PagSeguro

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PagSeguro Digital Ltd (NYSE:PAGS)

The **BCF** is initiating coverage on **PAGS** with a BUY rating and a **$15 target price**, representing a **potential upside of 57%**.

PAGS | Buy			
Month Price Target			$15
Tech Proposed Weight			5.0%
XLK Weight			0.0%
Current Price			$ 9.64
Upside			57%
Key Statistics			
52 Week Range		$8	$22
Avg. Volume			2,608.4
Market Value (000s)			$ 1,925
Shares Out			332.0
Beta 5y			*1.45*
% Short			
EPS			$0.91
Key Financials	**FY2021A**	**FY2022E**	**FY2023E**
Sales	*$10,447*	*$15,482*	*$18,145*
Y/Y Growth	*53%*	*48%*	*17%*
EBITDA	*$3,038*	*$3,056*	*$3,546*
Share Price % Return	**3M**	**YTD**	**5Y**
PAGS	0.00%	18.00%	-65%
SPY	*-4.09%*	*-20.23%*	*47.03%*
XLK	*-8.13%*	*-27.50%*	*101.57%*

Investment Theses

1) The Brazilian Fintech industry presents superior growth prospects to the mature, crowded US market

2) PagSeguro is a market leader with competitive advantages, providing quality exposure to this emerging market

3) Brazilian interest rate declines will drastically increase profitability over the next twelve months

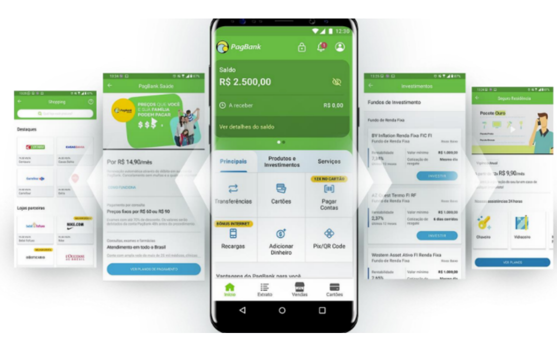
Company Introduction

PagBank PagSeguro's mission is to disrupt and democratize access to financial services and payment solutions in Brazil, providing a simple, secure, affordable, and digital two-sided ecosystem to merchants and consumers.

PagSeguro's payment solutions such as POS system, all-in-one app, etc, are the most popular solutions among the micro-merchants in Brazil with more than 66% market share in that segment.

PagSeguro's parent company is Universo Online (UOL), the leading internet portal in Brazil with over 50 million unique visitors and 6.7 billion page views on a monthly basis.

In 2019, PagSeguro successfully acquired their own banking license and founded PagBank. Now, Pagbank is the second largest digital bank in Brazil with 16.1 Million active clients



Understanding Drivers; Q3 '22 Earnings Visualized

PagSeguro

Key Terms:

Selic = Brazilian Interest Rate
TPV = Total Payment Value
Take Rate = Portion of transaction fee

Drivers:

TPV

- Larger share of wallet
  - Migration from cash to e-payments
  - Leads to higher TPV/merchant
- Maturation of existing cohorts
  - Increasing sales channels productivity
- Market share gains
  - Boosted by HUBs execution exploring larger market
  - Offset by deflation slowing industry growth

Take Rate

- Repricing
  - Mainly applicable to prepayment services
  - Offset selic hikes
- TPV mix towards CC transactions - higher take rates

Financial Income

(Discount fees withheld from CC transactions in installments)

- Increasing volume of credit transactions
- Longer duration of installments

Drivers:

TPV / ARPAC

- Deepening client engagement
  - Deposits, bill payments, mobile top-up, PIX, cards spending, underwriting

Credit Portfolio

- Secured loans underwriting
  - Payroll loans, FGTS early prepayment, & secured CC

R$ 3,173M

PagSeguro

R$ 90.3B TPV
X
4.1% Take Rate

R$ 339M

PagBank

22.5 Qrtly ARPAC
X
15.8M Active Clients

R$ 4,035M

Revenue

R$ 1,384
34.3% Margin

Gross Profit

R$ 2,651

Cost of Revenue

R$ 869M
23.4% Margin

PagSeguro

R$ (99)M
-29.2% Margin

PagBank (unprofitable)

R$ 770M
19% Margin

Operating Profit

R$ 380M
9.4% Margin

Net Income

D&A, taxes

Operating Expenses

Marketing & Advertising

Personnel Expenses

Other Expenses

Transactional Costs

4.1% Gross Take Rate
-
2.59% Net Take Rate

Drivers:

- Increased interchange fees paid to card issuers
  - Driven by increase in penetration on SMBs and more CC volumes
- Card scheme fees

Financial Expenses

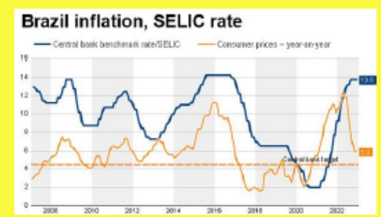
Drivers:

- Selic hikes
  - W/out hikes, would be 34% increase from higher volume
  - 300% increase driven by Selic hike
- TPV mix (more CCs) and growth

Chargeback

SELIC:

- Inflation is near target, and peak rates have not descended yet
- Any decrease will massively improve $PAGS' profitability via lowered financial expenses



Business Model

PagSeguro's business model primarily revolves around providing digital payment (PagSeguro) and financing solutions (PagBank) to individuals and small businesses. The company generates revenue through a variety of different channels, including:

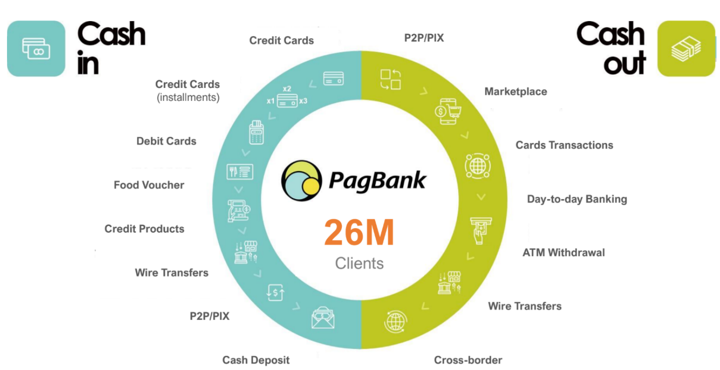
Transaction Revenue: PagSeguro charges a fee for processing transactions made through its platform, such as POS transactions, online banking transfers, e-commerce payments, etc. According to the latest quarterly earning, transaction fees make up **57.3%** of the total revenue of last quarter. The cost associated with this channels are:

- **Interchange Cost Paid to Card Issuers:** A fee that paid to the original issuer of the card, the banks, accounted for **81%** of the total transaction cost
- **Card Scheme Cost:** A fee paid to the scheme such as Visa, Mastercard, Amex. This cost accounted for **19%** of the total transaction cost

The gross profit margin for the transaction business is **37.8%.**

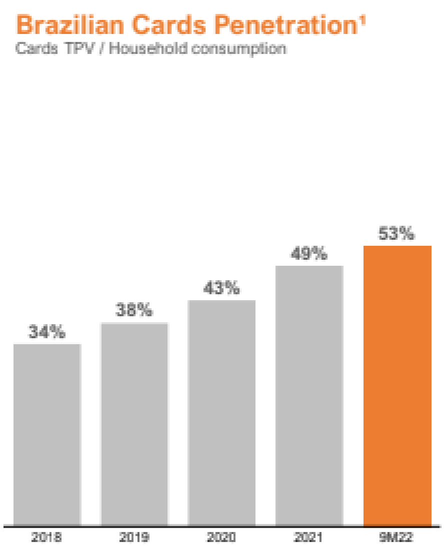
Financial Revenue: PagSeguro also makes money by providing value-added services that enable merchants to receive their installment payment faster. Financial Income made up **42.4%** of PagSeguro's total revenue. The cost associated with this segment of the business is mainly financial expenses related to the Brazilian Basic Interest Rate (SELIC). The gross margin last quarter for this segment is **45%.**

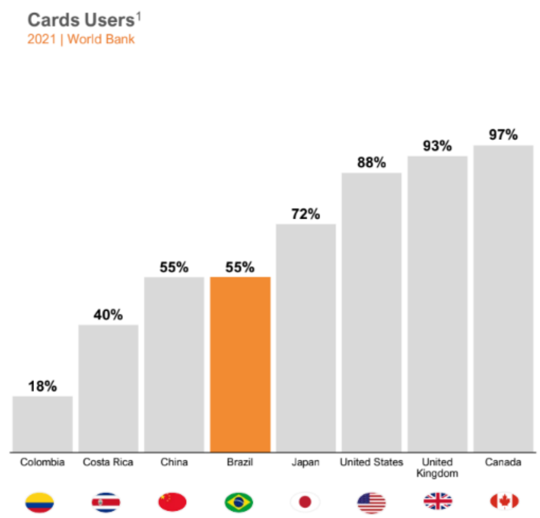
PagsBank: PagBank is a rather new segment of business for PagSeguro. In 2019, PagSeguro acquired their banking license and started PagBank. Now, PagBank is the second largest digital bank in Brazil. PagBank provided a range of financial services on their super-app. PagBank is still a small part of PagSeguro, but growing rapidly with total deposits up 300%+ and TPV up 100% YoY. PagBank is also the core of PagSeguro's growth strategy for the next ten years as it offers a one-stop shop banking solution for entrepreneurs that's far beyond just payment.



Thesis 1: The Brazilian fintech industry presents superior growth prospects to the mature, crowded U.S. market

The Brazilian fintech space can be broken down into two sub-industry: Digital Payments and Digital Banking. Pagsegruo has a strong presence in both sub-industries. Regarding the payment space, only 55% of Brazil's personal consumption comes from credit & debit cards transactions compared to almost 90% in the United States. The need for more card penetration is foreseeable, expected to grow to 70% by 2026, representing a 13% CAGR according to Morgan Stanley. PagSeguro is capturing the opportunity by providing fully-digital, easy-to-use, and instant payment solutions for micro-merchants and small entrepreneurs.





PagSeguro also has a strong presence in another yet-to-be-penetrated but larger sub-industry—digital banking. The TAM for this market is 30x bigger than the payment market in terms of net income. Although Brazil has undergone a significant improvement in terms of banking access, the runway is still long — there are still 25% of the population unbanked and 80% of the profit taken by the Top 5 Banks. The digital experience of these top 5 banks is lagging behind. Clients of traditional banks also complain about high fees and spreads, limited product offerings and poor user experience when using their product. Digital banks like PagBank were able to solve this pain point by providing more diversified products and seemingless digital experience. Thus, the trend of increasing adoption of digital banking in Brazil is expected to persist. According to Accenture, 44% of Brazilians hold a digital-only bank account. Brazil not only holds the second-highest number of digital-only bank customers, but also boasts the second-fastest-growing market with a 73% growth rate between 2019 and 2021.

Thesis 2: PagSeguro is a market leader with competitive advantages, providing quality exposure to this emerging market

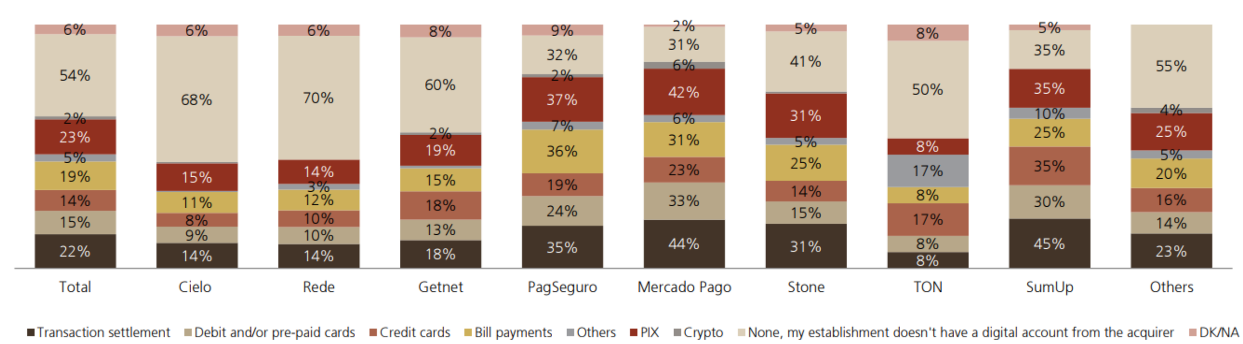
There is much growth to be captured in the Brazilian fintech market. We believe PAGS is the most likely to capture market share profitably due to their competitive advantages in product offering and distribution. Recent KPIs relative to competitors reflect these advantages. Simultaneously, PAGs has the lowest risk profile, and most attractive relative valuation.

Superior Product Offering - Payments & Banking

PAGS was the first industry player to launch a mobile POS, and informal merchants across SMBs found this incredibly valuable, granting them a first mover advantage. They are now the long tail segment leader with a unique value proposition; they provide one app and platform for banking and payments, a combination of their traditional payment arm and their new banking arm, PagBank, creating a one stop shop.

From UBS research, you can see the use of banking solutions offered by their acquirers. While many acquirers lack solutions entirely, PAGS has the most diversified mix of use cases, emphasizing the value of their integrated one stop shop.

Figure 5: Merchants' usage of digital account banking solutions offered by the acquirer, by acquirer



Rather than just processing transactions, PAGS' end-to-end digital platform creates an ecosystem enabling clients to both transact and manage their cash - no need to open a bank account. They provide a complete set of payment solutions, including cards, PIX, Boletos, and wire transfers. For reference, PIX is Brazil's instant payment scheme, and PAGS accounted for nearly 10% of all PIX payments last quarter. Boletos are printed or virtual vouchers which can be used as payment across thousands of locations in Brazil. The traditional UX for Brazilian payment platforms were poor, as making digital or debit purchases requires consumer authentication. However, PAGS provides prepaid cards which do not, making the process more enjoyable. PagSeguro has also become a synonym of mobile POS, and many SMB merchants purchased PAGS' POS because of the first movement and trend.

PAGS largest competitor, Stone Co, has a similar business model but inferior product. As purported by the Former Payments Product Manager at Mercado Libre, a company hosting the largest online commerce and payments ecosystem in Latin America. They denote Stone has a digital bank, but it is "not a very good product", so they rely more on receivables lending. Meanwhile, PAGS cares about the digital banking experience and customer interaction.

Superior Distribution

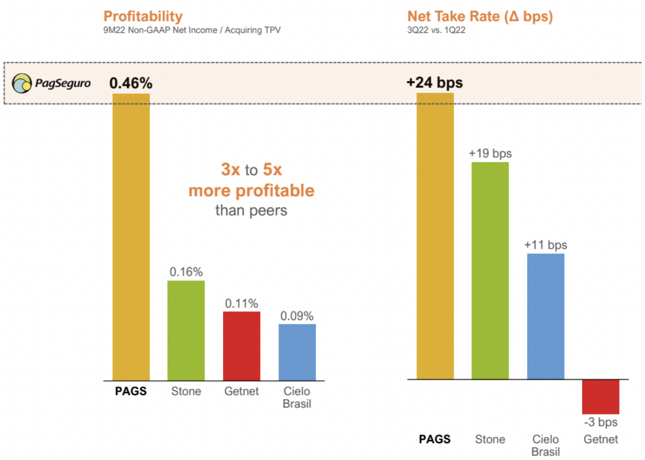
UOL is the largest Brazilian content, technology and digital services company; nine out of ten Internet users access UOL every month and its homepage receives more than 114 million unique visitors per month. UOL is the parent company of PAGS, owning approximately 40% of the outstanding equity. As a result, PAGS has a different client profile than traditional acquires, higher brand awareness, and a lower CAC due to the digital distribution model.

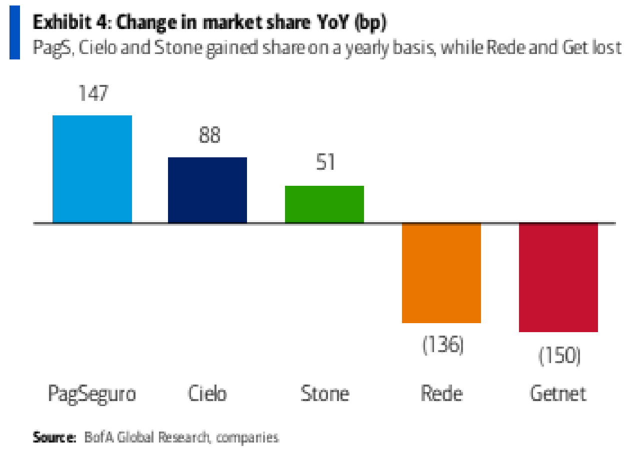
Close links exist between the management of UOL and PAGS. PAGS' former CEO and current board member Luiz Frias, for example, was previously CEO of UOL as well; he also owns over 1% of PAGS' shares outstanding. Additionally, 4/6 remaining board members previously held roles at UOL, one of them being the current CEO. Thus, this superior distribution model provides a *sustainable* moat because of management's financial incentives.

Quantitative Backing

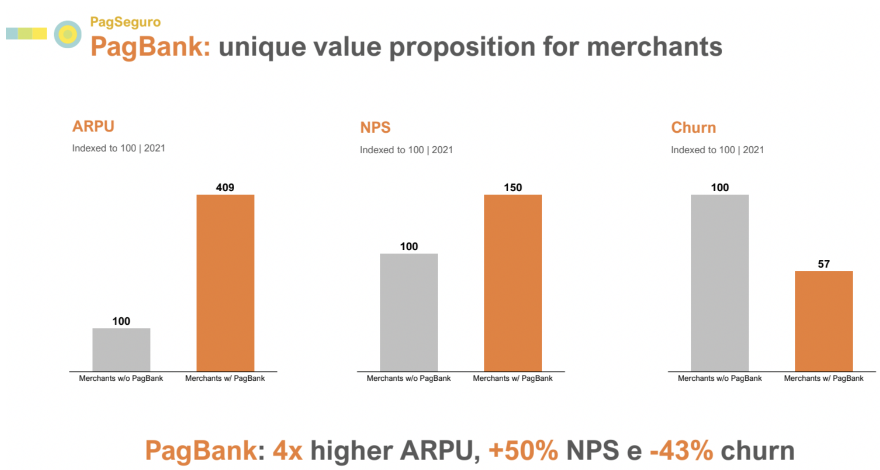
Competitive advantages reaped through superior product and distribution are supported by leading growth, margins, ROE, Net Promoter Score (NPS), Annual Revenue per User (ARPU), and low churn.

As Brazilian interest rates increased, PAGS was able to reprice their merchant acquiring fees without any churn, further evidence for their product superiority. This enabled the superior net take rate below. You can also see they are gaining market share the fastest within this rapidly growing industry:





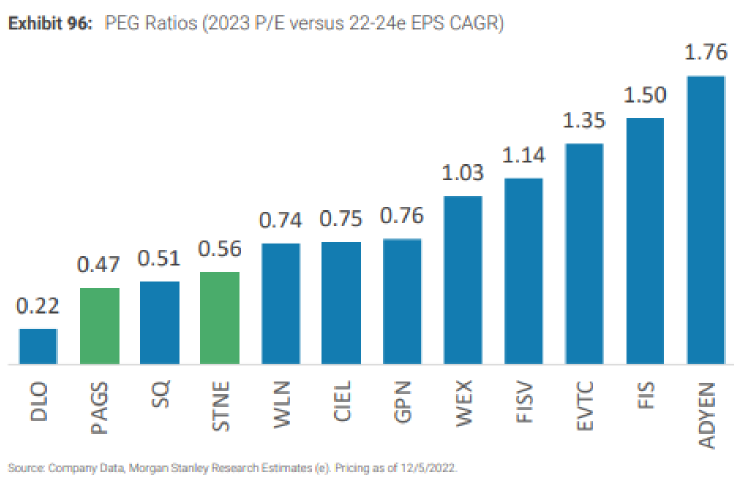
As mentioned, the combination of PAGS' merchant services and PagBank creates a superior value proposition, evidenced by 4x ARPU, a 50% higher NPS, and nearly half the churn:



PAGs also exhibits a 5 year average ROE of 27.1% compared to their 15.7% cost of equity, demonstrating high ROIC, representative of their competitive advantages. Below, you can see the difference in profitability metrics between competitors:

	PagSeguro	Stone Co	Cielo
5 Year Average ROE	27.1%	0.4%	14.6%
Gross Margin	43.5%	28.8%	31.9%
Net Margin	9.5%	5.1%	13.2%

Being 3-5x more profitable than peers in acquiring (*not overall*), boasting 3x more clients, and hiking prices without additional churn, PAGs presents the highest quality player to gain exposure to this growing market. It is also highly attractive on a relative valuation basis, furthering the attractiveness of this player.



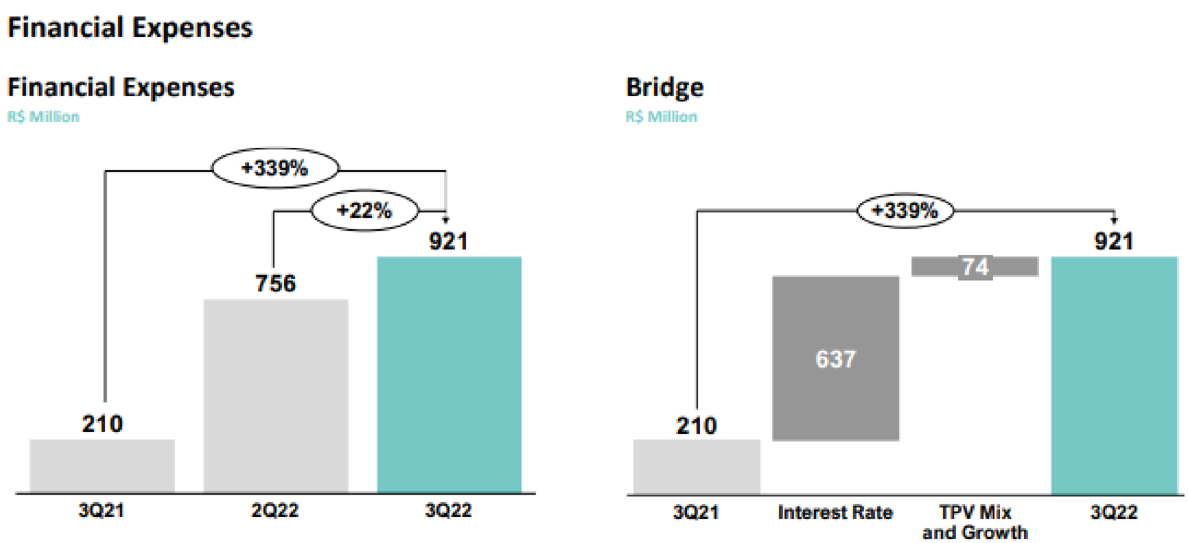
Superior Risk Profile

	PagSeguro	Stone Co	Cielo
Net Debt/EBITDA	No net debt	No net debt	3.25x
Current Ratio	1.41	1.31	1.15
EBIT/Interest Expense	2.68x	-0.66x	1.65x

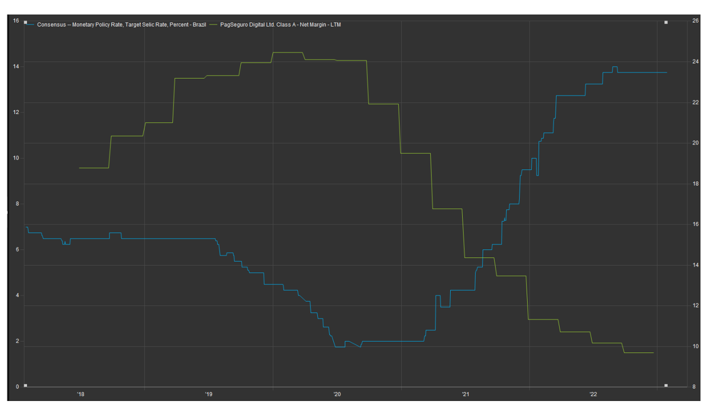
Ultimately, PAGS is poised to continue gaining share profitably while avoiding loss. We believe they have the highest probability of success as a player in this growing Brazilian fintech market.

Thesis 3: Brazilian interest rate declines will drastically increase profitability in the NTM

Brazil's central bank chief moved to combat inflation before the Fed. Rate hikes initiated in Brazil in early 2021, increasing from 2% to 13.75% in August of 2022. PAGS' financial costs fluctuate primarily in accordance with the Brazilian interest rate - the Selic. Please reference our visualization of PAGS' business model for a clear illustration of factors driving their cost of revenue. Financial expenses are a large portion of their cost of revenue and grew in tandem with Selic increases.



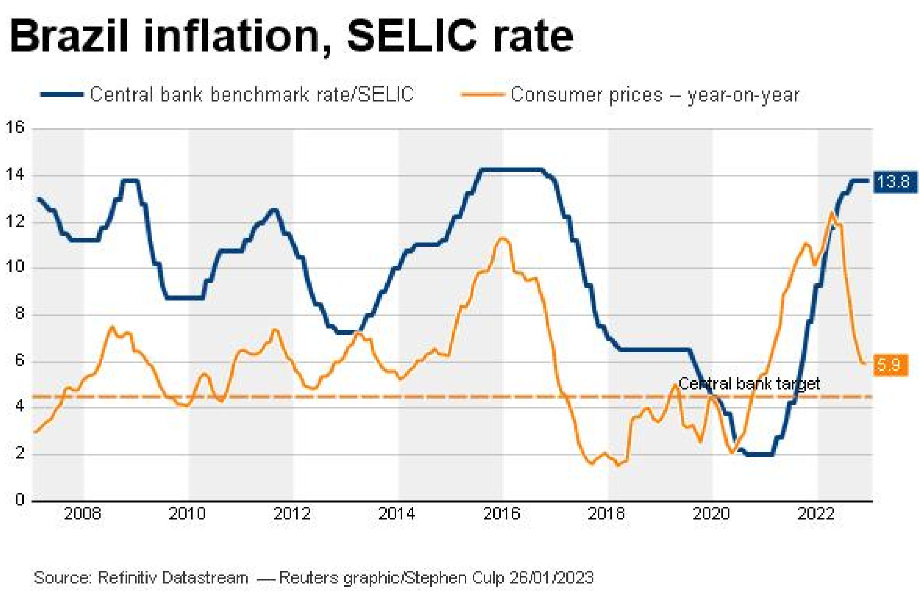
In one year - from rate hikes alone - their financial expenses ballooned 300%; the remaining increase was standard from revenue growth. Around R$600M per quarter annualized is a $R2.4B headwind; yet, PAGS still delivered higher net income. The moment the Selic begins to decline, profitability will be dramatically improved. Here you can see PAGS' net margin relative to the Selic. As rates - the blue line - increase, the net margin - the green line, has more than halved to 10%. Meanwhile, the underlying profitability of the company has been *improving* aside from costs influenced by rate hikes.



Street reports are seemingly forecasting a flat Selic throughout 2023, such as Credit Suisse in their January 16 report. In contrast, Brazil's big banks are expecting declines of about 2% this year:

Bank	EOY Selic Projection
Banco do Brasil	11.75%
Bradesco	12.25%
Santander Brasil	12%

The main driver for PAGS' FCF generation is Selic declines. The street expects a flat Selic in 2023, and we believe it will come down at least 2%. Here we have a differentiated viewpoint which should enable us to enter at a price that doesn't fully reflect the cost profile at a lower interest rate. There has been a large decline in the CPI, with the rate approaching the Central Bank's benchmark target.



A revision in cost expectations from Selic declins will produce a meaningful stock price increase. Revenue growth for acquiring is already expected to fall flat this year, rates have peaked but are expected to stay flat, and analysts are pricing in country risk.

Catalyst & Risk

Catalyst:

1. Continue to gain market share in this period of industry consolidation
2. Brazilian's increase in credit card adoption which will favor PagSeguro's profitability
3. Brazilian interest rate decline

Risk:

1. Inflation in Brazil continue to persist, causing interest rates to stay at a high level
2. Future regulation may encompass additional caps on interchange rates, privacy legislation, pro-competition legislation, etc.
3. New entrants or current rivals may employ competitive pricing strategies to gain new clients

Valuation Summary

Discounted Cash Flow Analysis (75% weight)

Our DCF Model Indicated a price target of $17, representing an upside of 72%. We broke down PAGS revenue and COGS into two primary categories: Transaction and Financial.

For Transaction Revenue, We expected the company to grow slightly higher than the industry growth as we expected PAGS to continue its share-gain which is linked to our first and second thesis. We expected the COGS to stay flat as a % of revenue as we see no apparent reason for a GM improvement in this segment.

For Financial Income, we expected it to grow slightly faster than Transaction Revenue as we see signs of improvement mix in installment payment and PagBank's Revenue. We used a regression model to reflect the decline of COGS of Financial Income as it is highly correlated with our third thesis relating to the interest rate.

For the cost drivers, we expected the operating expense to grow slightly along the way as we see signs of PAGS increasing its effort in software development. We also expect the tax rate to increase as the interest rate comes down.

Compco(25% weight)

Our comps consist of 4 of PAGS's biggest competitors NU, Cielo, STNE, GPN which have similar drivers with PAGS. However, we only put 25% weight in Comps as we believe the interest rate decline will benefit all four companies in terms of valuation multiples.

Disclosures:

Babson College Fund

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Definition of Ratings

BUY: Expected to outperform the S&P 500 producing above-average returns.
HOLD: Expected to perform in line with the S&P 500 producing average returns.
SELL: Expected to underperform the S&P 500 producing below average returns.

References

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Morgan Stanley Research

Interview with Deutsche Bank Analyst

Interview with Tekne Investment Management

Analyst

Matthew Giacchetti

Han Li