1,779
D&A		169	169	169	169	169
Maintenance CapEx		(169)	(169)	(169)	(169)	(169)
Change in WC		(8)	(126)	(183)	(210)	(231)
Lease payment		(200)	(200)	(200)	(200)	(200)
FCF		**29**	**538**	**1,098**	**1,183**	**1,348**
Inventory acquisition	(1,123)					
Pre-operating expenses	(1,032)					
Initial CapEx	(1,078)					
POS acquisition	(850)					
Invested capital	4,083	4,259	4,554	4,906	5,284	5,684
Return metrics		10Y IRR	*30%*		10Y ROIC	*30%*
		NPV	*11,884*		Payback	*4.9*

Appendix 8 – Vivara stores cohort

		21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
Vivara store sales after cannibalization		**1,658,750**	**1,858,731**	**2,157,757**	**2,428,227**	**2,698,447**	**2,987,142**	**3,170,896**	**3,337,210**	**3,475,163**	**3,620,573**	**3,772,974**
Cannibalization due to Life openings	8%											
% of Vivara stores where there is also a Life store		14.4%	27.9%	39.8%	50.4%	58.1%	66.2%	71.7%	77.0%	79.0%	79.3%	79.6%
% of Life stores where there is also a Vivara store		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Vivara sales transferred to Life stores		7,037	16,835	31,662	49,813	69,193	92,468	107,739	120,607	130,083	137,834	144,540
Vivara store sales		**1,665,787**	**1,875,566**	**2,189,419**	**2,478,040**	**2,767,640**	**3,079,610**	**3,278,635**	**3,457,817**	**3,605,245**	**3,758,407**	**3,917,514**
Mature store sales per m2 (tier 1 malls)	% mix in 2021	*85*	89	99	107	115	124	130	135	139	143	147
Jewelry	58%	49	52	58	63	68	73	77	80	82	85	87
Life	27%	23	24	26	29	31	34	36	37	38	39	40
Watches	13%	11	12	13	13	14	15	15	16	16	17	17
Accessories	2%	2	2	2	2	2	2	2	2	2	2	2
Mature store sales per m2 (tier 2 malls)	70%		63	69	75	81	87	91	94	97	100	103
			Maturation curve									
Time to maturity	3Y		Store age	1	2	3						
Average store size (m2)	90		% of mature store sales	55%	80%	100%						
Opening year	# new m2 and new stores											
2018 and previous m2	15,778	1,335,962	1,409,904	1,561,923	1,695,384	1,818,981	1,960,978	2,044,817	2,124,821	2,188,566	2,254,223	2,321,849
2019 m2	1,547	130,988	138,238	153,143	166,229	178,347	192,270	200,490	208,334	214,584	221,022	227,652
2020 m2	1,658	112,310	148,157	164,132	178,156	191,144	206,065	214,876	223,283	229,981	236,881	243,987
2021 m2	1,858	86,527	132,823	183,930	199,647	214,201	230,923	240,795	250,217	257,723	265,455	273,418
2022	15		46,444	74,839	101,543	108,945	117,450	122,471	127,263	131,081	135,013	139,064
2023	15			51,452	81,234	108,945	117,450	122,471	127,263	131,081	135,013	139,064
2024	15				55,848	87,156	117,450	122,471	127,263	131,081	135,013	139,064
2025	15					59,920	93,960	122,471	127,263	131,081	135,013	139,064
2026	10						43,065	65,318	84,842	87,387	90,009	92,709
2027	5							22,453	33,937	43,694	45,004	46,355
2028	5								23,332	34,955	45,004	46,355
2029	5									24,032	36,004	46,355
2030	5										24,752	37,084
2031	5											25,495
Total openings	95											

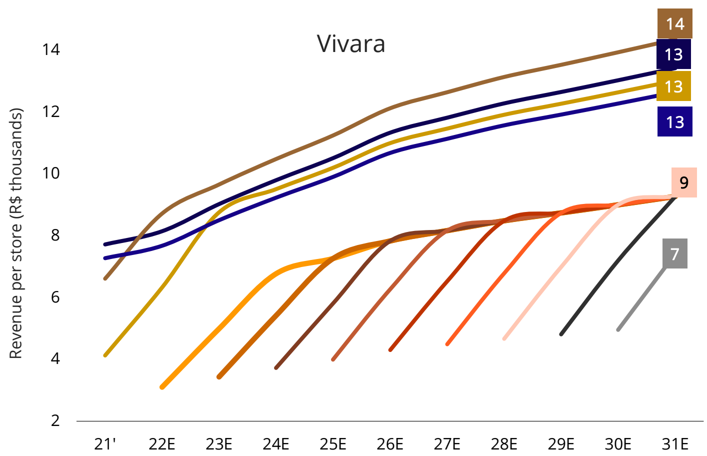
Vivara stores revenue build-up: for the revenue build-up of Vivara stores, we adopted the following procedure: I) first, we separated the revenue coming from m2 already built and in operation (2018 and previous m2 - 2021 sqm) from the revenue of new stores, since the old ones continue generating 100% of forecasted sales/m2 because they are placed in tier 1 malls. II) Next, we established a maturity curve for the stores (highlighted in the different shades of green in the chart above), because we understand that a new store takes time to reach its full sales potential. III) Then, we defined the sales/m2 of a fully mature store, which is adjusted mainly according to the IPCA, but also by the U.S. dollar variation and the price of raw materials (gold and silver future contracts). This value represents a composition of different sales/m2 according to the product mix of the store: we chose to model the upcoming revenue of each type of product individually as we understand that the evolution of sales varies according to the type of SKU and its costs. IV) Finally, we applied a reducer on the sales/m2 of new stores since there are practically any other tier 1 mall left to be explored by Vivara, making it necessary for the company to enter malls with lower profitability than the current ones. V) With the sale of all stores in hand, we applied a revenue loss resulting from the opening of Life stores near Vivara ones, according to the company's expansion plan. The sales volume transferred to Life was obtained by estimating an expected cannibalization rate, then multiplying it by an intersection rate between stores - after all, the cannibalization occurs only over sales from a Vivara store positioned close to a new Life unit.

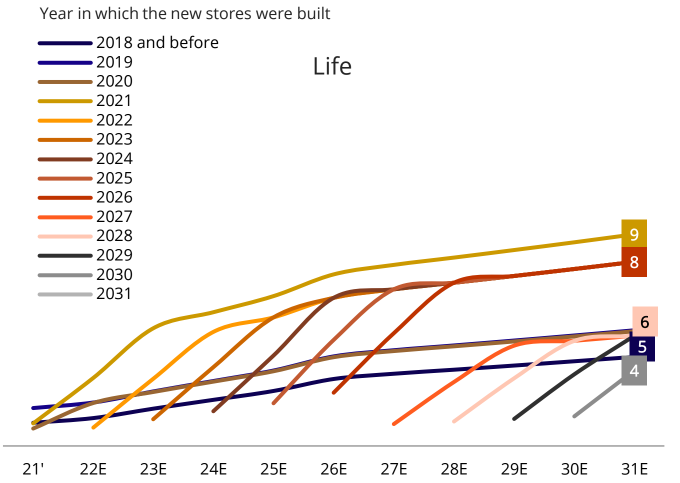
Appendix 9 – Life stores cohort

		21'	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
Life store sales		**90,554**	**216,645**	**407,444**	**641,030**	**890,418**	**1,189,936**	**1,386,450**	**1,552,051**	**1,673,987**	**1,773,732**	**1,860,033**
Mature store sales per m2 (tier 1 malls)		*64*	67	74	81	87	96	100	103	106	109	113
Mature store sales per m2 (tier 2 malls)	70%							70	72	74	76	79
Time to maturity	3Y		**Maturation curve**									
Average store size (m2)	70		Store age	1	2	3						
			% of mature store sales	55%	80%	100%						
Opening year	# new m2 and new stores											
2018 and previous m2	86	5,463	5,764	6,367	6,931	7,499	8,265	8,600	8,858	9,123	9,397	9,679
2019 m2	202	12,833	13,539	14,955	16,281	17,615	19,414	20,199	20,805	21,429	22,072	22,734
2020 m2	352	17,890	23,593	26,060	28,370	30,695	33,831	35,199	36,255	37,342	38,463	39,616
2021 m2	1,556	54,368	83,433	115,196	125,409	135,686	149,547	155,594	160,262	165,070	170,022	175,123
2022	35		90,316	145,106	197,463	213,644	235,469	244,991	252,341	259,911	267,708	275,740
2023	35			99,760	157,971	213,644	235,469	244,991	252,341	259,911	267,708	275,740
2024	35				108,605	170,916	235,469	244,991	252,341	259,911	267,708	275,740
2025	30					100,718	161,465	209,992	216,292	222,781	229,464	236,348
2026	30						111,007	167,994	216,292	222,781	229,464	236,348
2027	20							53,898	80,749	103,964	107,083	110,296
2028	20								55,515	83,172	107,083	110,296
2029	10									28,590	42,833	55,148
2030	5										14,724	22,059
2031	5											15,166
Total openings	225											

Life stores revenue build-up: for Life stores, the procedure was very similar to the one described above. The main differences are I) in relation to the sales/m2 composition, which is simpler in this case because we are talking about an exclusive store for Life products and II) the segmentation of stores in tier 1 and 2 malls. We see that only after 2027 the opportunities in more profitable locations will be exhausted, therefore only the sales from this year on are affected by the reducer, which follows the same procedure adopted for Vivara stores.

Appendix 10 – Revenue per store evolution





Appendix 11 – Implicit volume sold

		16'	17'	18'	19'	20'	21'	22E
Gold products		15%	16%	19%	33%	71%	11%	6%
Silver products		23%	10%	19%	30%	102%*	11%	6%
Watches and acessories		6%	3%	19%	13%	37%	11%	6%
Avg ticket	R$	323	360	384	371	488	546	613
YoY			*11%*	*7%*	*-3%*	*31%*	*12%*	*12%*
# items sold	k	3,739	3,442	3,521	3,995	2,734	3,360	3,893
YoY			*-8%*	*2%*	*13%*	*-32%*	*23%*	*16%*
Life, silver		391,618	400,387	427,705	450,964	399,872	547,192	838,326
Average ticket		135	149	159	154	201	221	272
Volume sold		2,895	2,684	2,691	2,924	1,985	2,472	3,085
Jewelry, gold		590,634	608,405	668,406	749,669	692,382	1,001,550	1,204,163
Average ticket		1,359	1,575	1,678	1,622	1,967	2,162	2,952
Volume sold		435	386	398	462	352	463	408
Watches		207,606	207,784	225,528	243,246	201,671	241,130	298,177
Average ticket		608	625	666	658	730	803	990
Volume sold		342	332	338	370	276	300	301
Acessories		17,719	21,717	30,072	39,233	40,313	45,553	44,969
Average ticket		277	285	304	300	333	366	451
Volume sold		64	76	99	131	121	125	100

2022 median ticket
272
2952
990
451

Results were calculated by the team using Python Selenium to scrape Vivara's website. More than 8,000 products were plotted and categorized, from which we were able to establish several median tickets (there are outliers in the portfolio), which were weighted by the number of SKUs they refer to (see appendix 22).

Vivara can increase sales without increasing volume: despite growing sales between 2016 and 2021, the volume sold didn't grow accordingly. It has even decreased. This is a clear sign of the company's pricing power, as it can increase the product's average ticket and keep customers buying them anyway.

If disclosures about units sold are hard to find, more granular data about each product line is even scarcer. To get that info, we used 2022 median tickets to "reverse calculate" the previous volume sold. The question to be answered was: "if we have an X median ticket in 2022, this was the cost increase Vivara had to face in each year and gross margins stayed almost flat, what should have been the median ticket in previous years?"

Appendix 12 – Sales/m2 build-up rationale

	16'	17'	18'	19'	20'	21'
Vivara	1,067,070	1,081,952	1,180,404	1,264,434	951,638	1,401,710
# m2	14,591	15,056	15,778	17,325	18,983	20,841
m2 in 1st year	0	465	722	1,547	1,658	1,858
m2 in 2nd year	0	0	465	722	1,547	1,658
m2 in 3rd year	0	0	0	465	722	1,547
m2 in 4th year	0	0	0	0	465	722
m2 in 5th year	14,591	14,591	14,591	14,591	14,591	15,056
Sales/m2	73	72	75	73	50	67
Weighted average stores' age	5.0	4.9	4.7	4.5	4.3	4.2
Previous age	5.0	4.0	4.0	4.0	4.0	4.0
Difference from current age	0.0	0.9	0.7	0.5	0.3	0.2
Next age	6.0	5.0	5.0	5.0	5.0	5.0
Base maturation stage	100%	100%	100%	100%	100%	100%
Next maturation stage	100%	100%	100%	100%	100%	100%
% of next maturation stage reached	0%	88%	73%	46%	31%	22%
Current maturation stage	100%	100%	100%	100%	100%	100%
Equivalent mature stores sales	1,067,070	1,081,952	1,180,404	1,264,434	951,638	1,401,710
Equivalent mature stores sales per m2	73	72	75	*73*	50	67

	19'	20'	21'
Life	9,851	18,441	62,919
# m2	288	640	2,196
m2 in 1st year	202	352	1,556
m2 in 2nd year	86	202	352
m2 in 3rd year	0	86	202
m2 in 4th year	0	0	86
Sales/m2	34	29	29
Weighted average stores' age	1.3	1.6	1.5
Previous age	1.0	1.0	1.0
Difference from current age	0.3	0.6	0.5
Next age	2.0	2.0	2.0
Base maturation stage	55%	55%	55%
Next maturation stage	80%	80%	80%
% of next maturation stage reached	30%	58%	46%
Current maturation stage	62%	70%	67%
Equivalent mature stores sales	15,770	26,492	94,553
Equivalent mature stores sales per m2	*55*	41	43

Equivalent mature stores: to arrive at a reasonable sales/m2 for Vivara and Life units, we did a reverse calculation by estimating how much of a mature store's full sales potential would previous stores be selling according to their age. I.e in the case of Life, if the weighted average age of units is 1,3 Years, and if we estimate that in the 1st year a new store will be selling 50% and in the 2nd 75%, then a 1,3 years old store should be selling 57%. Since sales/m2 in 2019 was R$34 k, then an **equivalent mature store** should be selling R$ 55 k.

Following this approach, the target sales/m2 of a mature store is connected to the maturity curve expected for next stores, which makes total sense. When it comes to Vivara stores, since we estimate that in year 3 stores should already be completely mature, the target no longer depends on 1st and 2nd year maturity stage.

Appendix 13 – Fiscal benefits research

The two main tax benefits that the company enjoys go through different legislative processes to be approved, given that each tax is under the competence of a distinct federative entity;

a) The ICMS reduction that Vivara enjoys was instituted by Law no. 2.826/2003 and has already been renewed twice since then. The renewal of the benefit must be approved by the state legislative assembly and be sanctioned by the governor.

b) The IRPJ tax benefit was instituted by the Provisional Measure no. 2.199-14/2001 and has also been renewed twice. In order to renew the benefit, the Brazilian congress must approve a bill and the president must sanction it.

By talking with law professionals, we observed that three main issues could impact the renewal of fiscal benefits Vivara enjoys: **(I)** the importance that the Manaus Free Trade Zone (MFTZ) have to the State of Amazonas and the consequences of undermining this especial regime; **(II)** the elected government; and Provisional Measure **(III)** a tax reform in the country.

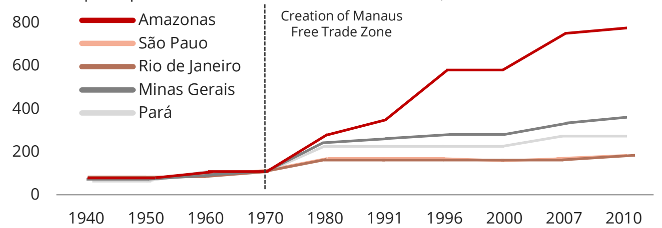
We conducted a study to understand each of those topic and got to the conclusion that both fiscal benefits that Vivara enjoys have a very high possibility of been consecutively renewed. We detail our research below.

(I) The importance of the Manaus Free Trade Zone

The MFTZ was created in the 1970s with the purpose of developing Amazonas by attracting companies to the region, integrating the territory and generating jobs for the population. To offset the logistical costs of having a factory far from the country's largest consumer centers, the government of Brazil and Amazonas grant a series of tax incentives to companies, which are extremely important in encouraging them to stay in the region.

Since its creation, the socioeconomic impacts observed in the Amazonas state have been phenomenal. Amazonas witnessed an evolution in its GDP per capita far above that of other states (as is shown in the chart below). Furthermore, it is estimated that more than 500k direct and indirect jobs depend on the MFTZ (Source: Suframa's website).

GDP per capita evolution for selected Brazilian States, basis 100 on 1970



Source: FGV EESP

With that being said, the removal of tax benefits would make the continuation of operations of many companies unfeasible in the region, which would cause a migration of factories to other states, having an incalculable impact on the population. Therefore, given the importance of the MFTZ, we believe that the tax benefits will be maintained.

(II) The impacts of the elected government

Another point that must be considered when evaluating the perpetuation of the tax benefits is the position of the elected government regarding this issue. The governor of Amazonas, Wilson Lima, has already positioned himself in favor of the MFTZ, which is not surprising, given that it is in the government's own interest that companies continue to be attracted to the region, generating employment and economic development. However, when it comes to the federal government, the interpretation can change. The Brazilian government, when granting the IRPJ tax benefit to companies located in the MFTZ, performs a tax waiver of approximately R$ 21 billion (source: Brazilian government website). Having this in mind, the removal of this benefit could be defended by some politicians as a way to improve the government's fiscal health. Nevertheless, the elected president, Lula, has already shown himself to be an advocate of the region on a recent visit to Amazonas, saying that the MFTZ will be maintained, and the tax benefits will also be preserved (exhibit below).

Lula says he will maintain comparative advantages of the Manaus Free Trade Zone if elected

PT candidate says he will also keep IPI exemptions, diverging from the policy of Jair Bolsonaro's government

By Rodrigo Pedroso, for Valor - Manaus
31/08/2022 16h16

Valor ECONÔMICO

(III) The impacts of a tax reform

The possibility of a tax reform that makes it difficult to renew fiscal benefits in the country is also an issue to be considered. In Bolsonaro's government we had two main Proposals of Constitutional Amendment being discussed: the PEC 110/2019 and the PEC 45/2019, with the second being more restricted regarding fiscal benefits.

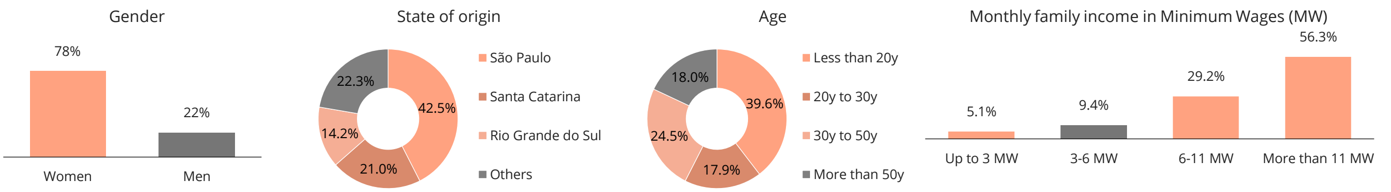
However, with the election of a new government, it becomes hard to predict when and what will be voted on the tax reform. Therefore, we consider the approval of this reform as a risk, in case it is harmful to the tax benefits that Vivara enjoys.

Appendix 14 – Monte Carlo's new factory production capacity

Vivara's stated that it is building a new factory in Manaus that should be ready by 2023. The factory has an approximate cost of R$50 Mn and has twice the capacity of Vivara's current factory, which means a production capacity of around 5.2 million pieces per year. The factory built by Monte Carlo, located in the same region, cost R$5 Mn (Source: Valor Econômico), which is 10% of Vivara's factory cost. Considering those numbers, we estimate that the production capacity of Monte Carlo's factory is approximately 10% of that of Vivara's factory, which would amount to around 500k pieces per year.

Also, we tried to understand the magnitude of this production capacity when compared to the number of pieces commercialized by Monte Carlo in one year. Vivara currently sells 3.4 Mn pieces a year and has around 8.4 times the size of Monte Carlo. Considering a similar average ticket for both companies, it is possible to estimate that Monte Carlo sells around 400k pieces per year, which is 80% of our estimated production capacity of its new factory. Therefore, we see Monte Carlo internalizing a large part of its production in the coming years, which would put the company in a similar position to Vivara, regarding the exploration of tax benefits and the effective tax rate paid on top of its earnings.

Appendix 15 – Characteristics of respondents

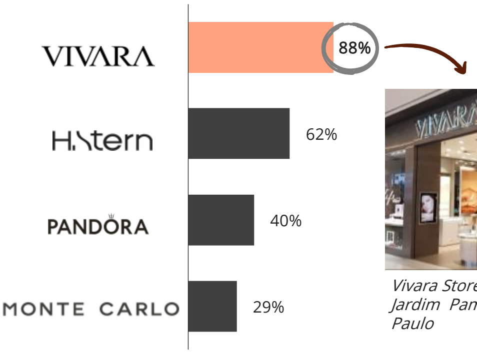


Appendix 16 – Design differentiation

To reach a conclusion about competition when it comes to design, we analyzed a series of products from different brands, trying to identify if one was different from other. However, we concluded that there is no relevant design differentiation between similar brands. We were unable to tell whether Vivara stood out regarding this topic. As an example, we selected 9 rings from three brands that sell to a similar audience, Vivara, Monte Carlo and H.Stern. The selected products range from R$ 5K to R$ 15K in all three stores. As you can see, there is little or no differentiation between those products. Customers' choice must end up being based on the taste of each one. This similarity happens with a series of products from each brand, being almost impossible to differentiate the products if you don't know the brand by heart.

If the most expensive pieces already present a certain similarity, in the silver line this is even more evident, which is why we address a risk factor in the Investment risks section regarding this issue. However, we believe that the already consolidated Vivara brand and the control over production are mitigating factors.

Appendix 17 – Stores positioning and corner locations



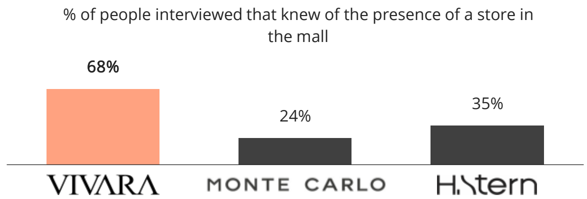
Vivara Store in a corner location – Jardim Pamplona Shopping, São Paulo

Using Google Indoors and images from Google Maps, we estimated the proportion of stores of Vivara, Hstern, Pandora and Monte Carlo that are in corner locations inside malls. Our sample is the stores from this companies in the 8 biggest cities in Brazil – São Paulo, Rio de Janeiro, Brasília, Salvador, Fortaleza, Belo Horizonte, Manaus and Curitiba.

Google Indoors showing Vivara and Hstern stores in a corner location, but Pandora's store in a common location – Pátio batel Shopping, Curitiba

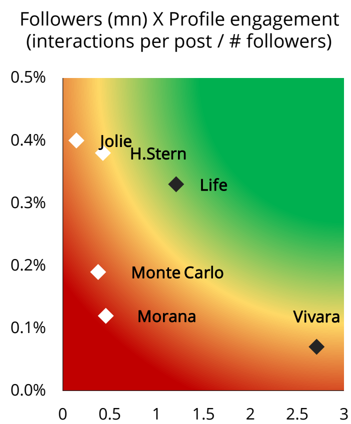
Appendix 18 – Survey made in shopping malls

We analyzed 3 different malls that contain all three stores: Vivara, Monte Carlo, and H.Stern. We interviewed 90 people (30 in each mall). We asked if they knew whether there exists a store of each brand at the mall and if they knew where it was located. We could see that 68% of people knew that there was a Vivara store in the mall, 35% knew of the presence of an H.Stern store, and only 24% knew of the existence of a Monte Carlo store. In addition, 60% of the people knew where the Vivara store was located at that mall, which shows that the brand positions itself at points where it can grab attention from passers-by.



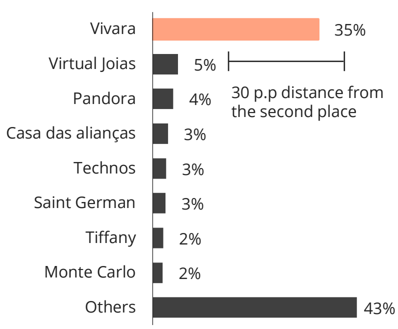
Appendix 19 – Competitive analysis regarding marketing aspects

A brand that speaks with its customers – literally: with the help of multiple SocialBlade metrics, combined with Python Web Scraping and hours scrolling jewelry-related posts, we looked at the official Instagram accounts of Vivara's brands and its competitors in more detail. We mainly focused on total followers, number of comments, likes and views to check how engaged were followers of each brand. As the number of followers increase, it is hard to keep a high percentage of engagement, but this relation is not linear, which is why we adopted a radial gradient line. Looking at our results, accounts under Vivara's control are doing well, especially Life, whose performance we suppose to be related to the younger public to whom the brand sells its products. Additionally, we regard the close contact between brand and client as an important driver for customer engagement and satisfaction.



International brands lag behind Vivara in Brazilian territory: large brands surprisingly leave much to be desired when it comes to basic aspects of influencer marketing in Brazil. Pandora, for example, does not have its own Instagram account dedicated to the Brazilian audience, and lets its resellers and franchisees have their own visual identities. Swarovski, another brand without a dedicated account, at least guides its franchisees on how to take pictures and organize their social media. We understand that the lack of guidance is a problem for 2 reasons: **(I)** In the luxury market, players adopt the so-called Porter's generic strategy of differentiation. It is essential, therefore, to have an impeccable visual communication to support brand positioning and allow it to sell products at higher prices. **(II)** As shown by Müller in his research "Referral Marketing on Social Media Platforms", 100% of people do research on some network before deciding their purchase. This, combined with our findings talking to saleswomen from different jewelry stores that, most of the time, the customer arrives at the store already asking for a collection that she saw on social media or website, leads to the conclusion that the social network works as both a virtual showcase of new products and a way to confirm the purchase.

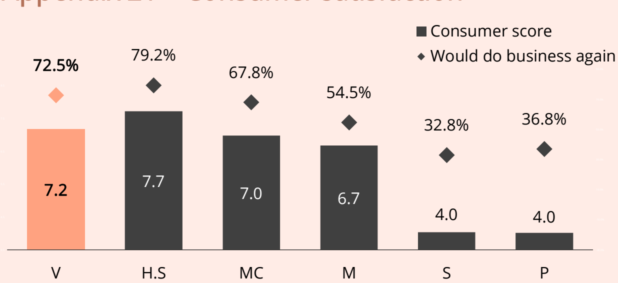
Appendix 20 – Share of Traffic and Digital presence



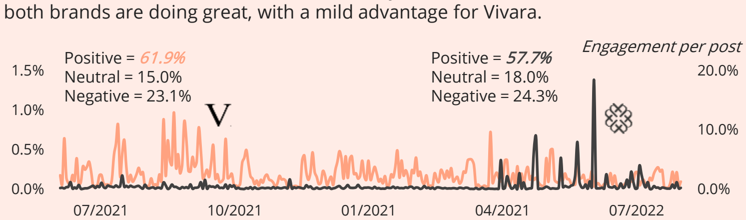
For this analysis we used outputs provided by Similar Web. We aggregated the various performance criteria analyzed into both objective and subjective ones, such as usability and visual identity, which were based on simulating purchases of pieces of different categories through e-commerce. ("-" means that the brand doesn't have an exclusive website). The rerouting score depends on how many keywords redirect the user to a particular address. Tag names: V – Vivara; L – Life; MC – Monte Carlo; J – Jolie; H.S – H.Stern; P – Pandora; S – Swarovski; M – Morana; T – Tiffany&Co.

Digital presence	Weight	V	L	MC	J	H.S	P	S	M	T
Traffic	3	3	-	2	-	1	3	1	1	1
Keyword	2	3	-	3	-	2	3	1	1	1
Rerouting	2	3	-	2	-	1	3	1	1	1
Usability	3	3	-	3	-	1	3	3	2	3
Visual identity	3	2	-	2	-	3	2	3	2	3
		2,7	1,3	2,4	1,0	1,8	1,6	1,1	2,0	1,6

Appendix 21 – Consumer satisfaction



We looked in more detail the comments left on Vivara and MC posts on Instagram. With the help of programming tools, such as scraping and codes for analyzing the sentiment that consumers wanted to convey with their comments, we noticed that both brands are doing great, with a mild advantage for Vivara.



Appendix 22 – Web scraping results – Vivara, Monte Carlo and H.Stern – brand portfolio

VIVARA

Product	# SKUs	Avg	Median	Min	Max
Watch	1,965	3,812	990	290	57,790
Pendant	712	2,113	1,290	80	68,790
Earring	696	5,078	2,450	390	131,990
Ring	521	4,905	3,590	390	76,990
Hoop	177	3,362	2,850	790	12,490
Glasses	168	443	450	290	510
Bracelet	166	7,658	3,820	290	59,990
Solitaire	126	13,695	10,440	1,150	76,990
Pen	122	2,114	700	240	8,400

MONTE CARLO

Product	# SKUs	Avg	Median	Min	Max
Watch	761	2,402	2,050	40	9,900
Pendant	323	1,738	1,310	170	32,750
Ring	296	4,648	3,080	260	45,310
Earring	288	4,328	2,050	200	61,790
Necklace	152	5,852	1,570	450	129,770
Bracelet	89	5,545	1,800	160	60,760
Hoop	61	2,480	815	200	16,990
Chain	49	3,041	1,540	70	26,260
Wedding ring	49	4,109	3,790	150	11,890

H.STERN

Product	# SKUs	Avg	Median	Min	Max
Earring	343	14,551	10,300	575	59,000
Ring	248	13,482	12,850	738	38,400
Necklace	147	13,740	10,600	561	59,000
Watch	121	5,044	4,580	1,780	22,900
Pendant	82	2,492	1,530	561	17,100
Bracelet	52	10,538	5,610	502	50,200
Wedding ring	47	7,121	6,790	1,620	16,500
Charm	22	409	457	325	457
Wedding band	17	13,297	9,440	6,490	29,500

Appendix 23 – Web scraping results – Life, Jolie and Pandora – brand portfolio

LIFE

Product	# SKUs	Avg	Median	Min	Max
Charm	1,059	232	230	130	440
Separator	532	236	210	130	410
Ring	387	276	230	110	690
Earring	260	410	390	70	1,790
Bracelet	193	414	390	260	2,450

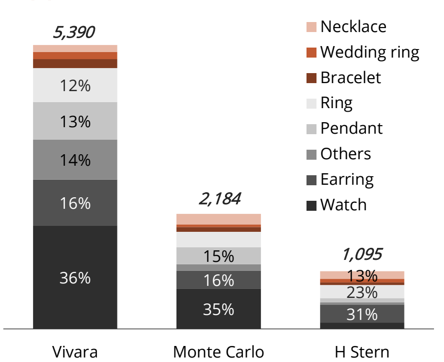
JOLIE

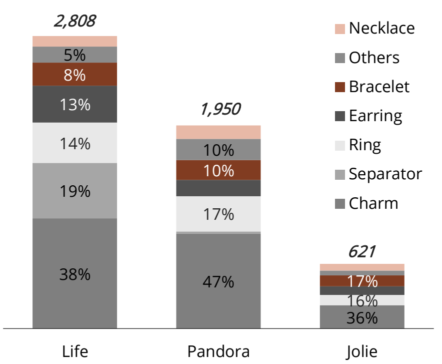
Product	# SKUs	Avg	Median	Min	Max
Charm	223	188	200	90	400
Bracelet	104	454	510	203	640
Ring	101	326	330	138	750
Necklace	61	631	470	280	1,550
Earring	48	372	364	190	820

PANDORA

Product	# SKUs	Avg	Median	Min	Max
Charm	912	1,106	779	239	9,049
Ring	338	1,513	934	409	22,219
Bracelet	192	1,878	1,134	525	44,029
Earring	144	1,002	779	259	7,559
Necklace	105	1,716	1,379	409	14,149

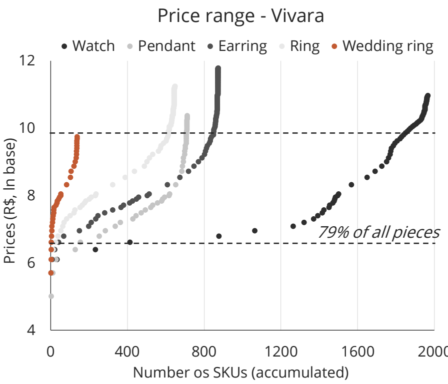
Appendix 24 – Product assortment

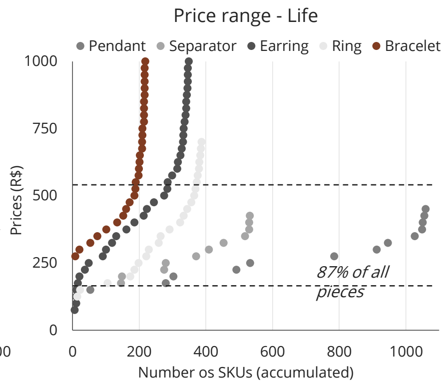




Wide portfolio compared to competitors: using Python programming language, we analyzed the e-commerce websites of 6 different brands as shown by the two charts on the left. We also confirmed with salespeople that the items shown in the digital media correspond to the brands' complete portfolio. It is clear the strength of Vivara in this sense, which has more than twice as many SKUs as its main competitors, something fundamental to meet different demands and please demanding consumers with subjective tastes. About the Vivara brand, one can see that most of the products consist of a wide variety of watches offered, as well as earrings, pendants, and rings. As for Life and competitors, the enduring success of charms is evident, as they account for at least a third of the entire product assortment across all brands

Appendix 25 – Price point complementarity





Results point to a complementarity between portfolios: using the data collected, we were able to compare the price points of brands, as well as in which price ranges are items located. Since those cumulative charts may seem a little bit tricky to understand, we explain them with an example: i.e when looking at Vivara's watches we see that there are around 2k SKUs priced at an absolute maximum of R$ e^11 (~ R$ 57k). Now, if we look at Life's bracelets, we see that there are around 200 pieces priced at an absolute maximum of R$ 500, but we still find a few pieces priced up until R$ 1k. On the left, Vivara's portfolio is concentrated above the R$ 1k threshold (~ e^7). We adopted a logarithmic scale due to outliers of more than R$ 57k (~ e^11), Vivara's most expensive items. On the other hand, Life products usually hit a maximum of R$ 575, with very few surpassing the R$ 1k threshold.

Appendix 26 – Portfolio scoreboard

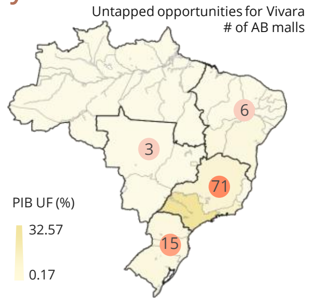
Portfolio	Weight	V	L	MC	J	H.S	P	S	M	T
Portfolio range	2	3	2	2	2	1	2	2	3	1
Price	3	3	3	3	3	1	2	2	3	1
Design	3	3	2	2	2	3	3	3	3	3
Quality	3	3	3	3	3	3	3	2	2	3
Gold/silver amount	1	2	1	2	1	3	2	2	1	3
Brand recognition	2	3	1	2	1	2	3	3	3	3
National footprint	1	3	1	2	-	2	3	3	2	1
Customer service	3	3	2	3	-	3	3	1	2	3
Location	1	3	3	3	-	3	2	2	2	3
		2,9	2,2	2,5	1,6	2,3	2,6	2,2	2,5	2,4

Product portfolio: we sought to understand how broad is, in the sense of collections and types of jewelry, the brands' catalog. Regarding price, how affordable is it for the average consumer? Regarding quality and design, we listened to the opinion of consumers on social media, complaint sites, digital field research, and day-to-day conversations. Another point we paid attention to was the positioning of each brand about the amount of precious metals in each piece and if this was valued by the final customer.

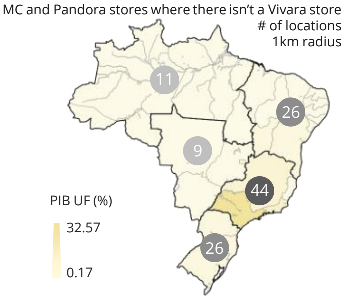
Service: our conclusions rely on visiting stores and talking to salespeople. By simulating that we were shoppers (on some occasions we dressed up, in others, we dressed down) we were able to get important insights about how a real customer is treated inside each store - criteria we designated weight equal to 3. Additionally, we considered the field research outputs and translated them into scores ranging from 1 to 3 to measure how well brands are recognized.

Appendix 27 – Geospatial analysis

AB malls Vivara can target: we created a database with all malls listed on ABRASCE's website, along with the main public that circulates each mall. With that, we filtered malls that mainly attract the AB classes. Crossing this list with the list of malls where Vivara already has stores. Finally, we filtered for cities with over 100K inhabitants, arriving at a total of 95 locations where Vivara may open a new store.

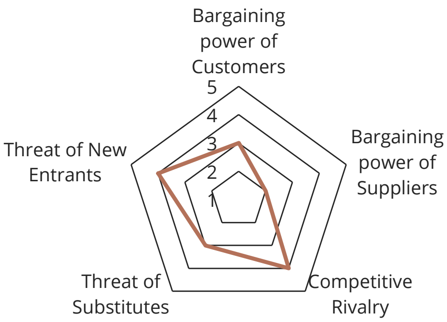


Life, Monte Carlo, and Pandora intersection: we used scrapping to grab the locations of stores from each brand and, using a Google Maps API, transformed each location into a coordinate. Then, we created a code in R to calculate the distance between each point and understand how much intersection there is between Life, Monte Carlo, and Pandora stores. The output on the right shows points to which Life can further expand.



Source: Company's websites, IBGE, Qgis, Team 3

Appendix 28 – Porter Five Forces



Conclusion: the Brazilian jewelry industry is marked by low entry barriers and strong consumer bargaining power, which diminishes the industry's attractiveness. Thus, we see the investment thesis in Vivara is much more driven by micro factors and relies on how it can combine multiple advantages to overcome competitors.

3

Bargaining Power of Customers (Moderate): this is because jewels are a replicable product between brands or independent goldsmiths, and there are low switching costs for customers. Thus, the bargaining power is much more related to the individual brands, which results in a stronger bargaining power only for large jewelry groups.

2

Bargaining Power of Suppliers (Low): the main materials – gold and silver – are considered commodities, and there exist a lot of suppliers willing to offer them. Yet, the fact that a lot of these suppliers operate illegally increases the bargaining power of the legal ones.

4

Competitive Rivalry (High): it could be lower if the products sold by the company were more high-end, such as Tiffany and Cartier, which have clients less sensible about prices and more loyal to the brand. For Vivara, the relevant competitors are other "accessible luxury" jewelry, such as Monte Carlo. In this segmentation, less product differentiation leads to higher competition.

3

Threat of Substitutes (Moderate): the threat of substitute products for jewelry is moderate. In terms of gifts, jewels compete with luxury apparel, semi-jewels, and other cheap substitutes. However, the use of jewels has its origin millennia ago, also having a high emotional value for clients – therefore making its replacement more unlikely.

4

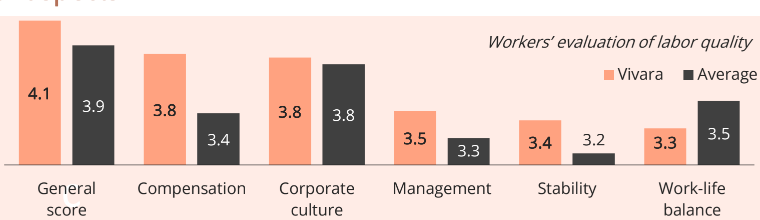
Threat of New Entrants (High): our belief in a high threat of new entrants is proved by the high number of small jewelry shops operating in the industry. This happens for jewelry retail and manufacturing since a producer can distribute to various jewelry shops.

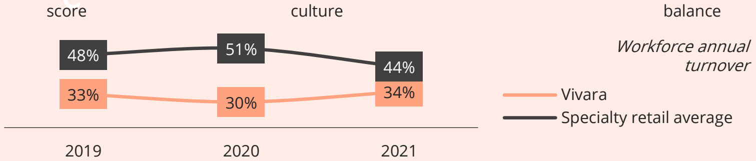
Appendix 29 – ESG Scoreboard

Indicator	Weight	Vivara	Monte Carlo	Hstern	Swarovski	Pandora	LVMH (Tiffany)	Richemont (Cartier)	Arezzo	Renner	Grade criteria
ESG Score		2.3	1.0	1.2	2.3	2.7	2.6	2.6	2.7	2.8	
Environment		2.4	0.0	1.1	3.0	3.0	3.0	3.0	3.0	3.0	
Emissions targets	3	1	0	0	3	3	3	3	3	3	Relevance given to carbon emissions by the company and emissions reduction targets
Resource using	3	3	0	1	3	3	3	3	3	3	Relevance given to reduction in resource using in operations
Sourcing	4	3	0	2	3	3	3	3	3	3	Supplier requirements of sustainability and good practices
Social		2.2	1.5	2.2	1.4	2.0	2.1	2.1	2.2	2.3	
Labor management	3	2	2	2	2	2	2	2	2	2	Score on proprietary index (Appendix 30) translated for scale 0-3
Inclusion politics	2	2	2	2	2	2	2	2	2	3	Glassdoor diversity grade translated for scale 0-3
Customer relationship	2	2	2	2	1	1	2	2	2	2	ReclameAqui grade translated for scale 0-3
Whistleblower channel	2	3	0	3	0	3	3	3	3	3	0: Doesn't have a channel; 3: Has an independent whistleblower channel
Governance		2.3	1.5	0.3	2.4	3.0	2.8	2.8	3.0	3.0	
Board	2	2	0	0	2	3	3	3	3	3	Board independency and diversity
Management track-record	3	2	2	1	3	3	3	3	3	3	Management education, companies worked in past and performance
Integrity (corruption schemes)	3	3	3	0	3	3	3	3	3	3	0: Already involved in a corruption scheme; 3: no evidence of involvment in any corruption scheme
Shareholders concentration and power of decision	2	2	0	0	1	3	2	2	3	3	0: Privately owned; 1: family owned and run, but publicly traded; 2: Some degree of controller interference; 3: Corporation

Appendix 30 – Competitive analysis regarding labor aspects

Customer relationship means employee relationship: luxury brands do not make money from client flow or high sales volume, but with the high added value of the products. Few checkouts, but a high average ticket is a characteristic of the sector, an aspect that requires superior service by the brands. To quantify this point, we observed how companies relate to their employees, as we understand that a good relationship between employer and employee is reflected in the employee's relationship with the customer. In addition, in retail, employee turnover in stores is usually high, so having strict training to maintain high standardization and quality is essential. In the upper-right graphic, we summarized scores from Infojobs, Indeed, and Glassdoor to compose the grades, while on the lower graphic we show a comparison of the workforce turnover, from the company's IR.





Appendix 31 – Optionalities

M&A Opportunities: Last year, there were some rumors about Vivara acquiring H.Stern. However, the company denied that the deal would occur at the time, and nothing happened.

Based on the company's guidance of using inorganic means to penetrate a higher-end market (A+ public), we mapped some brands that might be interesting for Vivara as an acquisition target. The table besides shows the main characteristics of the potential targets.

Brand	Price range	# of stores	International?	Countries (ex-BR)
H.Stern	R$325 - 59,000	68	Yes	7
antonio bernardo	R$200 - 67,290	28	Yes	9
CARLA AMORIM	R$2,160 – 44,450	42	Yes	15
Julio Okubo	R$128 -104,904	16	No	-
JACK VARTANIAN	R$450 – 74,500	4	No	-

International expansion: To understand the full potential of an expansion to Latin America, we looked into the industry's dynamics in the region. The jewelry market size in Latam, in terms of revenue, was R$20.13 Bn in 2021. More specifically, in Mexico, the total addressable market is equal to R$8.0 Bn. The market is fragmented, with the top 5 players having only 23% of the revenue share. Some of Vivara's peers are already present in the country: H.Stern has 5 stores, while Cartier and Bulgari each have one store. However, these brands are at a higher end than Vivara, showing that the company can conquer a different cluster of the market and achieve a relevant position as a new player in Mexico. The addressable market is projected to reach R$11.16 Bn by 2026. If Vivara can penetrate the country successfully, it could expand its sales by a significant amount. With only 1% of the market share in Mexico, its revenue could increase by R$111.16 Mn.

A caveat regarding this expansion is whether Vivara will still be able to secure the fiscal benefits that it enjoys in Brazil by expanding operations globally. If this is not the case, international operations could imply lower profitability and not be as accretive as they seem at first sight.

Appendix 32 – Valuation

	22E	23E	24E	25E	26E	27E	28E	29E	30E	31E
EBIT	432,848	573,708	716,263	870,677	1,086,080	1,199,305	1,298,451	1,367,682	1,436,340	1,501,849
NOPAT	373,981	497,793	624,214	762,250	955,349	1,060,141	1,153,591	1,221,351	1,289,301	1,355,043
(+) D&A	96,754	122,135	156,349	184,104	181,240	215,201	236,678	255,822	267,035	275,563
(-) CapEx	(118,540)	(187,095)	(147,259)	(169,304)	(212,860)	(147,760)	(181,393)	(186,974)	(197,028)	(208,987)
(+/-) Change in working capital	(5,198)	(83,302)	(123,213)	(144,290)	(162,667)	(158,765)	(136,506)	(114,769)	(99,255)	(90,017)
(-) Lease CapEx	(88,974)	(93,563)	(96,838)	(88,707)	(83,970)	(69,170)	(115,200)	(58,242)	(73,843)	(101,790)
Free Cash Flow to Firm			413,254	544,053	677,091	899,647	957,170	1,117,188	1,186,209	1,229,813
YoY				*32%*	*24%*	*33%*	*6%*	*17%*	*6%*	*4%**
Discounted FCFF			380,303	436,468	473,539	548,504	508,547	517,448	478,960	432,888
YoY				*15%*	*8%*	*16%*	*-7%*	*2%*	*-7%*	*-10%*
Discount Period			0.6	1.6	2.6	3.6	4.6	5.6	6.6	7.6
Dates for discounted period			08/08/2024	08/08/2025	08/08/2026	08/08/2027	08/08/2028	08/08/2029	08/08/2030	08/08/2031

Present value of free cash flows	3,766,948
% of total value	45%
Growth in perpetuity	4,8%
Perpetuity value	12,913,559
Present value of perpetuity	4,524,336
% of total value	55%
Total enterprise value	8,291,284
Debt 23E	349,456
Cash 23E	892,531
Lease liability 23E	450,372
Total equity value	8,383,987
Shares outstanding	236,632,646
Target Price 31/12/2023	R$ 35.70
Current Price 03/11/2022	R$ 26.86
Upside	32.9%

Case	Base
Target price	R$ 35.70
Tier 2 malls	*70%*
Cannibalization	*8%*
E-commerce	
Others	*15%*
Jewelry	*10%*
New stores	
Vivara	*95*
Life	*225*
Maturity curve	
1	*55%*
2	*80%*
3	*100%*

Cost of equity	
Risk-free rate	3.83%
Equity risk premium	7.21%
Country risk premium	2.97%
Beta	1.11
Inflation differential	0.49%
Ke	15.29%

Cost of debt	
Long term CDI	8.27%
Weighted average default spread	2.05%
Pre-tax cost of debt	10.32%
Tax rate	34%
Kd	6.81%

Lease discount rate	11.59%

Weighted average cost of capital	
Market value of equity	90%
Market value of debt	4%
Lease commitments	6%
WACC	14.71%

Mid-year adjustment given that Vivara is directly impacted by the seasonality of commemorative dates, we have seen that 50% of revenue is generated after 7.25 months, which is why we consider that cash flows are received on August 8th of each year. With the adjustment and the target for the end of 2023, we disregard cash flows that originated in 22 and 23.

Lease CapEx and D&A: we opted to consider the changes brought by IFRS 16 as follows: all the new lease contracts of the stores are treated as CapEx, reason why there is a line called "Lease CapEx". To keep the consistency, we have reconciled the D&A related to right-of-use assets and excluded lease commitments along with net debt.

***2031 FCF YoY**: at first glance, it seems weird that our 2031 free cash flow to firm is growing at a slower pace than the terminal growth rate. However, we have added in our model the renewal of lease contracts made for Vivara stores, which generates a substantial impact given the renewal of 46 contracts expiring in 2031.

Appendix 33 – Scenario analysis

	Bull	Base	Bear
Store openings	Vivara: 115 Life: 245	Vivara: 95 Life: 225	Vivara: 75 Life: 205
Cannibalization	5.8%	7.8%	9.8%
Tier 2 malls	75%	70%	65%
Maturity curve	V: 60 - 85 - 100% L: 50 - 75 – 100%	V: 55 - 80 - 100% L: 55 - 80 - 100%	V: 50 - 75 - 100% L: 60 - 85 - 100%
E-commerce	Jewelry: 12% Others: 17%	Jewelry: 10% Others: 15%	Jewelry: 8% Others: 13%
Target price	*R$ 42.43*	*R$ 35.70*	*R$ 29.65*
Upside (downside)	*58.0%*	*32.9%*	*10.4%*

Appendix 34 – Fiscal benefit sensitivity

Given the importance of tax benefits to the company, we sensitized 4 scenarios to understand the impact on Vivara's valuation if any of the current benefits are not renewed (results are shown below). In the case of IRPJ, we considered that it won't exist as of 2025. For ICMS, as of 2032. We put the scenarios in order of descending probability, as we understand that the probability of the IRPJ benefit not being renewed when it ends in 2024 is lower than the probability of the ICMS not being renewed in 2032. Nevertheless, as shown in Appendix 13, we truly believe in the extension of all benefits, reason why they are all considered in our base case scenario.

Most likely scenario

IRPJ	ICMS	Target price	Upside (downside)
✓	✓	R$ 35.70	32.9%
✓	X	R$ 29.06	8.2%
X	✓	R$ 25.53	(5.0%)
X	X	R$ 18.89	(29.7%)

Less likely scenario