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JHSF – The Luxury of Sao Paulo

Miguel Serrão Sousa Santos
39165

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Paula Antão

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Abstract

This report aims to reach a final valuation of JHSF Participações. In this report, we present the company segments by explaining the different business units and provide the forecast assumptions used for valuation. To vindicate the presented assumptions, we discuss the macroeconomic environment and the company's current performance.

Keywords
Real Estate – Luxury
Brazil – Development

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This report is part of the JHSF Participações company report (annexed), developed by Miguel Serrão Sousa Santos and Nuno Miguel Dinis Cardoso Marques Afonso and should be read has an integral part of it.

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Introduction

In this master's thesis, JHSF Participaçes, a Brazilian real estate firm that specializes in luxury homes and businesses, is thoroughly studied. This report focuses on developing the key forecasting assumption, providing the inputs for a valuation model. These assumptions were developed based on the macroeconomic environment, and its impact on the current company business model. The industry in which each one of the segments is inserted is also deeply approach, by studying the key drivers of each industry and the trends that have been driving the sector.

The full report also includes the valuation chapter, as well as the company future value creation and its risks. The report also explores scenarios for recessions and multiple levels of leverage. We recommend purchasing the company's shares and have set a target price of R$ 6.0 for 2023FY based on our analysis. Investors who want to choose wisely while investing in JHSF can take useful insights from this study.

Macroeconomic Outlook

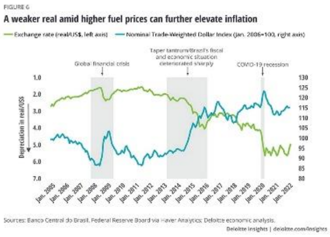

Figure 1: Inflation drivers
Source: Deloitte

The Brazilian economy has experienced a period of strong growth, driven by high commodity prices and an expansion in domestic demand. However, this growth has recently slowed in Q3, with real GDP growing 0.4%, less than the expected 0.6%. The economy is expected to weaken considerably in 2023 amid persistent inflationary pressures, higher geopolitical risks, and tighter financial conditions.

One of the challenges facing Brazil is high inflation, which the central bank has been aggressively addressing through rate hikes. Inflation has begun to ease as the Brazilian central bank has implemented 12 consecutive rate hikes before pausing in September 2022, with the central bank policy rate ultimately reaching 13.75%. This hawkish policy stance has helped to support the value of the currency, but with other central banks turning more hawkish, the currency could depreciate further.

The global economy is expected to weaken in 2023, which will likely impact Brazil. Higher interest rates and slowing economic activity could hinder demand for raw materials, which could have negative implications for Brazil as a commodity exporter. Additionally, the ongoing conflict in Ukraine and the maintenance of China's "zero-COVID" policy have contributed to global supply chain disruptions, further exacerbating the situation.

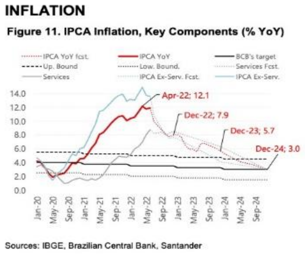

Figure 2: Inflation components
Source: Santander Bank

The combination of these factors is expected to weigh on the Brazilian economy. According to Bloomberg, the consensus forecast is that GDP will expand by 2.4% in 2022 and 0.9% in 2023. Inflation is projected to remain elevated, at 5.2% in 2023, and the central bank is likely to continue its hawkish stance on monetary policy. In terms of the exchange rate, the consensus forecast according to a report made by Santander is of R$/US$ 5.10 for the end of 2023.

The luxury retail industry, the luxury residential real estate industry, the luxury hotel and restaurant industry, shopping malls, and the executive airports will all be impacted by Brazil's economic outlook.

The luxury retail industry in Brazil is likely to be impacted by the economic challenges facing the country. High inflation and tighter financial conditions could lead to reduced consumer spending, particularly on luxury goods. This could also lead to a decrease in foot traffic and revenue for the shopping malls. However, since JHSF's customers are high earning individuals, we believe that this slowdown will not be dramatic. We incorporated this fact into our forecast by assuming sales in shopping malls will decrease in 2023.

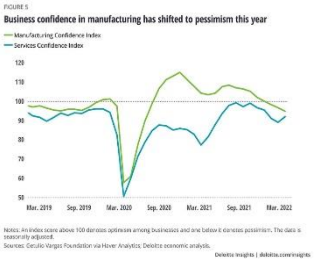

Figure 3: Business confidence
Source: Deloitte

The luxury hotel and restaurant industry could also be affected, as reduced consumer spending and a weaker economy could lead to lower demand for luxury hospitality services. However, at the same time, we believe that JHSF's segment may benefit as rich families choose to spend their vacation in Brazil instead of going abroad.

Executive flights may also decrease if the economic conditions are not very favorable. However, since there is a big demand for infrastructure, we believe that even in a recession, this segment will not be very affected.

Company Overview

JHSF is a Brazilian holding company focused on delivering services and products for high-income households. The company aims to build an ecosystem to attend all their client's demands in serval fields such as housing, entertainment, shopping, hospitality, and travels. JHSF can be seen as a “niche” company as their main target clients are the “ultra-rich” families in Brazil which are around 180 000 according to an estimation made by BTG Pactual. The target group may look limited; however, they are currently the only player in the market with this strategy.

JHSF has been in business for 50 years and has a wealth of knowledge when it comes to creating and managing both residential and commercial real estate. This is a crucial asset for the business, not only because it has developed beneficial relationships with vendors, service providers (such renowned architects), and retailers, but also because its brand has grown significantly in recognition within its target market. The company is perfectly situated to capitalize on the trend of "Branded Real Estate," which has grown to be a significant component of premium real estate. In addition, diversifying into new markets like hotels raises the brand value of JHSF.

As a “one-stop-shop" for luxury real estate, as well as by developing and providing products and services to their high-net-worth clients, the company creates internal synergies, increasing the value of all its segments. One good example of these synergies can be seen in Cidade Jardim, a complex which includes residential buildings, “triple A” offices, a shopping centre, and, more recently, a hotel.

Targeting high-earning individuals also brings another advantage to JHSF: stable cashflows. Since these customers are less likely to significantly reduce their consumption habits during periods of recession or uncertainty, they can better rely on the income streams provided, for example, by the hotel unit, to finance any future acquisitions of new real estate proprieties or expansions.

Company Segments

JHSF is composed by four main segments, generating revenues from diversified sources and business models. The company is currently operating with a development sector, a recurring income segment, a hotels and restaurants segment and the airport segment.

Development

The business model of this segment is based on the construction and the allotment of their landbank. Such allotment provides construction permits, increasing substantially the value of each lot. Furthermore, they focus especially on opportunistic investment properties, such as acquiring large undeveloped plots of land and creating value through the urbanization of underdeveloped areas.

Currently, this segment is the biggest source of revenue for JHSF, representing almost 80%. We expect this segment to be the biggest source of revenue for the next years, generating more than 16 thousand R$ until 2030, only with the projects already in their portfolio.

Figure 4: Boa Vista Complex
Source: JHSF

The pandemic had a significant influence on the Brazilian real estate market over the past two years, specially on the high-income group, with double-digit growth in the sales of luxury homes. The increase in the demand was driven by the Brazilian wealthy families desire for larger, higher-quality, more comfortable homes with spaces for home offices. In Sao Paulo, demand for homes costing more than R$ 2 million has grown 3.2%. Since JHSF capitalized on the second house boom in the last two years, this segment has seen particularly strong growth. From 2019 to 2020, this segment's CAGR was 242%, more than tripling, and in 2021, it was 71%. Nevertheless, the pandemic was an event that is not expected to occur in the next years, therefore, the company's growth last year should not be considered as sustainable for the long term.

Figure 5: Parque Catarina

Source: JHSF

The typical customer for these properties is not very concerned about interest rates. Consequently, the demand is not very dependent on future expectations for interest rates, and is, therefore, highly resilient (although it can be affected indirectly). We anticipate that a slowdown in the economy will have an indirect effect in the upcoming years as wealthy people may prefer to save their income over investing. Having said that, we expect that the development sector, particularly the market for second homes, will be most impacted by a slowdown in the economy. This is because second homes are considered non-essential purchases. The JHSF target customer will probably choose to maintain their current level of consumption and save over increasing their investment holdings.

Hotels & Restaurants

Figure 6: Hotel Fasano Cidade Jardim

Under the Fasano brand, this business operates 28 exclusive eateries and bars across 9 cities in addition to 9 luxury hotels. Fasano activities can be viewed as secondary because they only accounted for 11.37% of total revenue in 2021 and contributed an average of 0.38% to the company's net income from 2018 to 2021.

The synergies that hotels and restaurants produce with the other divisions are what brings most value to the businesses. For instance, having one or more Fasano's restaurant brands in a JHSF mall will enhance the flow of customers, which will raise the sales of the retailers in such malls, increasing JHSF's revenue as the rent for the store varies with their sales. Having a hotel in/near JHSF's residences will also increase their value.

Out of hospitality revenues, 52% of total sales were earned by restaurants in 2021, while hotels' proportion has been rising since 2014. The segment's EBIT margin was 7.4%, and its gross margin was 26%. For the previous five years, revenues have increased at a CAGR of 5.2%, and in 2021.

JHSF plans to increase the scope of its operations by opening more hotels and eateries under the Fasano brand, both domestically and abroad. With the opening of a hotel in Miami, the U.S. will be the main focus of the current worldwide expansion. The corporation said that it has intentions to expand to the United Kingdom and Portugal, but as far as we know, these plans have not yet been carried out. Still international expansion is still in accordance with the company's goal as high-earning families in Brazil will now be able to spend their vacations in hotels of a brand they are familiar with.

Portfolio	Hotel Units
São Paulo	60
Rio de Janeiro	89
Boa Vista	39
Punta del Leste	30
Angra dos Reis	60
Salvador	70
Belo Horizonte	77
Trancoso	40
Itaim	107
Fith Avenue	7
Cidade Jardim	50
Miami	85

Figure 7: Number of units per hotel

In 2021, the luxury hotel industry recovered very quickly and even had better results than 2019. According to a yearly survey made by the Brazilian Luxury Travel Association (BLTA), their associates earned 50% more revenue than in 2019. This was because of travel restrictions. Since it was difficult to leave the country and go to other luxury travel destinations, high-income Brazilian travelers preferred to stay in Brazil. In 2019, 54% of demand was domestic but in 2021 this number increased to 90.7%.

The change in the composition of hotel demand happened throughout all the Hotel industry. According to JLL's annual "lodging industry in numbers", 97.3% of resort guests and 92.1% of city hotels in 2021 were Brazilian. In 2019, the origin of guests was 93.5% and 87.5% Brazil in resort and city hotels, respectively. JLL defines Resorts as "hotels located at the beach or countryside with extensive leisure facilities", and City Hotels include both hotels and condo-hotels.

In the same report, we can read that the average hotel gross revenue per available room in 2021 was equal to 47.090 R$, which was still 30.8% less than in 2019. We can, therefore, conclude that, besides luxury hotels, the hotel industry has not recovered yet from the pandemic. This confirms that high earnings individual's demand is more resilient, thus corroborating the company's strategy.

Figure 7: Hotel Fasano Boa Vista
Source: JHSF

To understand how the market has been growing, we used the information from BTLA's yearly reports. For this analysis, we used the reported estimated gross revenue and yearly guests and divided them by the number of BLTA members of the corresponding year. From 2017 to 2019, yearly gross revenue and yearly guests per member grew by a CAGR of 29% and 25% respectively.

Restaurants, on the other hand, did not fully recover from the pandemic. There were 4.5% less meals sold in 2021 than in 2019, even though the company had one more restaurant. This is likely because of a lockdown in the state of São Paulo in March which affected 12 out of the 28 restaurants in the company's portfolio. Nevertheless, restaurants performed extremely well, which seems to be a consequence of a phenomenon called "revenge shopping" where consumers increase their spending after being deprived of the possibility of going to restaurants.

According to Passport, from 2016 to 2019, the restaurant industry in Brazil grew at a CAGR of 2.5%

Recurring Income

Through this segment, the company seeks to generate cash flows to finance the acquisition of new projects or the expansion of existing ones. The segment can be divided into two "sub-segments": shopping malls and retail. The first one consists in the 6 shopping malls and markets that the company has developed. Revenue in this sub-segment is generated through the lease of store area to retailers, parking lot fees, administration services, telephony services as well as the sale of electric energy. Main costs and expenses are salaries and benefits of employees, purchase of goods for the sale of telephony and electric energy services, and marketing expenses.

JHSF also sells portions of its shopping malls whenever it finds it to be more profitable to do so then continuing with operations in that area. Currently, the company has 66 262 square metres of gross leasable area, which is 41% of the total GLA of all the malls. One good example of this was the transaction with the real estate fund "XP Malls" where JHSF sold stakes of Shopping Cidade Jardim, Catarina Fashion Outlet, Shopping Bela Vista, and Ponta Negra Shopping Mall for $600 Million.

The company has a robust pipeline of projects for next years and plans to increase its GLA by 141% to 160 978 square meters. These projects include both expansions of the existing malls (for example, Cidade Jardim), and development of new shopping centres (Usina São Paulo).

Currently, 59% of JHSF's GLA is in the state of São Paulo. This is a risk since the lack of regional diversification means that the company is very exposed to any event that happens in this state. This risk will increase in the following years as all the planned increases of GLA will also be in this state.

The retail sub-segment has been having a growing importance in the company's business model. From 2017 to 2021, retail revenues have grown at a CAGR of 60% as the company acquires more brands and expands its online platforms.

Retail sales in Brazil have fully recovered from the pandemic in 2021. Sales are expected to continue their growth in 2022 as the Extended Retail Cielo Index, an index developed to measure the performance of the Brazilian Retail Industry, indicates a positive nominal year-on-year growth every month of this year. However, even though industry sales have been soaring, the shopping malls have not seen the amount of traffic they used to have before the pandemic. According to the president of the Brazilian Association of Shopping Centers (ABRASCE), this can be explained by two reasons. One of these reasons is remote working. Since a lot of shopping malls are located near offices, a lot of its traffic was due to workers visiting the malls during their lunch breaks or after work. As more people work from home, it is expected that shopping malls will have less traffic. The second reason is the growing preference to shop online, which made people have fewer motives to go to shops.

Figure 8: Real Parque Complex
Source: BTG Pactual

JHSF has been able to position itself so that it can reap the benefits of the growing popularity of e-commerce. Currently, the company has one fashion platform (CJ Fashion) and one food delivery platform (CJ Food), which allows them to sell their retail products online. This is part of JHSF's strategy of creating an omnichannel, where clients can buy products through different ways: offline, on websites, or through the apps. Their digital strategy also allows them to increase their client base as luxury clients who don't live near JHSF's malls can now more easily also acquire their products.

In 2021, this segment generated 12.3% of total Revenue however this was only because of the extremely good performance of the development segment. From 2019 to 2021, recurring income generated on average.

Airport

In 2019, Catarina Aeroporto was inaugurated. Located 70 km from the city of São Paulo. At the end of June 2021, the airport was allowed to operate international flights which is a competitive advantage to its main competitors that are only authorised for domestic flights (For example Congonhas, Sorocaba, and Campo de Marte).

Figure 9: Catarina Airport
Source: JHSF

Brazil has the second largest executive aircraft fleet in the world. According to Brazil's National Agency of Civil Aviation (ANAC), in February 2022, there were 737 private jets in Brazil. This is a growth of 8.7% from last year. The demand for private jets in Brazil has increased significantly after the pandemic as the ultra-wealthy want to be able to make their travels without the risk of contamination or having their flights cancelled due to external factors.

The construction of this airport aims to fulfil the infrastructure needs that these individuals have. Currently, most of executive aircrafts are served by commercial airports who often operate in full capacity and lack incentives to adequately serve this segment of the market. This indicates that JHSF will most likely be able to steal market share from these competitors. According to JHSF, São Paulo has 35% of Brazilian jets and they believe they will be able to target 35% of the State's market share.

Since its inauguration, the airport has consistently increased its capacity. It currently has 8 hangars and is already working on its 3rd expansion, building 4 new hangars. When the company had 6 hangars, it could have 72 hangered aircraft. Assuming, therefore, that each hangar has capacity for 12 aircraft, this new expansion will increase the capacity to 144 aircraft. Knowing that the monthly rent is approximately R$ 20 000, the Catarina Airport will be able to generate R$

34.56 M yearly just from rent.

The main operating revenues in this segment are generated through the hangar of customer's aircrafts (currently, around R$ 20 000 per hangered airplane per month), fees for the use of the runway (around R$ 3 000 per landing), resale of fuel, air taxi services to São Paulo, and services provided such as aircraft cleaning and polishing. Most of the costs come from personnel expenses, insurance, depreciation, purchase of fuel, and maintenance of own aircraft.

In 2021, this segment represented only 2% of the gross revenues and 2.4% of the total core result, however, since the beginning of 2022, the airport has generated 4.2% of the company's total gross revenues.

Company Current Performance

Cash Convertion Cycle Analysis

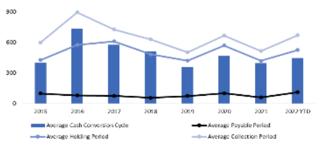

Figure 10: Cash Conversion Cycle of JHSF as of 2022YTD

Since JHSF is a real estate company, they may keep inventory and receivables for more than one year, so they have separated the current and non-current captions. They do not make this difference for payables, indicating that they anticipate that those are paid within a year. The average holding period is currently 201 days, and the non-current average holding period is 622 days, according to the most recent statistics, 2022 YTD. Considering the weighted values of current and non-current receivables, the average collection period is 154 days. The average payable period over the past twelve months was 112 days. The average time it took to convert money was 445 days. This metric is particularly relevant to estimate our net working capital requirements.

Liquidity Analysis

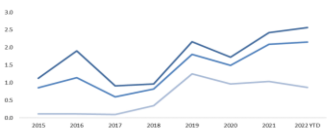

Figure 11: Liquidity Ratios evolution

JHSF has a strong track record when it comes to liquidity, with a current ratio that has consistently been over 1 and is currently 2.6. These is strongly tied to one of their priorities, which is maintaining a conservative capital structure with a manageable level of debt. With inventories excluded, the ratio was consistently over 1 throughout the previous seven years and is now set at 2.2. With a current cash ratio of 0.9, which translates into a remarkable liquidity. With this cash ratio of 1, they should be ready to keep their goal of maintaining minimal debt and investing in opportunistic ventures. Relying on debt issuances may restrict businesses from acting fast.

Current Value Creation

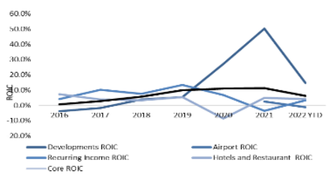

Figure 12: ROIC Evolution of each segment

To highlight the sources of value for JHSF, is important to analyse the value creation of each segment, so we can infer the performance evolution and discuss its reasons.

The development segment currently has a ROIC of 14.7%, above the WACC for this segment, 8.2%. This allows us to conclude that this segment is creating value for this segment. However, due to a negative RONIC of -44%, we conclude that the capital that is being currently invested is not delivering the same return. This is likely because new invested capital in this segment only generate returns after more than a year. Later in this report we will approach the RONIC fluctuations, and its implications for value creation.

The airport segment, has a negative ROIC, contributing to value destruction. This metric is explained by the negative result obtained in this segment. The RONIC is also negative, but since this segment is very recent there is not enough activity in this segment to consolidate our analysis.

There is also value destruction in the recurring income segment, with a ROIC of 3.3%, below the segment WACC of 7.79%. On the opposite, the RONIC is currently extremely positive, so the new invested capital is delivering higher return than the previously invested capital. This may be because of the segment’s recent investments in retail and digital Lastly, the hospitality segment, with the lowest WACC of 5.02% is not adding value, with a ROIC of 4.2%. The RONIC is also negative, aligned with two of the other segments.

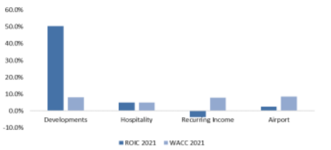

Figure 13: ROIC vs WACC (2021) analysis per segment

Lastly, the hospitality segment, with the lowest WACC of 5.02% is not adding value, with a ROIC of 4.2%. The RONIC is also negative, aligned with two of the other segments.

This analysis is particularly relevant to understand the evolution of the ROIC given the RONIC’s we computed, and the value generated by the new capital.

ROE Breakdown

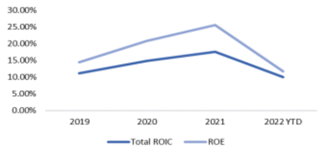

Figure 14: ROIC vs ROE evolution

The 2021 ROE was 25.64%, and the 2022 YTD ROE is 11.75%, still missing the last quarter of 2022, which is anticipated to be one of the most significant ones. The assets value creation minus the debtholder return was the first breakdown we performed. The ROE was 11.9%. Such approach is particularly relevant to our analysis because later in the report we will investigate the impact of higher leverage ratio in the return for the shareholder and for the value creation overall.

Forecast Assumptions

To perform both DCF and sum of parts valuations, we created several assumptions for each segment, to base our forecasts for income statement and invested capital.

Developments

Income Statement

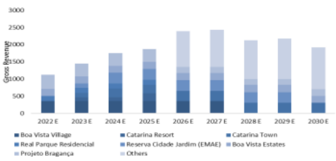

Figure 15: Construction revenue per project

The forecast of the income statement was based on JHSF's property report and its track record in this segment, with a focus on gross margins and sales projections. Overall, the development portfolio is composed by seven launched or ready to launch projects, accounting for more than R$ 16 billion to be sold over the next eight years.

Boa Vista is one of company’s project and is expected to generate a total value of R$ 1 750 million during the next 8 years. The project was already launched and is based on the construction of dwellings. On average, JHSF is expected to sell R$ 200 million worth of properties in each of the next eight years. Regarding the gross margin, the company expects to sell the properties with the same proven margin used in all the previous developments in the exact same location. The margin is expected to be 70% in the first years of development, and to decrease and stabilize at 60% by the end of the third year.

Another project is Parque Catarina, a residential project in a JHSF complex that also has shopping malls, restaurants, and the executive airport. This complex is a greenfield project, so the company cannot sell the properties in advance because they do not have a completed project to price the properties yet. Due to its marked riskiness, we decided to be conservative, discounting this amount to a total value of R$ 2 500 million. The gross margins are expected to be aligned with the previous JHSF projects, averaging 60% over the next 6 years. This project will generate revenues of around R$ 250 million in the next year, R$ 500 million in the following two years, and stabilize at R$ 300 million in the following six years.

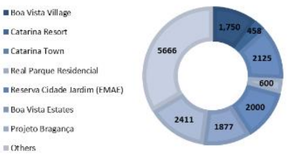

Figure 16: Development portfolio composition

Reserva Cidade Jardim is in the center of Sao Paulo and characterized by its similarity with all the other company projects. Inserted in a complex with shopping malls and offices, there are nine residential buildings with a total estimated value of R$ 2 000 million. The revenues are expected to be steady and averaging 300 million over the next seven years. Having that said, it is an ongoing project, was launched in 2019, the gross margin is already slightly smashed by the sluggishness of the sales. However, JHSF still expects 50% gross margin to meet guaranteed demand for these properties over the next four years.

Lastly, Real Park is a project located also in the center of Sao Paulo, only with residential units. Since it is smaller in terms of size, it does not benefit from the scale of the project meaning that the gross margins will decrease and be more aligned with the average construction margins. The expected gross margin will be constant at 36%, heavily contributing to the lower scale of operations and the good location, which led to a higher land plot acquisition cost. The total sales value will be R$ 600 million, evenly divided between the next four years.

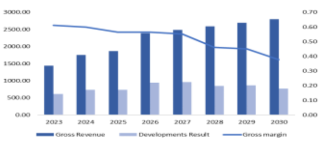

Figure 17: Evolution of Development Revenue vs Development Result vs Gross

Finally, JHSF provides a projection of R$ 8 800 million to be developed in the years after 2026 but does not disclose any detailed information about these projects. Without further information, we decided to discount this value to R$ 5 650 million and distribute it at a 4% growth rate. The gross margin was set as a weighted average of all the other JHSF projects, averaging 55%.


Figure 18: Cement Commodity evolution (from Dec21 until Dec22
Source: FRED, St. Louis Data

Overall, the gross margins are expected to marginally contract, with an increase in the raw materials verified worldwide, especially with key commodities increasing substantially its price. As an example, since December 2021, the cement as commodity increased 15%. However, we assume a marginal increase because we expect such increase to be passed on to customers, coupled to inflation.

The demand side has been proving its resilience, even under economic adversities such as the pandemic, where JHSF capitalized it as an opportunity, and more than tripled its sales. Although this period was characterized by historical low interest rates, incentivizing consumption, and especially investment, benefiting JHSF sales. An eventual more severe recession, specially under demand shocks, where households must set priorities, clearly threats the company development revenues, with a substantial decrease in sales of properties.

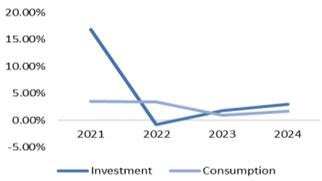

Figure 19: Consumption vs Investment Prediction
Source: Bloomberg

According to CNN Brazil the residential real estate market (also including medium and low-income properties) has demonstrated a decrease in the launch of new properties to develop, diminishing the supply of properties. Such slowdown, increases the value of the properties already in the market, leading to an appreciation of its value. The momentaneous and quick increase in the interest rates, often limits more the developers (the suppliers) than the households (the demand). This is explained by the risk, as developers face considerably more risk than the household. Consequently, and as predicted by Brazilian banks, the demand for properties will marginally decrease while the supply should slowdown during the next two years, as predicted by the national association of Brazilian real estate developers. The marginal decrease is explained by the increase in the interest rates (although a tiny impact for our target customer), as 12% of the properties in Brazil are acquired with mortgages. The constraint in the supply side related to the difficulty of the developers to leverage their projects should prevent the Brazilian market of entering in a real estate bubble for a foreseeable period as the supply impact is higher than the demand impact.

The sales of the last two years saw a significant increase, but it is expected that they will return to levels more closely aligned with the trend before the pandemic. This will be a more conservative outlook than what is predicted by JHSF's internal forecasts. The expected economic slowdown does not significantly affect the consumption habits of high earning individuals, but it can affect their investment strategies. According to Bloomberg, the investment rate should decrease two thirds in 2023, when compared with the last quarter of 2021 (before rise of interest rates and war in Ukraine). For this reason, we reviewed conservatively the projected development sales, closer to the values shown before the pandemic. Bloomberg reports a 20% probability of recession for the Brazilian economy, which will likely impact the units sold. For this reason, we have a scenario of projections under recession, projecting sales at lower levels than pre-pandemic times. Furthermore, the model allows to increase the probability and understand the share price change.

The selling, general and administrative expenses are common to all the projects, so they were assumed the average ratio of the last four years, at 6% of revenues.

Invested Capital

Regarding the invested capital JHSF does not disclose detailed information about each project capital requirements, so we had to make assumptions related to overall segment, rather than each individual project. Development segment, according to last quarters report, accounts for the major fraction of inventories and receivables, collecting almost 100%. We used the average values of cash conversion cycle to estimate future years, with residual corrections in the final years, increasing its efficiency. With the cash conversion cycle, we also estimated the suppliers, but for this caption, the developments only contribute with 46%. For the other assets and liabilities captions, we applied the same strategy, and forecasted the values based on the overall revenue’s ratio, keeping it like the last 4 years. For the advances from customers, which only affect the developments, and are related to the payments of the acquisitions of properties that are not finished yet, we applied the same average revenue’s ratio of the last 4 periods. Predicted to be the most capital-intensive segment, the development segment requires the biggest stake of invested capital. The operating cash was assumed as weighted division per revenue. The intangibles are related with rights of use while fixed assets are machinery, equipment, and the construction in progress. These values are detailed and included in the model.

Recurring Income

Income Statement

Current Malls	Opening	Total GLA	Own GLA	% Own
Shopping Cidade Jardim	2008	37343	18675	50%
Shopping Bela ista	2012	51351	13356	26%
Shopping Ponta Negra	2013	35925	14374	40%
Catarina Fashion Outlet	2014	29409	14707	50%
BV Market	2020	949	949	100%
Shops Jardins	2020	6000	4200	70%

Figure 20: shopping malls current characteristics

Mall Expansions and New Projects	Opening	Total GLA	Own GLA	% Own
Shopping Cidade Jardim Expansion	1S23	10964	5483	50%
Catarina FashionOutlet Expensaion	1S23 and 1S24	38005	24843	65%
Faria Lima Shops	2S24	9383	7037	75%
Boa Vista Village Mall	3Q23	24894	24894	100%
Real Park Mall	1S24	20000	20000	100%
Shopping Ciade Jardin II Usina SP	1S24 and 3Q26	12590	8435	67%

Figure 21: shopping malls future expansions

To forecast the revenues for the recurring income segment, it was necessary to forecast the revenues for both the mall and retail sub-segments.

The mall sub-segment's revenues were generated through leasing of the company's gross leasable area (GLA) and from the services provided by the mall, such as parking and electricity. The leasing revenue was dependent on JHSF’s GLA and their stores’ occupancy cost (an average of the stores’ leasing cost as a percentage of the sales generated), which was assumed to be stable at around 9.91%. This is because leases are composed of a fixed amount, renegotiated every year, and a variable amount which depends on the sales generated by the store. Because of that, we also had to make a forecast for the sales produced by the malls. The sales for the mall were forecasted by assuming a 3% decrease of sales per area in 2023 due to exceptional performance in the previous year, followed by a yearly growth of 3%. GLA was assumed to increase with the planned expansions: 30 000 sqm in 2023, 54 363 sqm in 2024, 1 759 sqm in 2025 and 2 108 sqm in 2026. We did not model any sales of stakes in the malls or sales of the company's own GLA.

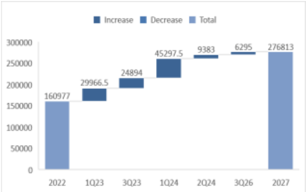

Figure 22: Current GLA (2022), GLA expansions (2023-2026), and final stabilization in 2027

The malls' gross margin was assumed to be equal to the average of the previous years (65.4%) as it has historically been very stable. The SG&A expenses were estimated to be equal to 23% of malls' revenue from 2023 and 2024. This value is equal to 2017, the year that had the highest SG&A expenses as a share of revenue, as we believe that the sub-segment will incur in a lot of these expenses as it expands. Afterward, we assumed that SG&A expenses will be equal to 13% of revenues as the company consolidates its position.

For the retail sub-segment, a growth rate was estimated for the revenues generated. For the years 2024, 2025, and 2026, a growth rate of 25%, 15%, and 10% was assumed, respectively, due to the company's expansion of its stores, brand portfolio, and digital channels. Afterwards, the revenues were forecasted to grow at the same rate as the store sales: 3% annually.

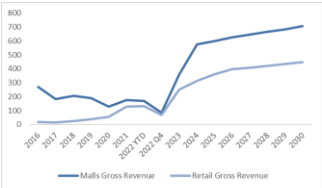

Figure 23: Historical vs Projections of Retail and Mall revenue

We expect the retail gross margin and the revenue proportion of SG&A expenses to be equal to the average of 2016-2022 until 2026. Afterward, we forecasted these values to be equal to 40% and 54% as the company consolidates its position.

Overall, we assumed that revenue deductions will be equal to 16%, the average of the historical deductions. We also believe that there will the other operating income/expenses will not be significant.

Finally, the income from the increases of the fair value of investment properties was equal to difference of the balance sheet value of the previous year. We dive deeper into how we estimate this changes in the following section.

Figure 24: Evolution of Recurring Income Revenue vs Recurring Income Result vs Gross Margin

Invested Capital

Investment properties are the most important element of this segment's invested capital. Investment Properties are represented, substantially, by the company's investments in malls. The properties' value is estimated by the company using a DCF model. It is also important to note that operational investment properties are often worth 34% more than pre-operational properties. As the new shopping malls open, and the current ones are expanded, we increase the value of their squared meters by 34%. Additionally, all the company's investment property increases their value annually by 6%, which is the average capitalization rate assumed by JHSF in its models.

The recurring income segment also has intangible assets. We assumed that all JHSF's software was part of this segment because of the development of online stores and apps. It is expected that this asset will increase in the next two years as the company finishes the development of these channels. Points of sales were also included in this segment as they refer to the retail stores. We also added a third of "other intangibles" to the total. Finally, we considered the goodwill from "JHSF Gestão de Investimentos" as being part of this segment because this new vertical will include a "Membership" which will grant benefits and discounts to its members.

The segment's fixed assets include "leasehold improvements" and "other fixed assets". Leasehold improvements will grow until 2026 with the expansion of the retail sub-segment, afterward, it will remain stable. Other fixed assets will grow at an average rate.

Hospitality

Income Statement

Hotel revenues are mostly driven by the occupancy rate, the average daily rate (ADR), and the number of available rooms. We will use these variables for our revenue forecast.

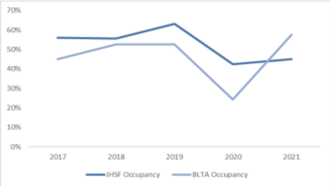

Figure 25: JHSF occupancy rate vs DLTA occupancy rate

Hotel developers, appraisers and consultants often assume that occupancy rates of new hotels take around 3 years to stabilize. This assumption has been confirmed by O'Neill, who found that luxury hotels take 3.31 years to stabilize (O'Neill, 2011). We do not have enough information regarding each Hotel's occupancy. However, we will expand on this assumption and assume that the segment's occupancy rate remains stable at a certain level. This assumption seems to be reasonable as the pre-pandemic occupancy rate had a standard deviation of only 5.47% and an average of 62.73%. The pre-pandemic occupancy of BLTA had an average of 46.37% and a standard deviation of only 3.6%. Therefore, we will assume that the occupancy rate will be equal to 62.73% throughout the forecasted period.

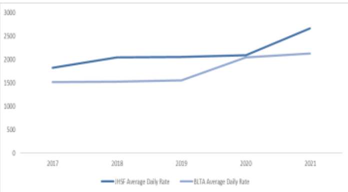

Figure 26: JHSF average daily rate vs DLTA average daily rate

The number of available rooms changes with the expansion of existing hotels and the opening of new ones. In the next years, JHSF is expecting to open the Hotel Fasano Cidade Jardim (50 units) and Fasano Itaim (107 units) in 2023. There are also news regarding an acquisition of a Miami hotel by JHSF. The company has expressed its intentions of opening operations in this city, however, in their reports, they have not yet announced the expected opening date. We will assume that this hotel (85 units) will open in 2025. Afterwards, we will assume that JHSF will not make any new expansions. We find this to be more reasonable than assuming a constant expansion since JHSF has an opportunistic approach.

The ADR seems to be related to the industry's average daily rate. In fact, JHSF's ADR is constantly 35% higher (except in 2021, where it was only 30% higher) than the rate published in BLTA's report of the previous year. The reason for the company's rate to be related to the industry's previous year rate and not with the same year may be that the industry information is only published one year after. Therefore, for Q4 2022 we will assume that the company's ADR is 35% higher than BLTA's ADR in 2021. Afterwards, we will increase the ADR by the expected inflation.

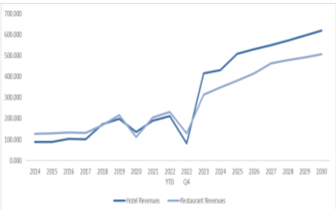

Figure 27: Hotel vs Restaurant Revenues (historical & projected)

Since the hotel industry is very seasonal, revenues from hotels in Q4 2022 were forecasted assuming that the RevPar was 27% higher in Q4 than in Q3. This value was estimated by calculating the median of previous increases from 2018 to 2021.

For restaurants, revenues are driven by the average price per meal and the number of meals sold, which, in turn, depend on the number of restaurants that the company has. In our forecast, the number of meals per restaurant is equal to the average from 2014 to 2021. We also assumed that the average price will grow with inflation in the future.

The restaurant "sub-segment" Is also very seasonal, especially because a lot of the company's restaurants are located inside the hotels. As such, revenues in Q4 2022 are 58% higher than revenues in Q3. This value is equal to the median difference of revenues between Q3 and Q4 from 2018 to 2021.

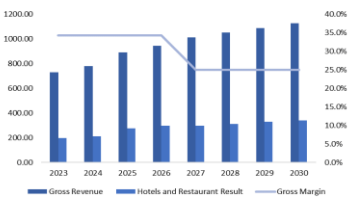

Figure 28: Evolution of Hospitality Revenue vs Hospitality Result vs Gross Margin

Margins seem to have stabilized since 2019 (except for the gross margin in 2020). As such, both the gross margin and the operating margin for our forecast are equal to the average of the margins of these years.

Invested Capital

The company has taken an asset-light approach to the hotel and restaurant industry, preferring to operate the hotels and restaurants without owning them. As such, it is the segment with the lowest amount of invested capital.

There are two kinds of fixed assets in this segment: “right of use” and “Fasano hotels”. We assumed that both captions will grow at the average rate of the past 3 years as it seems that the company has increased its expansion efforts for this segment in 2019.

The segment’s intangible assets include the goodwill from Hotel Marco International and Fasano Restaurants, which will be constant for the forecasted years. It also includes trademarks and patents, which will also remain constant, and a third of other intangibles.

Airport

Income Statement

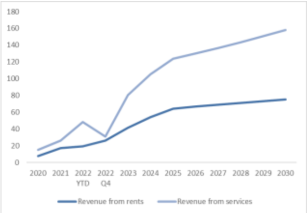

Figure 29: Revenue from rents vs Revenue from services (historical & projections)

To forecast this segment, we’ve assumed that revenues come from two sources: rent from hangered airplanes and revenues from the airport’s movement (fuel fees, landing and take-off fees, aircraft cleaning, etc.).

To estimate how much rent JHSF would earn, we assumed that each hangar had the capacity to hangar 14.4 planes. Whenever there was an expansion, we also assumed that the new hangars would only have 50% of occupancy in the first quarter they were inaugurated. Besides that, we always assumed 100% of occupancy and believe this to be reasonable since the company has reached full capacity in all its three expansions most likely due to the fact there is a lot of demand for adequate infrastructure for executive airplanes.

The rent was assumed to be 2000 per month per aircraft hangered until the end of 2022. Afterwards, rent will grow yearly with inflation. This can be seen as a conservative approach since JHSF has a lot of pricing power, being the only international executive airport in Brazil.

The new hangars will be built until 2025, where the airport will reach its maximum capacity of 17 hangars and 245 airplanes parking slots.

Figure 30: Evolution of Airport Revenue vs Airport Result vs Gross Margin

The remaining revenues, sale of fuel and landing fees, will be driven by the amount of traffic the airport has, which, in turn, will depend on the capacity of the airport. Since we lacked data regarding the traffic of the airport, we assumed that revenues generated from these fees and services would be equal to 66% of total revenues until 2025. In other words, we are assuming that these revenues are 1.94x higher than the rents. By doing this, we are making sure that our forecast for the airport’s traffic will depend on its facilities. We are also assuming that JHSF will not find ways to upsell more services to its clients during these years, thus making the forecast somewhat conservative. After the airport expansions, we expect these revenues to grow at a 5% rate, as the company invests more heavily in growing its service offering (air taxis, for example).

During the expansion, gross margins will be equal to 34.4% and SG&A expenses will be equal to 25% of revenues. In 2026, they decrease to 25% and 14% respectively as the company consolidates its position. These are margins that the segment has had historically.

Invested Capital

Most of this segment’s invested capital is its fixed assets which include the airport and aircraft owned by the company. In accordance with our scenario, we assume that the airport will increase its value until 2025 due to the expansions, afterward its value will increase because of capitalized interest.

We think that the company will not buy any new aircraft in the next two years because of the lack of supply. When the expansion is completed, we believe that JHSF will increase the size of its fleet (and renew the existing one) to provide air taxi services to its clients.

Figure 31: Invested Capital projections per segment

Other Invested Capital Assumptions

For many invested capital captions, there were not any information regarding their distrbution between each segment. The only segmentation data we had was from the year 2021 onward. Therefore, we assumed that the distribution of inventory, receivables, payables, other assets, and other liabilities remained the same as they are in the last segmentation available (Q3 of 2022).

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JHSF PARTICIPAÇÕES

COMPANY REPORT

REAL ESTATE

15 DECEMBER 2022

MIGUEL SERRÃO & NUNO AFONSO

39165@novasbe.pt / 39116@novasbe.pt

JHSF Participações Equity Research

Creating a one-stop-shop for luxury

- As the company operates in the high-net-worth segment, the demand for their products and services has been quite resilient over the last seven years, not being significantly impacted by the economic and social crisis in Brazil.
- The development segment benefited significantly with the covid crisis, with the boom of demand for second homes, especially outside the city centre of Sao Paulo. The segment is expected to stabilize to the pre pandemic levels.
- Over the last six years, the hotel and restaurant segment has been increasing significantly, with constant average growth of 10%. It is expected to keep such pace, with the acquisitions closed and projected for the segment.
- During the pandemic the company launched an executive airport, covering the increase in the demand for private jets, given the travel constraints due to the pandemic. Furthermore, Sao Paulo has the highest traffic commercial airport in south America and might be difficult to park a private jet in the commercial airport.

Based on our valuations, the target price for 2023FY is R$ 6.24. As of 14th of December of 2022, the closing price was R$ 4.85, meaning that it is trading at a discount of 28.8%. Our final recommendation is to BUY.

Company description

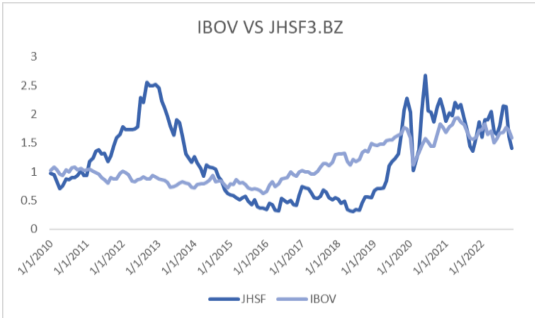
JHSF is a Brazilian real estate company that focuses on the development of high-end residential and commercial properties. The company was founded in 1972 and is based in São Paulo, Brazil. It has a strong presence in the luxury real estate market in Brazil, with projects including shopping malls, hotels, and residential buildings.

Recommendation:	**BUY**
Price Target FY23:	**6.00 R$**
Price (as of 16-Dec-22)	**4.93 R$**

Reuters: JHSF.SA, Bloomberg: JHSF.BZ

52-week range (€)	4.61-7.61
Market Cap (R$B)	3.389
Outstanding Shares (m)	486

Source: Bloomberg



Source: Bloomberg

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Macroeconomic Outlook

Figure 1: Inflation drivers
Source: Deloitte

The Brazilian economy has experienced a period of strong growth, driven by high commodity prices and an expansion in domestic demand. However, this growth has recently slowed in Q3, with real GDP growing 0.4%, less than the expected 0.6%. The economy is expected to weaken considerably in 2023 amid persistent inflationary pressures, higher geopolitical risks, and tighter financial conditions.

One of the challenges facing Brazil is high inflation, which the central bank has been aggressively addressing through rate hikes. Inflation has begun to ease as the Brazilian central bank has implemented 12 consecutive rate hikes before pausing in September 2022, with the central bank policy rate ultimately reaching 13.75%. This hawkish policy stance has helped to support the value of the currency, but with other central banks turning more hawkish, the currency could depreciate further.

The global economy is expected to weaken in 2023, which will likely impact Brazil. Higher interest rates and slowing economic activity could hinder demand for raw materials, which could have negative implications for Brazil as a commodity exporter. Additionally, the ongoing conflict in Ukraine and the maintenance of China's "zero-COVID" policy have contributed to global supply chain disruptions, further exacerbating the situation.

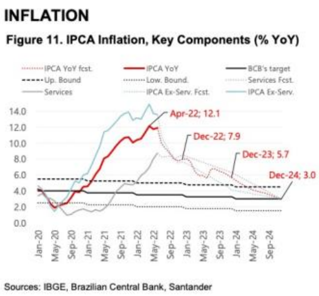

Figure 2: Inflation components
Source: Santander Bank

The combination of these factors is expected to weigh on the Brazilian economy. According to Bloomberg, the consensus forecast is that GDP will expand by 2.4% in 2022 and 0.9% in 2023. Inflation is projected to remain elevated, at 5.2% in 2023, and the central bank is likely to continue its hawkish stance on monetary policy. In terms of the exchange rate, the consensus forecast according to a report made by Santander is of R$/US$ 5.10 for the end of 2023.

The luxury retail industry, the luxury residential real estate industry, the luxury hotel and restaurant industry, shopping malls, and the executive airports will all be impacted by Brazil's economic outlook.

The luxury retail industry in Brazil is likely to be impacted by the economic challenges facing the country. High inflation and tighter financial conditions could lead to reduced consumer spending, particularly on luxury goods. This could also lead to a decrease in foot traffic and revenue for the shopping malls. However, since JHSF’s customers are high earning individuals, we believe that this slowdown will not be dramatic. We incorporated this fact into our forecast by assuming sales in shopping malls will decrease in 2023.

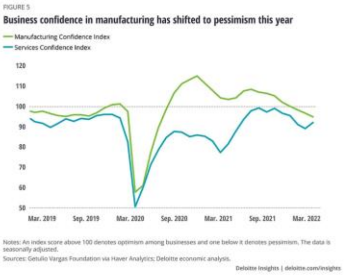

Figure 3: Business confidence
Source: Deloitte

The luxury hotel and restaurant industry could also be affected, as reduced consumer spending and a weaker economy could lead to lower demand for luxury hospitality services. However, at the same time, we believe that JHSF's segment may benefit as rich families choose to spend their vacation in Brazil instead of going abroad.

Executive flights may also decrease if the economic conditions are not very favorable. However, since there is a big demand for infrastructure, we believe that even in a recession, this segment will not be very affected.

Company Overview

JHSF is a Brazilian holding company focused on delivering services and products for high-income households. The company aims to build an ecosystem to attend all their client's demands in serval fields such as housing, entertainment, shopping, hospitality, and travels. JHSF can be seen as a "niche" company as their main target clients are the "ultra-rich" families in Brazil which are around 180 000 according to an estimation made by BTG Pactual. The target group may look limited; however, they are currently the only player in the market with this strategy.

JHSF has been in business for 50 years and has a wealth of knowledge when it comes to creating and managing both residential and commercial real estate. This is a crucial asset for the business, not only because it has developed beneficial relationships with vendors, service providers (such renowned architects), and retailers, but also because its brand has grown significantly in recognition within its target market. The company is perfectly situated to capitalize on the trend of "Branded Real Estate," which has grown to be a significant component of premium real estate. In addition, diversifying into new markets like hotels raises the brand value of JHSF.

As a "one-stop-shop" for luxury real estate, as well as by developing and providing products and services to their high-net-worth clients, the company creates internal synergies, increasing the value of all its segments. One good example of these synergies can be seen in Cidade Jardim, a complex which includes residential buildings, "triple A" offices, a shopping centre, and, more recently, a hotel.

Targeting high-earning individuals also brings another advantage to JHSF: stable cashflows. Since these customers are less likely to significantly reduce their consumption habits during periods of recession or uncertainty, they can better rely on the income streams provided, for example, by the hotel unit, to finance any future acquisitions of new real estate proprieties or expansions.

Company Segments

JHSF is composed by four main segments, generating revenues from diversified sources and business models. The company is currently operating with a development sector, a recurring income segment, a hotels and restaurants segment and the airport segment.

Development

The business model of this segment is based on the construction and the allotment of their landbank. Such allotment provides construction permits, increasing substantially the value of each lot. Furthermore, they focus especially on opportunistic investment properties, such as acquiring large undeveloped plots of land and creating value through the urbanization of underdeveloped areas.

Figure 4: Boa Vista Complex
Source: JHSF

Currently, this segment is the biggest source of revenue for JHSF, representing almost 80%. We expect this segment to be the biggest source of revenue for the next years, generating more than 16 thousand R$ until 2030, only with the projects already in their portfolio.

The pandemic had a significant influence on the Brazilian real estate market over the past two years, specially on the high-income group, with double-digit growth in the sales of luxury homes. The increase in the demand was driven by the Brazilian wealthy families desire for larger, higher-quality, more comfortable homes with spaces for home offices. In Sao Paulo, demand for homes costing more than R$ 2 million has grown 3.2%. Since JHSF capitalized on the second house boom in the last two years, this segment has seen particularly strong growth. From 2019 to 2020, this segment's CAGR was 242%, more than tripling, and in 2021, it was 71%. Nevertheless, the pandemic was an event that is not expected to occur in the next years, therefore, the company's growth last year should not be considered as sustainable for the long term.

Figure 5: Parque Catarina
Source: JHSF

The typical customer for these properties is not very concerned about interest rates. Consequently, the demand is not very dependent on future expectations for interest rates, and is, therefore, highly resilient (although it can be affected indirectly). We anticipate that a slowdown in the economy will have an indirect effect in the upcoming years as wealthy people may prefer to save their income over investing. Having said that, we expect that the development sector, particularly the market for second homes, will be most impacted by a slowdown in the economy. This is because second homes are considered non-essential purchases. The JHSF target customer will probably choose to maintain their current level of consumption and save over increasing their investment holdings.

Hotels & Restaurants

Under the Fasano brand, this business operates 28 exclusive eateries and bars across 9 cities in addition to 9 luxury hotels. Fasano activities can be viewed as secondary because they only accounted for 11.37% of total revenue in 2021 and contributed an average of 0.38% to the company's net income from 2018 to 2021.

The synergies that hotels and restaurants produce with the other divisions are what brings most value to the businesses. For instance, having one or more Fasano's restaurant brands in a JHSF mall will enhance the flow of customers, which will raise the sales of the retailers in such malls, increasing JHSF's revenue as the rent for the store varies with their sales. Having a hotel in/near JHSF's residences will also increase their value.

Figure 6: Hotel Fasano Cidade Jardim
Source: JHSF

Portfolio	Hotel Units
São Paulo	60
Rio de Janeiro	89
Boa Vista	39
Punta del Leste	30
Angra dos Reis	60
Salvador	70
Belo Horizonte	77
Trancoso	40
Itaim	107
Fith Avenue	7
Cidade Jardim	50
Miami	85

Figure 7: Number of units per hotel

Out of hospitality revenues, 52% of total sales were earned by restaurants in 2021, while hotels' proportion has been rising since 2014. The segment's EBIT margin was 7.4%, and its gross margin was 26%. For the previous five years, revenues have increased at a CAGR of 5.2%, and in 2021.

JHSF plans to increase the scope of its operations by opening more hotels and eateries under the Fasano brand, both domestically and abroad. With the opening of a hotel in Miami, the U.S. will be the main focus of the current worldwide expansion. The corporation said that it has intentions to expand to the United Kingdom and Portugal, but as far as we know, these plans have not yet been carried out. Still international expansion is still in accordance with the company's goal as high-earning families in Brazil will now be able to spend their vacations in hotels of a brand they are familiar with.

In 2021, the luxury hotel industry recovered very quickly and even had better results than 2019. According to a yearly survey made by the Brazilian Luxury Travel Association (BLTA), their associates earned 50% more revenue than in 2019. This was because of travel restrictions. Since it was difficult to leave the country and go to other luxury travel destinations, high-income Brazilian travelers preferred to stay in Brazil. In 2019, 54% of demand was domestic but in 2021 this number increased to 90.7%.

The change in the composition of hotel demand happened throughout all the Hotel industry. According to JLL's annual "lodging industry in numbers", 97.3% of resort guests and 92.1% of city hotels in 2021 were Brazilian. In 2019, the origin of guests was 93.5% and 87.5% Brazil in resort and city hotels, respectively. JLL defines Resorts as "hotels located at the beach or countryside with extensive leisure facilities", and City Hotels include both hotels and condo-hotels.

In the same report, we can read that the average hotel gross revenue per available room in 2021 was equal to 47.090 R$, which was still 30.8% less than in 2019. We can, therefore, conclude that, besides luxury hotels, the hotel industry has not recovered yet from the pandemic. This confirms that high earnings individual's demand is more resilient, thus corroborating the company's strategy.

Figure 7: Hotel Fasano Boa Vista
Source: JHSF

To understand how the market has been growing, we used the information from BTLA's yearly reports. For this analysis, we used the reported estimated gross revenue and yearly guests and divided them by the number of BLTA members of the corresponding year. From 2017 to 2019, yearly gross revenue and yearly guests per member grew by a CAGR of 29% and 25% respectively.

Restaurants, on the other hand, did not fully recover from the pandemic. There were 4.5% less meals sold in 2021 than in 2019, even though the company had one more restaurant. This is likely because of a lockdown in the state of São Paulo in March which affected 12 out of the 28 restaurants in the company's portfolio. Nevertheless, restaurants performed extremely well, which seems to be a consequence of a phenomenon called "revenge shopping" where consumers increase their spending after being deprived of the possibility of going to restaurants.

According to Passport, from 2016 to 2019, the restaurant industry in Brazil grew at a CAGR of 2.5%

Recurring Income

Through this segment, the company seeks to generate cash flows to finance the acquisition of new projects or the expansion of existing ones. The segment can be divided into two "sub-segments": shopping malls and retail. The first one consists in the 6 shopping malls and markets that the company has developed. Revenue in this sub-segment is generated through the lease of store area to retailers, parking lot fees, administration services, telephony services as well as the sale of electric energy. Main costs and expenses are salaries and benefits of employees, purchase of goods for the sale of telephony and electric energy services, and marketing expenses.

JHSF also sells portions of its shopping malls whenever it finds it to be more profitable to do so then continuing with operations in that area. Currently, the company has 66 262 square metres of gross leasable area, which is 41% of the total GLA of all the malls. One good example of this was the transaction with the real estate fund "XP Malls" where JHSF sold stakes of Shopping Cidade Jardim, Catarina Fashion Outlet, Shopping Bela Vista, and Ponta Negra Shopping Mall for $600 Million.

The company has a robust pipeline of projects for next years and plans to increase its GLA by 141% to 160 978 square meters. These projects include both expansions of the existing malls (for example, Cidade Jardim), and development of new shopping centres (Usina São Paulo).

Figure 8: Real Parque Complex
Source: BTG Pactual

Currently, 59% of JHSF's GLA is in the state of São Paulo. This is a risk since the lack of regional diversification means that the company is very exposed to any event that happens in this state. This risk will increase in the following years as all the planned increases of GLA will also be in this state.

The retail sub-segment has been having a growing importance in the company's business model. From 2017 to 2021, retail revenues have grown at a CAGR of 60% as the company acquires more brands and expands its online platforms.

Retail sales in Brazil have fully recovered from the pandemic in 2021. Sales are expected to continue their growth in 2022 as the Extended Retail Cielo Index, an index developed to measure the performance of the Brazilian Retail Industry, indicates a positive nominal year-on-year growth every month of this year. However, even though industry sales have been soaring, the shopping malls have not seen the amount of traffic they used to have before the pandemic. According to the president of the Brazilian Association of Shopping Centers (ABRASCE), this can be explained by two reasons. One of these reasons is remote working. Since a lot of shopping malls are located near offices, a lot of its traffic was due to workers visiting the malls during their lunch breaks or after work. As more people work from home, it is expected that shopping malls will have less traffic. The second reason is the growing preference to shop online, which made people have fewer motives to go to shops.

JHSF has been able to position itself so that it can reap the benefits of the growing popularity of e-commerce. Currently, the company has one fashion platform (CJ Fashion) and one food delivery platform (CJ Food), which allows them to sell their retail products online. This is part of JHSF's strategy of creating an omnichannel, where clients can buy products through different ways: offline, on websites, or through the apps. Their digital strategy also allows them to increase their client base as luxury clients who don't live near JHSF's malls can now more easily also acquire their products.

In 2021, this segment generated 12.3% of total Revenue however this was only because of the extremely good performance of the development segment. From 2019 to 2021, recurring income generated on average.

Airport

In 2019, Catarina Aeroporto was inaugurated. Located 70 km from the city of São Paulo. At the end of June 2021, the airport was allowed to operate international flights which is a competitive advantage to its main competitors that are only authorised for domestic flights (For example Congonhas, Sorocaba, and Campo de Marte).

Figure 9: Catarina Airport
Source: JHSF

Brazil has the second largest executive aircraft fleet in the world. According to Brazil's National Agency of Civil Aviation (ANAC), in February 2022, there were 737 private jets in Brazil. This is a growth of 8.7% from last year. The demand for private jets in Brazil has increased significantly after the pandemic as the ultra-wealthy want to be able to make their travels without the risk of contamination or having their flights cancelled due to external factors.

The construction of this airport aims to fulfil the infrastructure needs that these individuals have. Currently, most of executive aircrafts are served by commercial airports who often operate in full capacity and lack incentives to adequately serve this segment of the market. This indicates that JHSF will most likely be able to steal market share from these competitors. According to JHSF, São Paulo has 35% of Brazilian jets and they believe they will be able to target 35% of the State's market share.

Since its inauguration, the airport has consistently increased its capacity. It currently has 8 hangars and is already working on its 3rd expansion, building 4 new hangars. When the company had 6 hangars, it could have 72 hangered aircraft. Assuming, therefore, that each hangar has capacity for 12 aircraft, this new expansion will increase the capacity to 144 aircraft. Knowing that the monthly rent is approximately R$ 20 000, the Catarina Airport will be able to generate R$ 34.56 M yearly just from rent.

The main operating revenues in this segment are generated through the hangar of customer's aircrafts (currently, around R$ 20 000 per hangered airplane per month), fees for the use of the runway (around R$ 3 000 per landing), resale of fuel, air taxi services to São Paulo, and services provided such as aircraft cleaning and polishing. Most of the costs come from personnel expenses, insurance, depreciation, purchase of fuel, and maintenance of own aircraft.

In 2021, this segment represented only 2% of the gross revenues and 2.4% of the total core result, however, since the beginning of 2022, the airport has generated 4.2% of the company's total gross revenues.

Company Current Performance

Cash Convertion Cycle Analysis

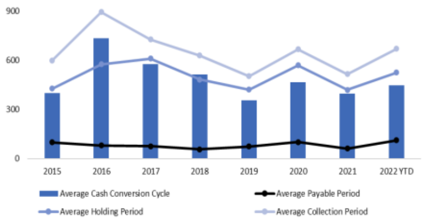

Figure 10: Cash Conversion Cycle of JHSF as of 2022YTD

Since JHSF is a real estate company, they may keep inventory and receivables for more than one year, so they have separated the current and non-current captions. They do not make this difference for payables, indicating that they anticipate that those are paid within a year. The average holding period is currently 201 days, and the non-current average holding period is 622 days, according to the most recent statistics, 2022 YTD. Considering the weighted values of current and non-current receivables, the average collection period is 154 days. The average payable period over the past twelve months was 112 days. The average time it took to convert money was 445 days. This metric is particularly relevant to estimate our net working capital requirements.

Liquidity Analysis

Figure 11: Liquidity Ratios evolution

JHSF has a strong track record when it comes to liquidity, with a current ratio that has consistently been over 1 and is currently 2.6. These is strongly tied to one of their priorities, which is maintaining a conservative capital structure with a manageable level of debt. With inventories excluded, the ratio was consistently over 1 throughout the previous seven years and is now set at 2.2. With a current cash ratio of 0.9, which translates into a remarkable liquidity. With this cash ratio of 1, they should be ready to keep their goal of maintaining minimal debt and investing in opportunistic ventures. Relying on debt issuances may restrict businesses from acting fast.

Current Value Creation

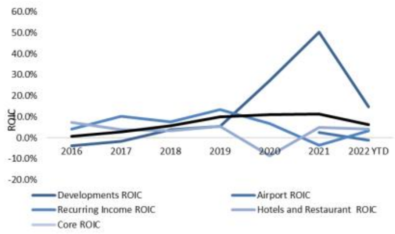

Figure 12: ROIC Evolution of each segment

To highlight the sources of value for JHSF, is important to analyse the value creation of each segment, so we can infer the performance evolution and discuss its reasons.

The development segment currently has a ROIC of 14.7%, above the WACC for this segment, 8.2%. This allows us to conclude that this segment is creating value for this segment. However, due to a negative RONIC of -44%, we conclude that the capital that is being currently invested is not delivering the same return. This is likely because new invested capital in this segment only generate returns after more than a year. Later in this report we will approach the RONIC fluctuations, and its implications for value creation.

The airport segment, has a negative ROIC, contributing to value destruction. This metric is explained by the negative result obtained in this segment. The RONIC is also negative, but since this segment is very recent there is not enough activity in this segment to consolidate our analysis.

There is also value destruction in the recurring income segment, with a ROIC of 3.3%, below the segment WACC of 7.79%. On the opposite, the RONIC is currently extremely positive, so the new invested capital is delivering higher return than the previously invested capital. This may be because of the segment's recent investments in retail and digital. Lastly, the hospitality segment, with the lowest WACC of 5.02% is not adding value, with a ROIC of 4.2%. The RONIC is also negative, aligned with two of the other segments.

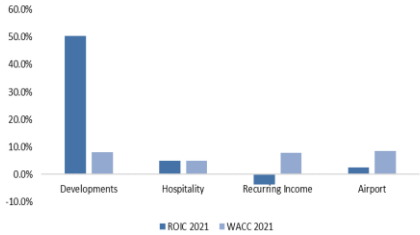

Figure 13: ROIC vs WACC (2021) analysis per segment

Lastly, the hospitality segment, with the lowest WACC of 5.02% is not adding value, with a ROIC of 4.2%. The RONIC is also negative, aligned with two of the other segments.

This analysis is particularly relevant to understand the evolution of the ROIC given the RONIC's we computed, and the value generated by the new capital.

ROE Breakdown

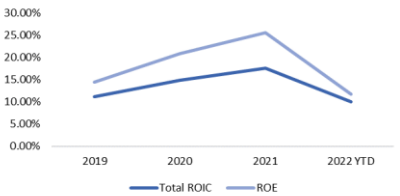

Figure 14: ROIC vs ROE evolution

The 2021 ROE was 25.64%, and the 2022 YTD ROE is 11.75%, still missing the last quarter of 2022, which is anticipated to be one of the most significant ones. The assets value creation minus the debtholder return was the first breakdown we performed. The ROE was 11.9%. Such approach is particularly relevant to our analysis because later in the report we will investigate the impact of higher leverage ratio in the return for the shareholder and for the value creation overall.

Forecast Assumptions

To perform both DCF and sum of parts valuations, we created several assumptions for each segment, to base our forecasts for income statement and invested capital.

Developments

Income Statement

The forecast of the income statement was based on JHSF's property report and its track record in this segment, with a focus on gross margins and sales projections. Overall, the development portfolio is composed by seven launched or ready to launch projects, accounting for more than R$ 16 billion to be sold over the next eight years.

Boa Vista is one of company's project and is expected to generate a total value of R$ 1 750 million during the next 8 years. The project was already launched and is based on the construction of dwellings. On average, JHSF is expected to sell R$ 200 million worth of properties in each of the next eight years. Regarding the gross margin, the company expects to sell the properties with the same proven margin used in all the previous developments in the exact same location. The margin is expected to be 70% in the first years of development, and to decrease and stabilize at 60% by the end of the third year.

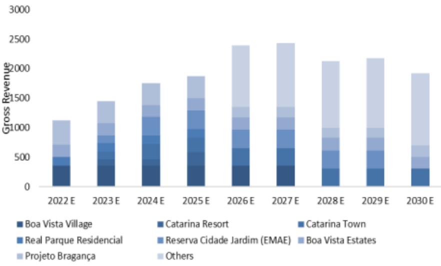

Figure 15: Construction revenue per project

Another project is Parque Catarina, a residential project in a JHSF complex that also has shopping malls, restaurants, and the executive airport. This complex is a greenfield project, so the company cannot sell the properties in advance because they do not have a completed project to price the properties yet. Due to its marked riskiness, we decided to be conservative, discounting this amount to a total value of R$ 2 500 million. The gross margins are expected to be aligned with the previous JHSF projects, averaging 60% over the next 6 years. This project will generate revenues of around R$ 250 million in the next year, R$ 500 million in the following two years, and stabilize at R$ 300 million in the following six years.

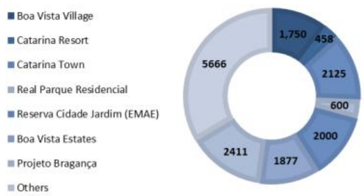

Figure 16: Development portfolio composition

Reserva Cidade Jardim is in the center of Sao Paulo and characterized by its similarity with all the other company projects. Inserted in a complex with shopping malls and offices, there are nine residential buildings with a total estimated value of R$ 2 000 million. The revenues are expected to be steady and averaging 300 million over the next seven years. Having that said, it is an ongoing project, was launched in 2019, the gross margin is already slightly smashed by the sluggishness of the sales. However, JHSF still expects 50% gross margin to meet guaranteed demand for these properties over the next four years.

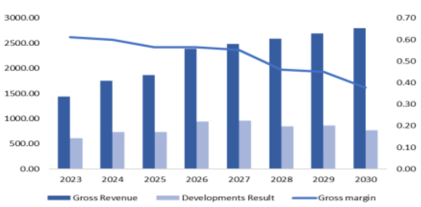

Figure 17: Evolution of Development Revenue vs Development Result vs Gross Margin

Lastly, Real Park is a project located also in the center of Sao Paulo, only with residential units. Since it is smaller in terms of size, it does not benefit from the scale of the project meaning that the gross margins will decrease and be more aligned with the average construction margins. The expected gross margin will be constant at 36%, heavily contributing to the lower scale of operations and the good location, which led to a higher land plot acquisition cost. The total sales value will be R$ 600 million, evenly divided between the next four years.

Finally, JHSF provides a projection of R$ 8 800 million to be developed in the years after 2026 but does not disclose any detailed information about these projects. Without further information, we decided to discount this value to R$ 5

650 million and distribute it at a 4% growth rate. The gross margin was set as a weighted average of all the other JHSF projects, averaging 55%.

Figure 18: Cement Commodity evolution (from Dec21 until Dec22
Source: FRED, St. Louis Data

Overall, the gross margins are expected to marginally contract, with an increase in the raw materials verified worldwide, especially with key commodities increasing substantially its price. As an example, since December 2021, the cement as commodity increased 15%. However, we assume a marginal increase because we expect such increase to be passed on to customers, coupled to inflation.

The demand side has been proving its resilience, even under economic adversities such as the pandemic, where JHSF capitalized it as an opportunity, and more than tripled its sales. Although this period was characterized by historical low interest rates, incentivizing consumption, and especially investment, benefiting JHSF sales. An eventual more severe recession, specially under demand shocks, where households must set priorities, clearly threats the company development revenues, with a substantial decrease in sales of properties.

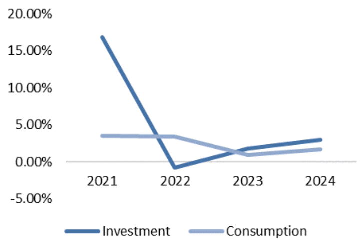

Figure 19: Consumption vs Investment Prediction
Source: Bloomberg

According to CNN Brazil the residential real estate market (also including medium and low-income properties) has demonstrated a decrease in the launch of new properties to develop, diminishing the supply of properties. Such slowdown, increases the value of the properties already in the market, leading to an appreciation of its value. The momentaneous and quick increase in the interest rates, often limits more the developers (the suppliers) than the households (the demand). This is explained by the risk, as developers face considerably more risk than the household. Consequently, and as predicted by Brazilian banks, the demand for properties will marginally decrease while the supply should slowdown during the next two years, as predicted by the national association of Brazilian real estate developers. The marginal decrease is explained by the increase in the interest rates (although a tiny impact for our target customer), as 12% of the properties in Brazil are acquired with mortgages. The constraint in the supply side related to the difficulty of the developers to leverage their projects should prevent the Brazilian market of entering in a real estate bubble for a foreseeable period as the supply impact is higher than the demand impact.

The sales of the last two years saw a significant increase, but it is expected that they will return to levels more closely aligned with the trend before the pandemic. This will be a more conservative outlook than what is predicted by JHSF's internal forecasts. The expected economic slowdown does not significantly affect the consumption habits of high earning individuals, but it can affect their investment strategies. According to Bloomberg, the investment rate should decrease two thirds in 2023, when compared with the last quarter of 2021 (before rise of interest rates and war in Ukraine). For this reason, we reviewed conservatively the projected development sales, closer to the values shown before the pandemic. Bloomberg reports a 20% probability of recession for the Brazilian economy, which will likely impact the units sold. For this reason, we have a scenario of projections under recession, projecting sales at lower levels than pre-pandemic times. Furthermore, the model allows to increase the probability and understand the share price change.

The selling, general and administrative expenses are common to all the projects, so they were assumed the average ratio of the last four years, at 6% of revenues.

Invested Capital

Regarding the invested capital JHSF does not disclose detailed information about each project capital requirements, so we had to make assumptions related to overall segment, rather than each individual project. Development segment, according to last quarters report, accounts for the major fraction of inventories and receivables, collecting almost 100%. We used the average values of cash conversion cycle to estimate future years, with residual corrections in the final years, increasing its efficiency. With the cash conversion cycle, we also estimated the suppliers, but for this caption, the developments only contribute with 46%. For the other assets and liabilities captions, we applied the same strategy, and forecasted the values based on the overall revenue’s ratio, keeping it like the last 4 years. For the advances from customers, which only affect the developments, and are related to the payments of the acquisitions of properties that are not finished yet, we applied the same average revenue’s ratio of the last 4 periods. Predicted to be the most capital-intensive segment, the development segment requires the biggest stake of invested capital. The operating cash was assumed as weighted division per revenue. The intangibles are related with rights of use while fixed assets are machinery, equipment, and the construction in progress. These values are detailed and included in the model.

Recurring Income

Income Statement

Current Malls	Opening	Total GLA	Own GLA	% Own
Shopping Cidade Jardim	2008	37343	18675	50%
Shopping Bela ista	2012	51351	13356	26%
Shopping Ponta Negra	2013	35925	14374	40%
Catarina Fashion Outlet	2014	29409	14707	50%
BV Market	2020	949	949	100%
Shops Jardins	2020	6000	4200	70%

Figure 20: shopping malls current characteristics

To forecast the revenues for the recurring income segment, it was necessary to forecast the revenues for both the mall and retail sub-segments.

The mall sub-segment's revenues were generated through leasing of the company's gross leasable area (GLA) and from the services provided by the mall, such as parking and electricity. The leasing revenue was dependent on

Mall Expansions and New Projects	Opening	Total GLA	Own GLA	% Own
Shopping Cidade Jardim Expansion	1S23	10964	5483	50%
Catarina FashionOutlet Expensaion	1S23 and 1S24	38005	24843	65%
Faria Lima Shops	2S24	9383	7037	75%
Boa Vista Village Mall	3Q23	24894	24894	100%
Real Park Mall	1S24	20000	20000	100%
Shopping Ciade Jardin II Usina SP	1S24 and 3Q26	12590	8435	67%

Figure 21: shopping malls future expansions

JHSF's GLA and their stores' occupancy cost (an average of the stores' leasing cost as a percentage of the sales generated), which was assumed to be stable at around 9.91%. This is because leases are composed of a fixed amount, renegotiated every year, and a variable amount which depends on the sales generated by the store. Because of that, we also had to make a forecast for the sales produced by the malls. The sales for the mall were forecasted by assuming a 3% decrease of sales per area in 2023 due to exceptional performance in the previous year, followed by a yearly growth of 3%. GLA was assumed to increase with the planned expansions: 30 000 sqm in 2023, 54 363 sqm in 2024, 1 759 sqm in 2025 and 2 108 sqm in 2026. We did not model any sales of stakes in the malls or sales of the company's own GLA.

The malls' gross margin was assumed to be equal to the average of the previous years (65.4%) as it has historically been very stable. The SG&A expenses were estimated to be equal to 23% of malls' revenue from 2023 and 2024. This value is equal to 2017, the year that had the highest SG&A expenses as a share of revenue, as we believe that the sub-segment will incur in a lot of these expenses as it expands. Afterward, we assumed that SG&A expenses will be equal to 13% of revenues as the company consolidates its position.

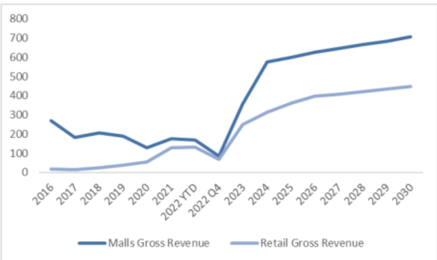

Figure 23: Historical vs Projections of Retail and Mall revenue

For the retail sub-segment, a growth rate was estimated for the revenues generated. For the years 2024, 2025, and 2026, a growth rate of 25%, 15%, and 10% was assumed, respectively, due to the company's expansion of its stores, brand portfolio, and digital channels. Afterwards, the revenues were forecasted to grow at the same rate as the store sales: 3% annually.

We expect the retail gross margin and the revenue proportion of SG&A expenses to be equal to the average of 2016-2022 until 2026. Afterward, we forecasted these values to be equal to 40% and 54% as the company consolidates its position.

Overall, we assumed that revenue deductions will be equal to 16%, the average of the historical deductions. We also believe that there will the other operating income/expenses will not be significant.

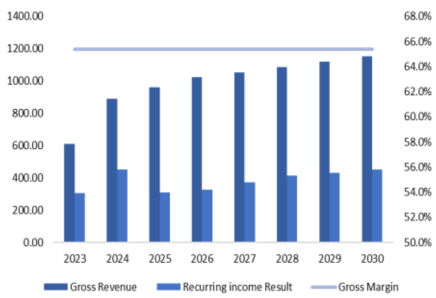

Figure 24: Evolution of Recurring Income Revenue vs Recurring Income Result vs Gross Margin

Finally, the income from the increases of the fair value of investment properties was equal to difference of the balance sheet value of the previous year. We dive deeper into how we estimate this changes in the following section.

Invested Capital

Investment properties are the most important element of this segment's invested capital. Investment Properties are represented, substantially, by the company's investments in malls. The properties' value is estimated by the company using a

DCF model. It is also important to note that operational investment properties are often worth 34% more than pre-operational properties. As the new shopping malls open, and the current ones are expanded, we increase the value of their squared meters by 34%. Additionally, all the company's investment property increases their value annually by 6%, which is the average capitalization rate assumed by JHSF in its models.

The recurring income segment also has intangible assets. We assumed that all JHSF's software was part of this segment because of the development of online stores and apps. It is expected that this asset will increase in the next two years as the company finishes the development of these channels. Points of sales were also included in this segment as they refer to the retail stores. We also added a third of "other intangibles" to the total. Finally, we considered the goodwill from "JHSF Gestão de Investimentos" as being part of this segment because this new vertical will include a "Membership" which will grant benefits and discounts to its members.

The segment's fixed assets include "leasehold improvements" and "other fixed assets". Leasehold improvements will grow until 2026 with the expansion of the retail sub-segment, afterward, it will remain stable. Other fixed assets will grow at an average rate.

Hospitality

Income Statement

Hotel revenues are mostly driven by the occupancy rate, the average daily rate (ADR), and the number of available rooms. We will use these variables for our revenue forecast.

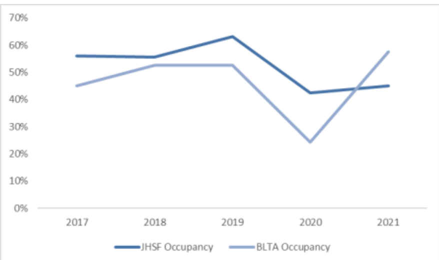

Figure 25: JHSF occupancy rate vs DLTA occupancy rate

Hotel developers, appraisers and consultants often assume that occupancy rates of new hotels take around 3 years to stabilize. This assumption has been confirmed by O'Neill, who found that luxury hotels take 3.31 years to stabilize (O'Neill, 2011). We do not have enough information regarding each Hotel's occupancy. However, we will expand on this assumption and assume that the segment's occupancy rate remains stable at a certain level. This assumption seems to be reasonable as the pre-pandemic occupancy rate had a standard deviation of only 5.47% and an average of 62.73%. The pre-pandemic occupancy of BLTA had an average of 46.37% and a standard deviation of only 3.6%. Therefore, we will assume that the occupancy rate will be equal to 62.73% throughout the forecasted period.

The number of available rooms changes with the expansion of existing hotels and the opening of new ones. In the next years, JHSF is expecting to open the

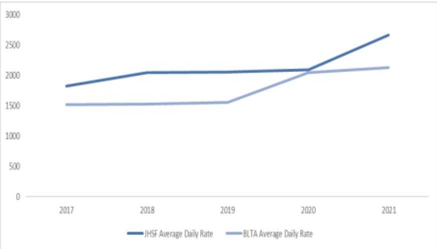

Figure 26: JHSF average daily rate vs DLTA average daily rate

Hotel Fasano Cidade Jardim (50 units) and Fasano Itaim (107 units) in 2023. There are also news regarding an acquisition of a Miami hotel by JHSF. The company has expressed its intentions of opening operations in this city, however, in their reports, they have not yet announced the expected opening date. We will assume that this hotel (85 units) will open in 2025. Afterwards, we will assume that JHSF will not make any new expansions. We find this to be more reasonable than assuming a constant expansion since JHSF has an opportunistic approach.

The ADR seems to be related to the industry's average daily rate. In fact, JHSF's ADR is constantly 35% higher (except in 2021, where it was only 30% higher) than the rate published in BLTA's report of the previous year. The reason for the company's rate to be related to the industry's previous year rate and not with the same year may be that the industry information is only published one year after. Therefore, for Q4 2022 we will assume that the company's ADR is 35% higher than BLTA's ADR in 2021. Afterwards, we will increase the ADR by the expected inflation.

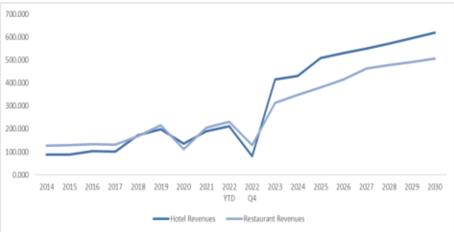

Figure 27: Hotel vs Restaurant Revenues (historical & projected)

Since the hotel industry is very seasonal, revenues from hotels in Q4 2022 were forecasted assuming that the RevPar was 27% higher in Q4 than in Q3. This value was estimated by calculating the median of previous increases from 2018 to 2021.

For restaurants, revenues are driven by the average price per meal and the number of meals sold, which, in turn, depend on the number of restaurants that the company has. In our forecast, the number of meals per restaurant is equal to the average from 2014 to 2021. We also assumed that the average price will grow with inflation in the future.

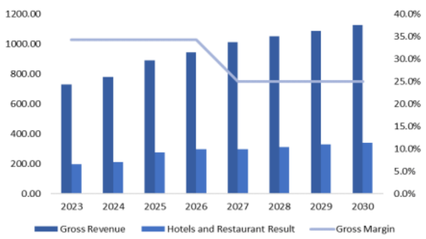

Figure 28: Evolution of Hospitality Revenue vs Hospitality Result vs Gross Margin

The restaurant "sub-segment" Is also very seasonal, especially because a lot of the company's restaurants are located inside the hotels. As such, revenues in Q4 2022 are 58% higher than revenues in Q3. This value is equal to the median difference of revenues between Q3 and Q4 from 2018 to 2021.

Margins seem to have stabilized since 2019 (except for the gross margin in 2020). As such, both the gross margin and the operating margin for our forecast are equal to the average of the margins of these years.

Invested Capital

The company has taken an asset-light approach to the hotel and restaurant industry, preferring to operate the hotels and restaurants without owning them. As such, it is the segment with the lowest amount of invested capital.

There are two kinds of fixed assets in this segment: "right of use" and "Fasano hotels". We assumed that both captions will grow at the average rate of the past

3 years as it seems that the company has increased its expansion efforts for this segment in 2019.

The segment's intangible assets include the goodwill from Hotel Marco International and Fasano Restaurants, which will be constant for the forecasted years. It also includes trademarks and patents, which will also remain constant, and a third of other intangibles.

Airport

Income Statement

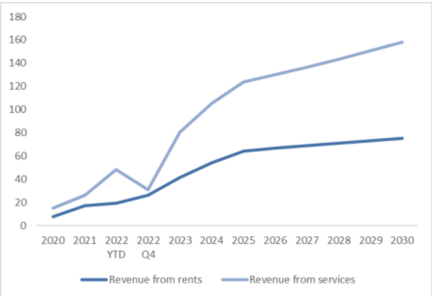

Figure 29: Revenue from rents vs Revenue from services (historical & projections)

To forecast this segment, we've assumed that revenues come from two sources: rent from hangered airplanes and revenues from the airport's movement (fuel fees, landing and take-off fees, aircraft cleaning, etc.).

To estimate how much rent JHSF would earn, we assumed that each hangar had the capacity to hangar 14.4 planes. Whenever there was an expansion, we also assumed that the new hangars would only have 50% of occupancy in the first quarter they were inaugurated. Besides that, we always assumed 100% of occupancy and believe this to be reasonable since the company has reached full capacity in all its three expansions most likely due to the fact there is a lot of demand for adequate infrastructure for executive airplanes.

The rent was assumed to be 2000 per month per aircraft hangered until the end of 2022. Afterwards, rent will grow yearly with inflation. This can be seen as a conservative approach since JHSF has a lot of pricing power, being the only international executive airport in Brazil.

The new hangars will be built until 2025, where the airport will reach its maximum capacity of 17 hangars and 245 airplanes parking slots.

Figure 30: Evolution of Airport Revenue vs Airport Result vs Gross Margin

The remaining revenues, sale of fuel and landing fees, will be driven by the amount of traffic the airport has, which, in turn, will depend on the capacity of the airport. Since we lacked data regarding the traffic of the airport, we assumed that revenues generated from these fees and services would be equal to 66% of total revenues until 2025. In other words, we are assuming that these revenues are 1.94x higher than the rents. By doing this, we are making sure that our forecast for the airport's traffic will depend on its facilities. We are also assuming that JHSF will not find ways to upsell more services to its clients during these years, thus making the forecast somewhat conservative. After the airport expansions, we expect these revenues to grow at a 5% rate, as the company invests more heavily in growing its service offering (air taxis, for example).

During the expansion, gross margins will be equal to 34.4% and SG&A expenses will be equal to 25% of revenues. In 2026, they decrease to 25% and 14% respectively as the company consolidates its position. These are margins that the segment has had historically.

Invested Capital

Most of this segment's invested capital is its fixed assets which include the airport and aircraft owned by the company. In accordance with our scenario, we assume that the airport will increase its value until 2025 due to the expansions, afterward its value will increase because of capitalized interest.

We think that the company will not buy any new aircraft in the next two years because of the lack of supply. When the expansion is completed, we believe that JHSF will increase the size of its fleet (and renew the existing one) to provide air taxi services to its clients.

Other Invested Capital Assumptions

Figure 31: Invested Capital projections per segment

For many invested capital captions, there were not any information regarding their distrbution between each segment. The only segmentation data we had was from the year 2021 onward. Therefore, we assumed that the distribution of inventory, receivables, payables, other assets, and other liabilities remained the same as they are in the last segmentation available (Q3 of 2022).

Valuation

Since using multiple approaches to valuation can provide a more comprehensive view of a company's value and help ensure that the company's value is accurately and fairly assessed, we decided to run four different valuations: Discounted Cash Flows, Scenario DCF, Multiple Valuation, and Sum of Parts. The discount factor is a key component for a company's valuation. The discount rate was estimated differently depending on each valuation method.

Discount Rate

Estimating the cost of capital in a country like Brazil is somewhat challenging. For this estimation, we assumed the perspective of a global investor with a diversified portfolio and that this investor can diversify most country specific risks. Given these assumptions, the cost of capital should be close to a global cost of capital adjusted for local inflation. However, it is relevant to note that in our DCF valuation we only used the base-case scenario. This means that we did not incorporate into the forecast the possibility of adverse events changing the level of expected cashflows. As such, we must incorporate a country risk premium for the cost of capital used in this valuation.

DCF Valuation and Scenario DCF

Cost of Equity

GDBR10 Index	
Risk Free Rate	5.02%
Inflation Difference (US a	1.00%
Market Risk Premium	6.39%
Country Risk-Premium	0.80%

Figure 32: Valuation Inputs
Source: Bloomberg

Risk-free rate: Since Brazilian government debt is not risk free, we decided to use the yield on the 10-year U.S government bond (4.02%) and added the projected difference between the U.S and Brazilian inflation (1%).

Beta: To be consistent with our previous assumptions, we decided to run the regression on MSCI index. We included more than 2 thousand data points, approximately 6 years of daily returns. The regression estimated a Beta of 1.042, which we unlevered and relevered to the target D/E (31%).

Market risk premium: We assumed a market risk premium equal to a global estimate of 6.39% made by Bloomberg.

Country risk premium: For the regular DCF valuation, we also incorporated a CRP. We avoided using the premiums that are often used by analyst which are usually too high and not supported by valuations. The result is that these analysts must compensate with extremely high ROICs and growth rates. For our forecast, we used the country risk premium for Brazil of 0.8% which was estimated by Tim Koller, Marc Goedhart, and David Wessels.

The cost of equity for the DCF valuation is equal to 11.11% and for the Scenario DCF valuation is equal to 10.43%. We did not consider the CRP in scenario DCF.

Cost of Debt

Average Cost of Debt	
Interest Rate	Principal
2.15%	$261,465.00
1.90%	$334,840.00
6.00%	$374,815.00
1.55%	$213,975.00
1.55%	$100,348.00
2.70%	$337,111.00
1.40%	$102,196.00
8.64%	$93,958.00
5.49%	$69,443.00
1.79%	$780.00
3.27%	$1,888,931.00

Figure 33: JHSF Debt contracts (YTM of each principal)
Source: JHSF

To estimate the cost of debt for JHSF, we used the reported debt financing yield and weighted it by averaging their Yield to Maturity (YTM), resulting in a cost of debt of 3.27%. This method considers the interest rates and maturity dates of JHSF's debt financing, allowing us to calculate an accurate cost of borrowing for the company.

WACC

Using the aforementioned inputs, we estimated a WACC equal to 9.12% in the DCF valuation and 8.61% in the Scenario DCF valuation, both using the 31% target D/E.

Sum of Parts

To determine the discount rate for each market segment, we used the average of similar companies that only target that portion of the JHSF market. We focused on the business model and market capitalization of these companies, rather than their location, due to the unique characteristics of each market category.

	Developmer	Recurring In	Hospitality	Airport
Debt	$ 1,030.58	$ 913.71	$ 111.82	$ 219.03
Equity	$ 1,696.59	$ 2,246.50	$ 91.48	$ 618.10
D/E	0.61	0.41	1.22	0.35

Figure 34: Debt to Equity per segment reported in 2022 Q3

To calculate the WACC for each segment, we unlevered the betas of the companies and relevered them at the target D/E ratio for each segment. Using the relevered betas, the risk-free rate, and the market risk premium, we calculated the cost of equity for each firm.

The cost of debt was kept constant across all segments, as we did not have access to the specific cost of debt for each segment. Since the company issues debt collectively and finances each segment internally, the cost of debt does not accurately reflect the risk of each segment. However, this approach is particularly relevant for the riskier segments that may have difficulty issuing debt individually and can benefit from a collective debt issuance.

- Development

We used comparable firms for real estate development, including the North American developers Greenbrick, LGI Homes, Forestar as well as the Brazilian developer Cyrela. We arrived at an average cost of equity of 11.83% using these companies. Applying the overall company's cost of debt and the segment D/E (0.61) we arrive at an average WACC of 8.18%.

- Hotel & Restaurants

For the Hotels and Restaurants segment we decided to use as comparable company four US companies: Marriot, Vail Resorts, Park Hotels and Ashford Hotels. After computing the cost of equity for each company, we decided to eliminate Marriot because the values were not aligned to the other comparable companies. Consequently, we achieved an average cost of equity of 7.85% leading to an implied WACC for JHSF of 5.02% due to its high leverage ratio (D/E of 1.22).

- Recurring Income

As comparable companies in this segment we decided to use the companies: BR Malls and Aliansce both Brazilian companies, Parauco, a company from Chile, and Planigrupo, a Mexican company. The calculus of each company's cost of equity, delivered an average cost of equity of 10.08% which implicitly result in a 7.79% of WACC.

- Airport

As comparable companies we selected: Grupo Aeroportuario del Centro Norte and Corporacion America Airports, both Mexican airport managing companies and Fraport, a Germany company that manages the airports of Frankfurt County and Shanghai Airport, that manages the airport of Shanghai. The cost of equity derived from this sample, was on average 10.66%, leading to an implied WACC for JHSF of 8.44%.

Discounted Cash Flows Valuation

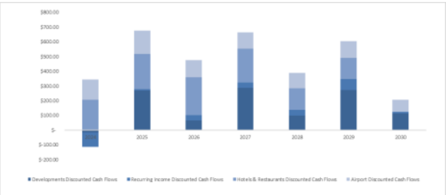

Figure 35: Projections of Discounted Cash Flows per segment

For Discounted Cash Flow analysis, we used the forecasts of each segment under the assumptions and value drivers described in the Forecast section. The invested capital was firstly computed aggregated before we split among the four segments. The sum of all the segments results minus the capital investments, led to the free cash flow that we discounted at the company's weighted average cost of capital.

We set the perpetuity growth rate at the average growth rate of core result, 2.5%. As the company is cyclically capitalized, the returns of a given project are always delayed when compared with the respective invested capital. This is the reason why the growth rates of each year are quite volatile.

By discounting the cash-flows the total enterprise value obtained was R$ 7 090.68 million. After deducting the 2023 book value of debt it results in an equity value of R$ 4 116.32 million which is translated into R$ 6.00 price per share. The final recommendation buy through the DCF model was based on the expected capital gain of 22%.

▪ Sensitivity Analysis

Share Price		WACC				
		6.00%	7.00%	9.12%	11.00%	13.00%
Growth Rate	1.0%	$ 9.51	$ 7.59	$ 5.03	$ 3.62	$ 2.59
	2.0%	$ 11.60	$ 8.90	$ 5.63	$ 3.98	$ 2.80
	2.5%	$ 13.08	$ 9.77	$ 6.00	$ 4.18	$ 2.92
	3.0%	$ 15.07	$ 10.87	$ 6.43	$ 4.41	$ 3.06
	4.0%	$ 22.01	$ 14.15	$ 7.55	$ 4.98	$ 3.37

Figure 36: Sensitivity Analysis (WACC & Growth rate of perpetuity as variables)

After performing the DCF analysis, we ran a sensitivity analysis, to evaluate the change in the equity value, and subsequently the share price. We chose to evaluate the change in WACC versus the change in the growth rate. Looking into the values, with 7% WACC, with a range from 1% to 4%, the share price can range from R$ 7.59 to R$ 14.15. At the predefined 2.5% long term growth rate, a WACC ranging from 7% to 11%, lead to a share price interval ranging from R$ 4.18 to R$ 9.77. Under the exact same assumptions just by decreasing the WACC to 7%, the share price increases 62%. Based on that we conclude that with slight changes in the inputs affecting the WACC or in the growth rates, the share prices substantially change.

Scenario DCF Valuation

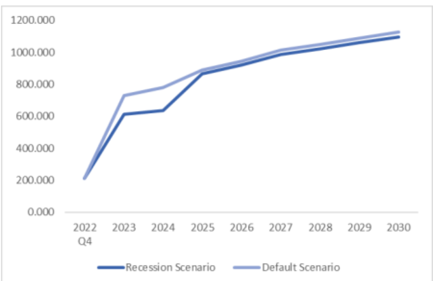

Figure 37: Default and Recession Scenario comparison for Hospitality Segment

Scenario analysis may be a more effective method for valuing a company than using a country risk premium in the discount rate. This is because most country-specific risks, can be diversified away and do not need to be reflected in the cost of capital. Additionally, there is no standard way to calculate a country risk

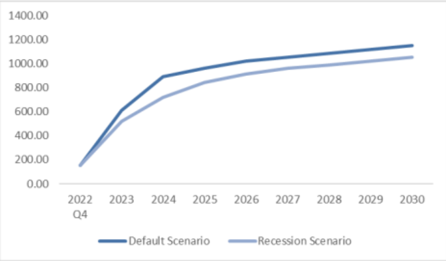

Figure 38: Default and Recession Scenario comparison for Recurring Income Segment

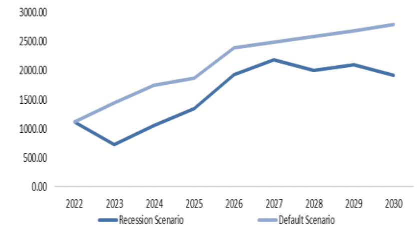

Figure 39: Default and Recession Scenario comparison for Development Segment

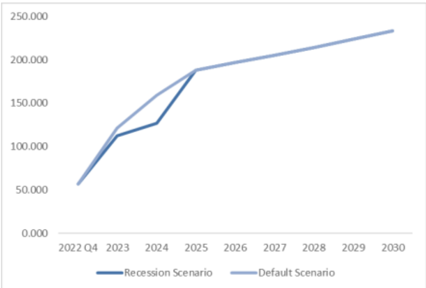

Figure 40: Default and Recession Scenario comparison for Airport Segment

premium and applying the same premium to all companies in an emerging market can result in an inaccurate assessment of the risks facing individual businesses. Instead, scenario analysis allows for a more detailed and precise evaluation of the potential effects of country-specific risks on a company's value. In this case, we decided to value the company in two different scenarios: the base-case scenario, and a scenario where Brazil is in a recession in 2023.

Under the recession scenario, we reviewed the company sales forecasts in a conservative approach, considering a recession period in 2023. After 2023, we expect a recovery V shaped, reaching the default scenario values in 2030. We assumed the same capital requirements for each segment, which means that company will keep its investments, without the anticipation of such recession.

After discounting both cashflows at the WACC previously mentioned for this valuation, we reach a share price of R$ 2.83 in the recession scenario and of R$ 6.68 in the base case. We must join both scenarios according to their probability of occurring. Currently, Bloomberg projects 20% probability of recession for the Brazilian economy. This means that, taking into consideration these two scenarios, the share price of the company should be equal to R$ 5.91.

Sum of Parts Valuation

In the case of JHSF, a Sum of Parts valuation may be particularly important because it operates in multiple markets with different risk profiles and financial characteristics. By valuing each segment individually, it may be possible to better reflect the unique characteristics and risks of each segment in the overall valuation of the company. This can provide a more accurate and comprehensive picture of the company's value. Since we independently discount each section's cash flow, valuing each part separately enables risk adjustment. Along with the capital requirements of each section, the various risk profiles are taken into consideration. In addition, we set a separate target leverage for each segment by assuming a constant debt-to-equity ratio equal to the current one reported by JHSF.

For the free cash flow calculation, we deducted the result from the income statement, used in our forecasts and subtracting the invested capital for each segment. Some assumptions for invested capital were carried for different weights of invested capital. These assumptions left us with the free cash flow, which we discounted and summed the growing perpetuity for each segment, computing the enterprise value. For total company equity value, we sum each segment enterprise value, reaching R$ 6 780.20 million. After, we deducted total debt in 2023, R$ 3 049.26 million to the total enterprise value of the whole company, leaving us an equity value of R$ 3 730.94 million. Dividing by the number of shares, we arrive at a share price of R$ 5.44.

- Development

The income statement forecast used the same assumptions as in the DCF model. However, the invested capital also followed the same assumptions described in the above section “Forecast Assumptions”.

After the summation of the cash flows with the perpetuity at 2% growth, we reached an Enterprise Value of R$ 3 004.57 million. The growth rate is explained as the long-term growth of this segment is converging to this value. As this is cyclical segment and is expected to have volatile growth, we applied an average growth to accurately reflect a long-term growth. The highly volatility of the cash flow is closely related with company’s investment strategy for this segment. Since the opportunistic approach may delay new investments this may originate longer periods without new investment opportunities, which decreases the growth, and increase the volatility of growth rate.

- Hotel & Restaurants

The free cash flow was computed by the same method described for developments with different assumptions for invested capital. The assumptions made were precisely the ones described for whole valuation model.

Using a growth rate of 2% we achieved an enterprise value of this segment of R$ 1 347.55 million. We applied the same growth rate of the whole company because it is the average growth rate of this segment result in the last four years. Furthermore, the growth of this segment is closely correlated with the capital invested in the segment, that subsequently increases its growth at the average inflation rate. To keep the conservative approach, we subtracted 1% to the average inflation rate. This assumes that if the company keeps the same investment strategy (which is expected), the growth rate is expected to be relatively constant.

- Recurring Income

The result of this segment was computed with the same logic of previous segments, using again, the previously stated assumptions for the segment result and invested capital.

Using a growth rate of 2% we achieved an enterprise value for this segment of R$ 231.40 million. The segment accounts for the lowest contribution for the company’s enterprise value, while actively having the highest leverage ratio. This may be a result of not considering possible sales of the segment’s investment properties which provide the company with significant amounts of FCF. By reducing its invested capital in malls, while still earning revenues from operating the malls, the company could also achieve higher ROIC than the one forecasted.

- Airport

The free cash flow was derived exactly in the same way as the previous segments, using again, the same projections of income statement captions as for DCF and invested capital.

Using a growth rate of 2.5% we reached an enterprise value for this segment of R$ 2 196.67 million. The growth rate is justified by the expected long-term stabilization of revenues in this segment. Over the next six years, the airport should grow at 2.5%, as it is not fully explored and has potential to become more relevant in the private jet industry. Furthermore, the possibility of expansion with low capital requirements, increases the growth capacity of this airport. Overall is expected to be the highest growth rate among the company segments.

Multiple Valuation

A multiple analysis of the real estate industry was performed to compare it with the DCF valuation and Sum of Parts. Moreover, we also improve our understanding of how the company is being valued compared to its peers.

One limitation of using the multiple valuation method for JHSF is that the company does not have any peers that are similar in terms of projects, segments in operation, capital structure, and target customers. This makes it difficult to compare JHSF to other companies and accurately determine its value using this method.

We selected companies from Brazil, the United States and Canada, Europe, and Asia. This allows us to explore if there are significant valuation differences in different regions. If valuations are higher in companies with a stronger presence in the United States, for example, it may indicate that the company will have a higher valuation if it expands its operations in this region.

We used three different ratios: P/B, EV/EBITDA, and P/E. The sample of south and central American companies includes 9 companies from Brazil (6) and Mexico (3). The priority was given to the business model and market capitalization, as in this area the business model may be focused on one specific segment which would not reflect correctly JHSF. The same applies for market capitalization, as this is a business with high capital requirements, the JHSF has relatively low size, so we should compare with companies with similar dimension.

The median ratios were equal to 0.47x, 17.3x, and 12.64x respectively, which implies a valuation that ranges from $3.36 to $25.80.

The U.S and Canada peers are a range of 10 companies, 6 from the U.S and 4 from Canada. The median ratios were 1.72x, 17.35x and 23.57x. The implied valuation from these ratios ranges from $20.12 to $54.59.

The European peers are a sample of 10 companies from Switzerland (3), Sweden (4), Great Britain (2) and Germany (1). The median ratios were 0.84x, 25.15x, and 5.32x which results in an implied valuation that ranges from $5.50 to $34.80.

Lastly the Asian peers sample includes ten companies, 4 Chinese, one Thai, one Philippine, one Indian, and three from Hong-Kong. The median multiples for Asian companies were, 0.78x, 16.88x and 8.14x, resulting in a valuation range of $11.52 to $36.25.

If we include all these peers together, the median ratios are 0.83x, 18.16x, and 7.48x. Therefore, the implied valuations range from $5.94 to $27.20.

All in all, we can conclude that valuations in the European continent are higher than in Brazil while in the U.S and Canada are significantly higher. Asian valuations are in between of both US and Canada and Europe.

When compared to our DCF valuation and Sum of Parts valuation, multiple valuation is currently delivering higher target prices than the ones predicted by the other models. Nevertheless, if we focus on local companies, the median of P/B, a good multiple for real estate companies is R$ 5.94, which is close to the values that we predicted in the other models. The leverage ratio of JHSF is also below average (in the sample used, only 5/30 companies had similar or lower leverage ratio), so the EV/EBITDA multiples may include a "premium" that is inherent to the average real estate company. However, once we subtract the debt value, this premium is not considered, resulting in a value that is higher than the values predicted by the other models. These conclusions should apply for the whole relative valuation because the typical real estate company (and most of the comparable companies used in our relative valuation) chooses higher leverage ratios. The most accurate relative valuation, for this sector is the P/B ratio, as the tangibility of the properties, and the ease of accurately estimate its market value, provides high level of security in the valuation under this multiple.

Value Creation

After performing the forecasts based on the value drivers for each segment, we analysed the future value creation of JHSF. Overall, the perspectives are

positive, with the core ROIC exceeding the WACC estimation in all years of our forecast. Given the invested capital and the results we are forecasting, ROIC value is expected to stabilize at 10%, above the cost of capital, 9.12%.

The growth rate is asymmetric, due to different growths of each segment, but especially due to the cyclicality of the development segment, which is dependent on the conclusion of each project to capitalize the investments performed in years previous. Each input impacts differently each segment of JHSF, consequently, the total growth rate fluctuates between negative and positive values, but it stabilizes in the last three years around 2%, the value we applied to the growth rate of the perpetuity.

Regarding the return rate of new invested capital, it fluctuates as well, ranging from 60% to -5%, and this can be explained by the development segment, as it requires initial investment before the property is sold, and the properties may stay in JHSF inventory for a long time, decreasing its return. Nevertheless, the average RONIC is 10%, which is aligned with the ROIC value, and provides good perspectives regarding the return of the new invested capital each year.

Per Segment

After conducting a company value creation analysis, is important to infer the contribution of each segment for such value added.

- Development

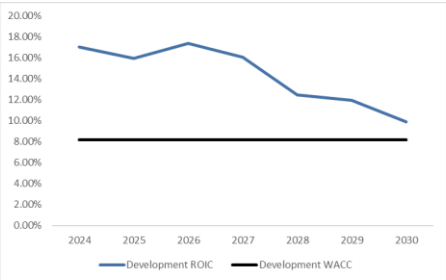

Figure 42: Development ROIC vs ROE projections

In the development sector, our ROIC value in 2022 has been 14.7%. This is explained by the periodicity of the development segment, which states that it typically takes two to three years to create a new real estate property and that investments must be made upfront, requiring sizable sums of money in advance. Such event drives ROIC variations since it causes a decrease when a new project is started and an increase when a project is capitalized. Due to the significant number of residential units sold during the pandemic, ROIC has recovered. The development section of JHSF now generates value with a WACC of 8.18%. Our projections indicate that this market will slow down and see a decline in ROIC converging to the WACC during the coming years. Nevertheless, ROIC will, on average, stabilize at 10%, with an average value during the next 7 years of 14.1%, above the WACC, allowing to a value creation in the segment. This is explained by the significant investment made by JHSF, which has resulted in an apartment stock whose development and sale could take longer than nine years. As previously said, this segment's value creation is periodic, therefore it can take some time before these capital investments start to pay off. It should be noted that the development section is the second riskiest segment of JHSF, according to the peers we chose.

- Recurring Income

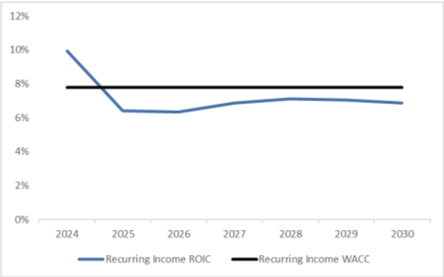

Figure 43: Recurring Income ROIC vs ROE projections

The recurring income segment of JHSF is expected to be the second safest segment of JHSF, based on our comparable companies. Overall, this segment is the second highest revenue generator of JHSF, with a historical ROIC averaging 5.9% over the last six years, below the segment WACC (7.08%). Regarding the forecasted ROIC, for the next seven years, it is expected to keep stable at an average value of 7%. This value assumes lower significance, as JHSF receives, as collateral source of value, the appreciation of the fair value of the properties, which is not included in this metric as it is not a core source of value for the segment.

- Hospitality

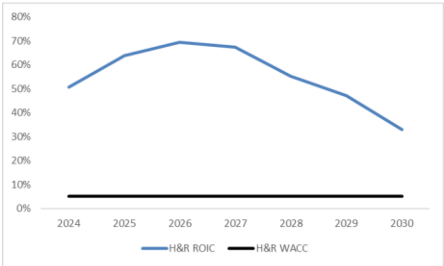

Figure 44: Hospitality ROIC vs ROE projections

This segment presents the lowest WACC (5.26%), meaning that it accounts for safest segment of the company. Over the last four years before the pandemic, that dramatically affected the whole hospitality segment, the ROIC was on average 5%, slightly above the WACC, with a residual value creation.

This segment is clearly generating value, as the average ROIC, 33%, surpassing the WACC. This segment is highly leveraged, but the nominal values are not significantly high when compared with the enterprise value. Such remarkable ROIC is mainly explained by the strategy of operation of new properties, with a asset light model, allowing for low capital requirements, maximizing the ROIC. Such strategy is expected to be steady, with the core result suffering from the pandemic rebound, especially in the next three years.

- Airport

Figure 45: Airport ROIC vs ROE projections

The airport segment is very recent, so there is no reliable data to consolidate our discussion. With only one observation and a high degree of uncertainty, we can utilize either the predicted ROIC or the present one. During its first year of operations, it generated a ROIC of 2.5%, although the value is clearly affected by the capital requirements inherent to the launch of an airport.

The segment accounts for the riskiest segment of JHSF. Based on our forecasts the airport business strategy can optimize profits without further significant capital expenditures because it is not at its full potential. Such a strategy is anticipated to provide earnings and maintain a consistently average ROIC of 20%, above the segment's WACC (8.44%).

Higher Leverage Scenario

Leverage Analysis

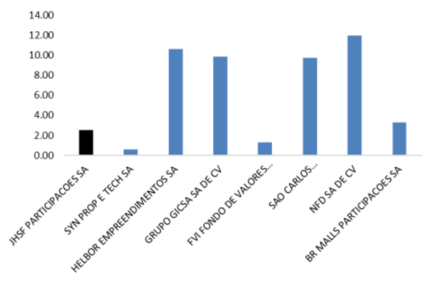

Figure 46: Net Debt to EBITDA of similar companies

JHSF's capital structure has fluctuated between 0.44 and 0.5 over the last six years and currently set at 0.59. Another interesting metric to investigate is the net debt to EBITDA, where JHSF, with 2.55x is clearly below the median value of the peers in south and central America of 9.71x. The median values are 11.97x and 11.09x, respectively, when compared to their European and North American counterparts. This is in line with the theoretical forecast because south American companies are riskier, making debt holders less willing to lend money. Overall, real estate businesses, especially recurring income enterprises, often look for less expensive financing, and sustain high leverage ratios for long periods.

Since the cost of debt is significantly lower than the cost of equity, increasing the leverage would decrease the cost of capital, increasing the enterprise value, even when considering possible marginal increases in cost of debt. Leverage expansion may further also boost the benefits of tax shield by reducing taxable income and raising the enterprise value.

With relatively constant income from properties being higher than the debt amortization, the company could finance a significant percentage of the acquisitions of hotels, restaurants, and shopping malls with debt so as to optimize return on cash. If they intend to sell the properties soon, they might either choose non-amortizable debt, which would maximize the cash-on-cash return.

The existing debt structure primarily applies to divisions with recurring income as they fund acquisitions with debt. Particularly, for the hotels and restaurants, debt (R$ 111M) made up most of the funding. They use debt financing in less risky segments, although without fully explore the benefits of debt, since they finance all the other segments with more than 60% of owners' equity.

Higher Leverage Scenario

The company publicly assumes a conservative capital structure. This may be a strategy to attract foreign investors who may be more cautious in investing in an Emerging Economy like Brazil as they may think that it can be too risky to have a very leveraged company in a volatile economy. Having that said, it is still interesting to investigate the impact of higher leverage in the value of the company.

To develop a scenario with higher leverage, the cash flows are only affected by the increment of tax shield, as the free cash flows from the operations are expected to be similar.

A new D/E ratio should increase the equity beta, leading to an increase in the cost of capital. The same is theoretically expected for debt beta. However, without debt market beta, and the debt securities of JHSF we cannot estimate accurately the increase of the cost of debt, so we kept it constant. It is an ambitious assumption for extreme increases of D/E ratios but is not that pronounced for residual changes. For that reason, an increase in the leverage ratio leads to a decrease in WACC, as the increase in the cost of equity is not sufficient to cover the decrease in the weight of equity. In the graph 47, we can analyse the evolution of the share price and the enterprise value with an increase in D/E. As theoretically expected, we verify a sharp increase in the enterprise value, as the cost of capital decreases and is discounting higher cash flows (with the sum of tax shield). Regarding the share price, the residual increase is constrained by the subtraction of debt value, that substantially increase, leading to marginal increase in the share price.

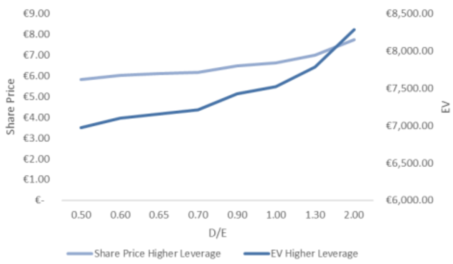

Figure 47: Share Price and EV evolution with leverage increase

Enterprise Value		D/E				
		0.50	0.65	0.70	1.00	2.00
Growth Rate	1.0%	€6,528.45	€6,680.39	€6,727.63	€6,982.63	€7,617.65
	2.0%	€6,975.96	€7,158.40	€7,215.25	€7,522.75	€8,289.74
	3.0%	€7,576.66	€7,805.25	€7,876.71	€8,264.83	€9,238.67

Figure 48: Sensitivity Analysis (D/E & Growth rate of perpetuity as variables)

Return on Equity Analysis

Under the scenario with higher leverage, the expected return for the shareholders is expected to increase. This happens because the company can keep generating the same returns (or increase) while decreasing the amount of capital invested by its shareholders. As an example, with a small increase in the D/E from 0.65 to 0.9, we expect an increase of ROE of an average 43% over the next seven years. The default conversion of ROE is 14% while, with a D/E ratio of 0.9, the ROE converges to 20%.

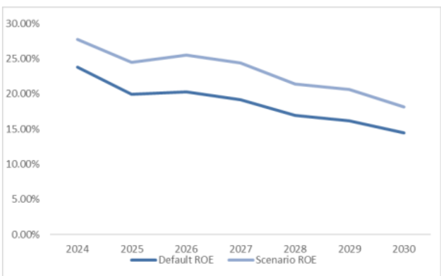

Figure 49: Default Scenario vs Higher leverage Scenario ROE Evolution

Combined High Leverage & Recession Scenario

Combining the two alternative scenarios we have developed, we allowed the model to change two variables at the same time, the probability of recession and the leverage ratio. We analysed the share price change under different leverage ratios, and for the investor perspective, the higher the leverage ratio, the lower is the risk for the shareholder, as the debtholder carries higher percentage of risk. With an increase in leverage, the price gap between shares with a low probability of recession and those with a guaranteed recession becomes smaller. As the debt-to-equity ratio rises, the risk shifts from the shareholder to the debtholder, and the gap narrows.

Share Price		D/E		
		0.50	0.65	0.90
Probability of Recession	10.0%	$ 5.69	$ 5.73	$ 5.78
	20.0%	$ 5.38	$ 5.45	$ 5.56
	50.0%	$ 4.46	$ 4.63	$ 4.89
	80.0%	$ 3.53	$ 3.81	$ 4.23
	100.0%	$ 2.92	$ 3.27	$ 3.79
Variation from 10%-100%		$ 2.77	$ 2.46	$ 1.99

Figure 50: Sensitivity Analysis (D/E & Recession probability as variables)

We should mention, that although the scenario reflects a theoretical prediction, it is not totally realistic, because we do not consider an increase in the cost of debt.

This could clearly influence the accuracy of the values but should delivery approximately the same conclusions.

Risks

Geographical Risk

Most of the company's operations are in Brazil, with a significant number of them being in São Paulo. Being closely tied to a specific location can help the company build strong relationships with local customers and may also provide the company with strategical advances. However, having most of a company's operations concentrated in one location, such as São Paulo, can be risky for several reasons. For instance, if there are natural disasters, political instability, or other unforeseen events in that location, it can greatly impact the company's ability to operate and potentially lead to significant losses.

Narrow Customer Base

The company targets mainly high-income Brazilian individuals in all its segments. This generates a lot of expertise and market knowledge, as well as synergies and upselling opportunities. However, since a lot of their cashflows comes from this small target market, they are very exposed to idiosyncratic risks affecting this segment of the Brazilian population. Additionally, since they depend on this niche's preferences, they must keep track of their trends and needs.

Execution Risks

JHSF has a large pipeline of projects, which includes a lot of green field projects. In these projects, developers face a lot of demand and price risks. Additionally, they depend a lot on government permits and other administrative obstacles that may cause delays in construction. There can also happen breaches in contracts with suppliers, for example, which will result in significant losses.

Since JHSF has a lot of experience in developing these kinds of projects, these risks are somewhat mitigated. However, since a lot of these projects are very big, it is expected that they will suffer a lot of delays.

Governance Risks

The fact that the Auriemo family holds a significant portion of the total shares of JHSF, specifically 55.37%, presents a governance risk because it gives them a high level of control over the company. This can potentially lead to conflicts of interest or unequal treatment of shareholders, as the family's interests may not always align with the interests of other shareholders. It can also make it difficult for outside investors or stakeholders to influence the company's decision-making process or hold the management accountable for their actions. Additionally, having a high concentration of ownership in one family can make the company more vulnerable to external threats, such as legal challenges or hostile takeovers. To address the governance risks associated with the concentration of ownership in the Auriemo family, JHSF has been implementing improvements to its internal controls and corporate policies.

Conclusion

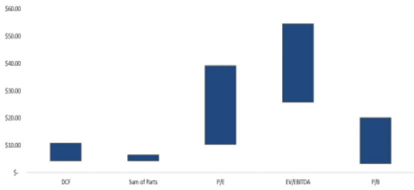

Figure 51: Football Field with all valuations
Recommendation: BUY

Overall, this company seems to be undervalued according to the four methods we have used in this report. The relative valuation seems to provide a significant capital gain implied by the target share price. Focusing on the Sum of Parts, Discounted Cash Flows and Scenario DCF valuation, which is closer to the current price, we still verify a target price of R$ 6.00, implying remarkable capital gain for 2023FY of 22%. Therefore, our recommendation is BUY.

Other analyst's price targets range from a low of R$ 7.60 to a high of R$ 10.50, with the average being R$ 9.60. Our valuation is lower than these other analysts, however we believe our analysis to be more accurate for multiple reasons.

Firstly, these analysts do not make the same discount rate assumptions we do (global investor) and apply extremely high country-risk premiums. This results in WACCs that range from 10% to 14%.

Because this is not the WACC that is being priced in the stock market, these analysts must compensate by forecasting ambitious ROICs and growth rates. From the reports that we had access, usually the ROICs were very overestimated as the forecasts expected very low increases in invested capital, while still making forecasts for the company's result like ours. In our view, this is very unrealistic as the company has very ambitious expansions plans that involve de deployment of a lot of new invested capital.

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Appendix

Financial Statements

	2018	2019	2020	2021	2022 YTD	2022 Q4	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	2030 F
Core Invested Capital														
Operating Cash	235.60	537.10	1,041.27	877.49	867.80	262.97	580.58	717.03	782.07	911.87	952.74	987.95	1,024.49	1,168.65
% of Total Revenues	44%	76%	83%	41%	48%	48%	20%	20%	20%	20%	20%	20%	20%	22%
Fixed Assets	740.01	948.23	1,077.87	1,264.76	1,413.48	1,466.04	1,516.47	1,540.14	1,553.71	1,618.60	1,667.89	1,713.92	1,756.94	1,797.20
Intangibles	98.80	99.25	108.64	114.19	123.16	126.15	129.49	132.17	134.31	134.31	134.31	134.31	134.31	134.31
Investment Property	2,588.10	3,168.12	3,305.48	3,637.53	3,761.36	3,775.95	4,157.15	4,686.50	4,976.75	5,286.22	5,603.39	5,939.59	6,295.97	6,673.72
% Appreciation						6%	6%	6%	6%	6%	6%	6%	6%	6%
Accounts receivable - NonCurrent	115.17	117.19	210.73	364.95	503.45	577.70	496.36	604.91	646.99	830.21	1,015.56	1,058.63	1,181.19	1,310.79
Collection Period	87	67	66	66	66	51	62	62	60	66	78	78	84	90
Inventory - NonCurrent	465.94	466.08	675.52	928.94	930.18	1,311.83	1,670.23	1,955.14	2,111.11	2,516.80	2,701.69	3,083.77	3,495.34	3,929.18
Holding Period	703	521	685	553	622	500	470	456	442	456	456	456	496	500
Other Non Current Assets	149.30	95.90	37.10	48.58	58.93	69.46	51.01	82.63	108.12	113.55	133.22	140.39	144.45	150.15
% of Total Revenues	28%	14%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Accounts receivable - Current	273.12	170.94	418.49	694.84	921.30	1,084.48	925.77	1,206.95	1,360.73	1,586.58	1,704.95	1,802.95	1,828.50	1,984.83
Collection Period	205	98	130	126	180	109	116	123	127	127	131	133	130	136
Inventory - Current	96.99	153.76	246.68	275.86	955.14	1,073.53	527.53	677.89	755.38	872.90	936.24	1,136.02	1,184.32	1,400.82
Holding Period	146	172	250	164	201	155	148	158	158	158	158	168	168	178
Other Current Assets	51.38	68.52	135.27	173.05	259.75	317.32	310.82	383.87	425.03	496.15	541.36	538.73	560.69	583.98
% of Total Revenues	10%	10%	11%	8%	15%	11%	11%	11%	11%	11%	11%	11%	11%	11%
Suppliers	37.64	65.87	99.58	101.57	133.89	301.70	642.02	792.91	864.83	1008.37	1053.56	957.16	992.56	1174.83
Payable Period	57	74	101	60	112	112	81	81	81	81	81	71	71	81
Obligations with partners in ventures	274.15	25.68	132.71	-	-	-	-	-	-	-	-	-	-	-
%Total Revenues	51%	4%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Advances from customers	89.45	32.15	-	176.86	166.07	15.07	173.13	210.63	224.37	287.04	298.52	310.46	322.88	335.80
% of Development Revenues	74%	12%	0%	11%	17%	12%	12%	12%	12%	12%	12%	12%	12%	12%
Obligations with partners in ventures	105.92	474.24	140.92	249.10	262.34	270.59	291.43	312.89	335.00	357.78	381.23	405.39	430.28	455.91
Other Liabilities	171.73	197.85	308.95	329.07	448.93	586.33	700.77	865.46	943.95	1100.63	1149.96	1192.46	1236.56	1282.32
% of Total Revenues	32%	28%	25%	15%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Total Core Invested Capital	**4,135.53**	**5,029.28**	**6,574.89**	**7,523.60**	**8,783.31**	**8,891.75**	**9,354.18**	**9,805.34**	**10,486.05**	**11,613.37**	**12,508.08**	**13,670.80**	**14,623.93**	**15,884.77**
Non Core Invested Capital														
Recoverable Taxes and Contributions	-	-	17.88	20.52	-	-	-	-	-	-	-	-	-	-
Investments	0.64	12.86	7.11	10.81	10.81	14.41	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33
Liabilities for sale	4.60	-	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Taxes	19.84	4.05	11.21	20.68	24.82	33.09	22.74	22.74	22.74	22.74	22.74	22.74	22.74	22.74
Social, labor and tax obligations	512.22	648.36	733.09	704.13	726.68	721.30	721.30	721.30	721.30	721.30	721.30	721.30	721.30	721.30
Total Non Core Invested Capital	**-536.02**	**-639.55**	**-719.31**	**-693.49**	**-740.69**	**-739.98**	**-732.71**	**-732.71**	**-732.71**	**-732.71**	**-732.71**	**-732.71**	**-732.71**	**-732.71**
Total Invested Capital	**3,599.51**	**4,389.73**	**5,855.58**	**6,830.11**	**8,042.62**	**8,151.78**	**8,621.47**	**9,072.63**	**9,753.34**	**10,880.66**	**11,775.37**	**12,938.09**	**13,891.22**	**15,152.06**
Net Debt														
Debt	1,332.26	1,332.94	2,028.90	2,283.65	2,974.36	3,259.49	3,049.26	2,629.07	2,469.42	2,591.21	2,854.75	3,103.97	3,359.01	3,598.58
Excess of Cash	-	-	-	-	-	-	-	-	-	-	211.90	95.65	213.43	-41.42
Net Debt	**1,332.26**	**1,332.94**	**2,028.90**	**2,283.65**	**2,974.36**	**3,259.49**	**3,049.26**	**2,629.07**	**2,469.42**	**2,591.21**	**2,642.86**	**3,008.32**	**3,145.57**	**3,640.00**
D/E	**0.59**	**0.44**	**0.53**	**0.50**	**0.59**	**0.67**	**0.55**	**0.41**	**0.34**	**0.31**	**0.31**	**0.31**	**0.31**	**0.31**
Payout Ratio		**2.37**	**0.39**	**-0.41**	**0.04**	**0.32**	**0.32**	**0.32**	**0.32**	**0.32**	**0.45**	**0.45**	**0.45**	**0.45**
Transactions with Shareholders		-462.87	-128.23	261.39	-35.18	-500.00	-319.97	-410.05	-395.47	-473.18	-689.79	-652.30	-667.54	-627.07
Common Equity	**2,267.25**	**3,056.79**	**3,826.68**	**4,546.46**	**5,068.26**	**4,892.29**	**5,572.22**	**6,443.56**	**7,283.93**	**8,289.44**	**9,132.52**	**9,929.77**	**10,745.65**	**11,512.06**

Developments	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Operating Cash					481.89	146.03	288.55	351.05	373.95	478.40	497.54	517.44	538.14	615.63
Fixed Assets					230.79	252.19	263.06	273.23	282.76	291.71	300.15	308.12	315.68	322.86
Intangibles					2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Accounts receivable					1,307.52	1,525.41	1,305.11	1,662.77	1,842.52	2,217.92	2,496.65	2,597.51	2,671.75	2,826.71
Inventory					1,807.83	2,287.32	2,107.44	2,524.81	2,748.69	3,250.39	3,488.42	3,961.97	4,300.15	4,779.96
Other Assets					90.26	109.54	102.48	132.12	151.00	172.68	191.05	205.92	227.92	266.65
Advances from customers					166.07	15.07	173.13	210.63	224.37	287.04	298.52	310.46	322.88	335.80
Suppliers					61.91	139.50	296.87	366.63	399.89	466.26	487.16	442.58	458.95	613.72
Other Liabilities					234.06	305.69	365.36	451.22	492.15	573.84	599.55	621.71	706.53	796.80
Invested Capital					3,458.55	3,862.53	3,233.59	3,917.81	4,284.81	5,086.28	5,590.89	6,218.51	6,567.58	7,067.79

Recurring Income	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Operating Cash					138.30	41.91	121.87	178.08	192.35	204.88	211.03	217.36	223.88	253.66
Fixed Assets					97.40	98.60	125.98	150.46	172.37	191.96	198.65	204.58	209.84	214.49
Intangibles					49.31	52.31	55.65	58.33	60.47	60.47	60.47	60.47	60.47	60.47
Accounts receivable					64.88	75.69	64.76	82.50	91.42	110.05	123.88	130.30	137.05	150.07
Inventory					57.29	72.49	66.79	80.02	87.11	103.01	110.56	128.24	142.22	161.98
Investment Property					3,761.36	3,775.95	4,157.15	4,686.50	4,976.75	5,286.22	5,603.39	5,939.59	6,295.97	6,673.72
Other Assets					159.58	193.68	181.18	233.59	266.97	305.30	337.79	340.06	317.84	294.19
Obligations with partners in ventures					262.34	270.59	291.43	312.89	335.00	357.78	381.23	405.39	430.28	455.91
Suppliers					36.54	82.35	175.23	216.42	236.05	275.22	287.56	261.25	270.91	308.91
Other Liabilities					208.06	271.74	324.78	401.11	437.49	510.11	532.97	552.67	573.11	491.73
Invested Capital					3,821.16	3,685.95	3,981.93	4,539.07	4,838.90	5,118.78	5,444.01	5,801.31	6,112.96	6,552.03

Hotels and Restaurants	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Operating Cash					214.84	65.10	145.83	156.03	178.19	189.18	203.07	210.26	217.72	248.00
Fixed Assets					249.78	248.44	232.83	219.16	207.19	196.74	187.62	179.68	172.79	166.83
Intangibles					71.54	71.54	71.54	71.54	71.54	71.54	71.54	71.54	71.54	71.54
Accounts receivable					33.65	39.25	33.58	42.79	47.41	57.07	64.25	96.19	161.37	275.56
Inventory					16.00	20.24	18.65	22.34	24.32	28.76	30.87	120.20	226.90	376.22
Other Assets					38.34	46.53	43.53	56.12	64.14	73.35	81.16	68.12	35.48	66.30
Suppliers					23.64	53.27	113.37	140.01	152.71	178.05	186.03	169.01	175.26	172.20
Other Liabilities					4.86	6.35	7.59	9.38	10.23	11.93	12.46	12.92	13.40	1.07
Invested Capital					595.64	431.48	425.01	418.59	429.86	426.66	440.00	564.07	697.13	1,031.17

Airport	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Operating Cash					32.77	9.93	24.34	31.87	37.58	39.41	41.11	42.89	44.75	51.37
Fixed Assets					835.52	866.82	894.59	897.29	891.39	938.19	981.47	1,021.53	1,058.63	1,093.02
Accounts receivable					18.71	21.83	18.68	23.80	26.37	31.74	35.73	37.58	39.53	43.28
Inventory					4.19	5.30	4.88	5.85	6.37	7.53	8.08	9.38	10.40	11.84
Other Assets					30.51	37.03	34.64	44.66	51.04	58.37	64.58	65.02	67.51	106.99
Suppliers					11.79	26.58	56.56	69.85	76.19	88.83	92.81	84.32	87.44	80.00
Other Liabilities					1.94	2.54	3.03	3.74	4.08	4.76	4.98	5.16	5.35	5.55
Invested Capital					907.96	911.79	917.54	929.87	932.48	981.64	1,033.19	1,086.92	1,128.03	1,220.95

Developments	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Gross Revenue	120.42	266.18	911.62	1559.93	993.99	125.60	1442.75	1755.25	1869.75	2392.01	2487.69	2587.19	2690.68	2798.31
% Change		121%	242%	71%	-36%	-87%	1049%	22%	6.52%	27.93%	4.00%	4.00%	4.00%	4.00%
Revenue Deductions	-4.52	-10.14	-34.77	-66.84	-37.48	-4.74	-54.40	-66.18	-70.50	-90.19	-93.80	-97.55	-101.45	-105.51
% of Revenues	-3.8%	-3.8%	-3.8%	-4.3%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%
Net Revenue	115.90	256.04	876.86	1493.09	956.51	120.86	1388.35	1689.07	1799.25	2301.81	2393.89	2489.64	2589.23	2692.80
COGS	-51.95	-121.62	-173.33	-332.41	-259.41	-41.12	-540.05	-676.70	-784.41	-999.69	-1069.56	-1344.31	-1419.88	-1676.25
Gross margin	0.55	0.52	0.80	0.78	0.73	0.66	0.61	0.60	0.56	0.57	0.55	0.46	0.45	0.38
% of Revenues	45%	48%	20%	22%	27%	34%	39%	40%	44%	43%	45%	54%	55%	62%
Gross profit	63.95	134.42	703.53	1160.68	697.10	79.74	848.30	1012.37	1014.84	1302.12	1324.33	1145.34	1169.35	1016.54
Operating Expenses	22.68	-14.25	-37.35	134.81	-86.26	17.48	79.40	96.59	102.90	131.64	136.90	142.38	148.07	154.00
Selling, General and Administrative Expenses	-15.68	-34.02	-35.32	-62.52	-54.70	6.91	79.40	96.59	102.90	131.64	136.90	142.38	148.07	154.00
% of Revenues	-14%	-13%	-4%	-4%	-6%	-6%	-6%	-6%	-6%	-6%	-6%	-6%	-6%	-6%
Other Operating Income (Expenses)	38.36	0.98	-3.21	2.08	-27.40	14.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% of Revenues	-19%	-1%	2%	-1%	12%	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fair value of investment properties	0.00	18.80	1.18	195.26	-4.17	-4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Result Before Taxes	86.64	120.17	666.18	1295.49	610.84	97.23	927.70	1108.96	1117.73	1433.76	1461.23	1287.71	1317.43	1170.54
Statutory Taxes	-29.46	-40.86	-226.50	-440.47	-207.68	-33.06	-315.42	-377.05	-380.03	-487.48	-496.82	-437.82	-447.92	-397.98
Developments Result	57.18	79.31	439.68	855.02	403.15	64.17	612.28	731.92	737.70	946.28	964.41	849.89	869.50	772.56

Airport	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Gross Revenue	0.00	0.00	22.28	43.15	67.59	57.09	121.68	159.36	187.89	197.03	205.55	214.45	223.75	233.48
Revenue Deductions	0.00	0.00	-2.20	-3.71	-5.27	-5.00	-10.67	-13.97	-16.47	-17.27	-18.02	-18.80	-19.62	-20.47
% of Revenues	0.0%	0.0%	-9.9%	-8.6%	-7.8%	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09
Net Revenue	0.00	0.00	20.07	39.44	62.32	52.09	111.01	145.39	171.42	179.76	187.53	195.65	204.14	213.01
COGS	0.00	0.00	-15.23	-30.63	-44.61	-37.29	-72.87	-95.43	-112.51	-117.99	-140.71	-146.81	-153.18	-159.83
Gross profit	0.00	0.00	4.85	8.81	17.71	14.80	38.15	49.96	58.90	61.77	46.81	48.84	50.96	53.18
Operating Expenses	0.00	0.00	-7.27	17.99	-33.56	-25.35	-27.75	-36.35	-42.85	-44.94	-26.72	-27.88	-29.09	-30.35
Selling, General and Administrative Expenses	0.00	0.00	-5.43	-8.76	-8.88	-7.42	-27.75	-36.35	-42.85	-44.94	-26.72	-27.88	-29.09	-30.35
% of Revenues	0%	0%	-27%	-22%	-14%	-14%	-25%	-25%	-25%	-25%	-14%	-14%	-14%	-14%
Other Operating Income (Expenses)	0.00	0.00	-1.85	-12.65	-21.45	-17.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% of Revenues	0%	0%	9%	32%	34%	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fair value of investment properties	0.00	0.00	0.00	39.40	-3.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Result Before Taxes	0.00	0.00	-2.43	26.80	-15.86	-10.55	10.39	13.61	16.05	16.83	20.09	20.96	21.87	22.82
Statutory Taxes	0.00	0.00	0.82	-9.11	5.39	3.59	-3.53	-4.63	-5.46	-5.72	-6.83	-7.13	-7.44	-7.76
Airport Result	0.00	0.00	-1.60	17.69	-10.47	-6.96	6.86	8.98	10.59	11.11	13.26	13.84	14.44	15.06

Recurring income	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Gross Revenue	229.48	225.00	183.90	303.42	285.27	153.41	609.33	890.41	961.73	1024.41	1055.14	1086.79	1119.40	1152.98
Mall	206.48	188.70	129.30	176.30	169.30	83.77	358.03	576.28	600.49	627.04	645.85	665.23	685.18	705.74
Retail and Digital	23.00	36.30	54.60	127.12	131.40	69.64	251.30	314.13	361.24	397.37	409.29	421.57	434.22	447.24
Revenue Deductions	-31.03	-33.02	-29.37	-56.66	-51.85	-27.88	-95.73	-139.88	-151.09	-160.94	-165.77	-170.74	-175.86	-181.14
Mall	-27.92	-27.69	-20.65	-32.92	-30.77	-15.23	-56.25	-90.53	-94.34	-98.51	-101.46	-104.51	-107.64	-110.87
Retail and Digital	-2.80	-4.47	-6.13	-13.79	-14.17	-6.91	-23.20	-31.94	-35.44	-38.21	-39.36	-40.54	-41.76	-43.01
% of Revenues	-13.5%	-14.7%	-16.0%	-18.7%	-18.2%	-0.18	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16
Net Revenue	198.45	191.98	154.53	246.76	233.41	125.52	513.61	750.52	810.64	863.47	889.38	916.06	943.54	971.84
COGS	-51.86	-64.71	-50.31	-90.36	-82.03	-49.07	-198.33	-272.21	-301.30	-325.10	-303.22	-312.31	-321.68	-331.33
% of Revenues	26%	34%	33%	37%	35%	39%	39%	36%	37%	38%	34%	34%	34%	34%
Gross profit	146.60	127.30	108.50	156.40	151.30	76.45	315.28	478.31	509.34	538.37	586.16	603.75	621.86	640.51
Operating Expenses	132.78	347.55	166.93	-317.98	-3.29	-42.25	146.04	205.80	-38.02	-45.58	-20.66	20.83	31.55	43.18
Selling, General and Administrative Expenses	-37.80	-60.42	-61.93	-101.54	-97.64	-56.85	-235.15	-323.55	-328.27	-355.04	-337.84	-315.37	-324.83	-334.58
% of Revenues	19%	31%	40%	41%	42%	-45%	-46%	-43%	-40%	-41%	-38%	-34%	-34%	-34%
Other Operating Income (Expenses)	-35.63	-15.53	-1.52	-8.03	50.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% of Revenues	18%	8%	1%	3%	-22%	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fair value of investment properties	206.21	423.50	230.38	-208.42	43.80	14.60	381.20	529.35	290.25	309.46	317.17	336.20	356.38	377.76
Result Before Taxes	279.38	474.85	275.43	-161.58	148.01	34.20	461.32	684.11	471.32	492.79	565.50	624.58	653.40	683.70
Statutory Taxes	-94.99	-161.45	-93.64	54.94	-50.32	-11.63	-156.85	-232.60	-160.25	-167.55	-192.27	-212.36	-222.16	-232.46
Recurring income Result	184.39	313.40	181.78	-106.65	97.69	22.57	304.47	451.51	311.07	325.24	373.23	412.22	431.25	451.24

Hotels and Restaurants	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Gross Revenue	190.25	212.73	135.42	259.71	443.14	211.76	729.16	780.13	890.96	945.92	1015.33	1051.32	1088.62	1127.26
Revenue Deductions	-11.43	-16.50	-17.68	-18.91	-16.13	-7.71	-55.03	-58.88	-67.25	-71.39	-76.63	-79.35	-82.16	-85.08
% of Revenues	-6.0%	-7.8%	-13.1%	-7.3%	-0.04	-0.04	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
Net Revenue	171.34	188.77	119.09	228.15	427.01	204.05	674.13	721.25	823.71	874.52	938.70	971.97	1006.45	1042.18
COGS	-138.12	-140.05	-121.26	-160.07	-180.95	-151.22	-486.29	-520.17	-545.14	-571.80	-647.28	-662.50	-676.04	-702.61
% of Revenues	81%	74%	102%	70%	42%	74%	72%	72%	66%	65%	69%	68%	67%	67%
Gross profit	33.22	48.72	-2.16	68.08	63.22	52.83	187.84	201.09	278.57	302.72	291.42	309.47	330.42	339.57
Operating Expenses	-25.79	-36.81	-24.10	-48.83	-46.38	-24.46	113.14	121.05	138.24	146.77	157.54	163.13	168.91	174.91
Selling, General and Administrative Expenses	-23.26	-33.75	-23.50	-40.00	-29.26	-24.46	113.14	121.05	138.24	146.77	157.54	163.13	168.91	174.91
% of Revenues	14%	18%	20%	18%	7%	-0.12	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17
Other Operating Income (Expenses)	-2.53	-3.07	-0.60	-8.83	-17.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% of Revenues	1%	2%	1%	4%	4%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fair value of investment properties	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Result Before Taxes	7.44	11.91	-26.26	19.24	16.83	28.37	300.97	322.13	416.82	449.49	448.96	472.60	499.33	514.47
Statutory Taxes	-2.53	-4.05	8.93	-6.54	-5.72	-9.65	-102.33	-109.53	-141.72	-152.83	-152.64	-160.68	-169.77	-174.92
Hotels and Restaurant Result	4.91	7.86	-17.33	12.70	11.11	18.73	198.64	212.61	275.10	296.66	296.31	311.92	329.56	339.55

Holding	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Operating Expenses	-19.50	21.12	-76.54	-56.32	-59.13	-18.10	-95.90	-118.44	-129.18	-150.62	-157.37	-163.19	-169.22	-175.49
Selling, General and Administrative Expenses	-51.16	-14.83	-42.08	-45.90	-50.42	-15.43	-81.77	-100.98	-110.14	-128.42	-134.18	-139.14	-144.29	-149.63
% of Total Revenue	-9%	-2%	-3%	-2%	-3%	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
Other Operating Income (Expenses)	31.67	40.92	1.51	-10.42	-8.71	-2.67	-14.13	-17.45	-19.04	-22.20	-23.19	-24.05	-24.94	-25.86
% of Total Revenue	6%	6%	0%	0%	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fair value of investment properties	0.00	-4.97	-35.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Result Before Taxes	-19.50	21.12	-76.54	-56.32	-59.13	-18.10	-95.90	-118.44	-129.18	-150.62	-157.37	-163.19	-169.22	-175.49
Statutory Taxes	6.63	-7.18	26.02	19.15	20.11	6.15	32.61	40.27	43.92	51.21	53.51	55.48	57.54	59.67
Holding Result	-12.87	13.94	-50.52	-37.17	-39.03	-11.95	-63.29	-78.17	-85.26	-99.41	-103.87	-107.70	-111.69	-115.82

Core Result	233.61	414.51	552.01	741.59	462.46	86.56	1058.96	1326.85	1249.21	1479.88	1543.35	1480.16	1533.05	1462.59

Non-Core Operations	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Equity Pickup	-3.24	-0.36	1.04	3.36	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial Gains	35.57	19.91	54.23	146.13	146.13	194.84	153.13	153.13	153.13	153.13	153.13	153.13	153.13	153.13
% of Cash Investments	5541%	155%	763%	1352%	1352%	1352%	1352%	1352%	1352%	1352%	1352%	1352%	1352%	1352%
Financial Expenses	-38.85	-44.89	-45.39	-77.33	-17.59	0.00	-77.33	-81.04	-81.04	-81.04	-81.04	-81.04	-81.04	-81.04
% of Cash Investments	-6051%	-349%	-639%	-715%	-715%	-715%	-715%	-715%	-715%	-715%	-715%	-715%	-715%	-715%
Other Non-Core Income (Expenses)	-22.13	-16.69	-16.97	-13.47	16.46		16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46
Non-Core Result Before Taxes	-28.64	-42.03	-7.08	58.68	146.96	194.84	92.26	88.55	88.55	88.55	88.55	88.55	88.55	88.55
Statutory Taxes	9.74	14.29	2.41	-19.95	-49.97	-66.24	-31.37	-30.11	-30.11	-30.11	-30.11	-30.11	-30.11	-30.11
Tax Adjustments	56.11	14.77	143.15	324.02	145.10	156.76	145.10	145.10	145.10	145.10	145.10	145.10	145.10	145.10
Non-Core Result	37.21	-12.97	138.48	362.74	242.10	285.35	205.99	203.55	203.55	203.55	203.55	203.55	203.55	203.55

Financing Operations	2018	2019	2020	2021	2022 YTD	2022 Q4	2023	2024	2025	2026	2027	2028	2029	2030
Debt modification adjustment	0.00	0.00	21.55	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Payments	-95.30	-62.42	-79.09	-161.76	-196.72	-65.57	-228.16	-213.45	-184.03	-172.86	-181.39	-199.83	-217.28	-235.13
% of Net Debt	-7.3%	-4.8%	-3.9%	-7.1%	-6.6%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Amortization of borrowing, financing and deb	-18.90	-42.51	-10.19	-3.91	-4.22	-1.41	-16.23	-16.23	-16.23	-16.23	-16.23	-16.23	-16.23	-16.23
Finance charges on lease (b)	0.00	-8.47	-6.22	-22.07	-16.93	-5.64	-20.73	-19.39	-16.72	-15.71	-16.48	-18.16	-19.74	-21.36
% of Net Debt	0.00%	-0.64%	-0.31%	-0.97%	-0.57%		-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Financing Result Before Taxes	-114.28	-113.45	-73.99	-186.61	-217.94	-72.55	-265.06	-249.01	-216.92	-204.73	-214.03	-234.15	-253.18	-272.66
Statutory Taxes	38.85	38.57	25.16	63.45	0.00	24.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financing Result	-75.42	-74.88	-48.83	-123.16	-217.94	-47.88	-265.06	-249.01	-216.92	-204.73	-214.03	-234.15	-253.18	-272.66

Total	$ 195.40	$ 326.67	$ 641.65	$ 981.17	$ 486.62	$ 324.03	$ 999.89	$ 1,281.39	$ 1,235.83	$ 1,478.70	$ 1,532.86	$ 1,449.55	$ 1,483.41	$ 1,393.48

Disclosures and Disclaimers

Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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