

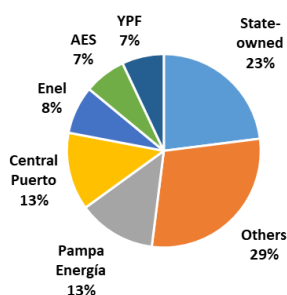
June 26th 2023

Pampa Energía S.A.

Pampa Energía is a leading Argentine company in the energy sector. It is fully integrated, and through its subsidiaries, covers almost the entire value chain of gas and electricity in the country. The company divides its segments into electricity generation, oil and gas (O&G) production, petrochemicals, and holding businesses.

Pampa operates three hydroelectric plants, five wind farms, and nine thermal power plants, with a total installed capacity of 5,366 MW, representing 13% of Argentina's generation capacity. After Central Puerto (following its recent acquisition of Enel), Pampa is the second most important private company in the electricity generation sector.

Electricity generation in Argentina 2022 (MW/total)

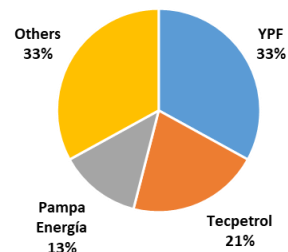


Source: Cucchiara Research based on institutional presentations.

In the O&G segment, Pampa is one of the most relevant producers and the third-largest producer of unconventional gas in Argentina, accounting for 8% of the country's total gas consumption. Pampa has a presence in productive blocks located in Neuquén and Rio Negro, with 12 productive areas and 4 exploration areas. In the first quarter of 2023, Pampa achieved a production of 52.4 thousand barrels of oil equivalent per day (boe/d) of natural gas and 5.2 thousand boe/d of oil. As of the end of 2022, Pampa's proven reserves amounted to 179 million boe, a 14% increase compared to 2021, mainly due to new shale reserves from Sierra Chata and El Mangrullo. 94% of the reserves correspond to gas, while the remaining 6% are oil. The reserve replacement ratio increased

from 1.8 to 2 in the last year, maintaining an average reserve life of 8 years.

Unconventional gas production in Argentina 2022 (mcm/diary)



Source: Cucchiara Research based on institutional presentations.

In petrochemicals, Pampa owns two highly complex plants and is the sole producer of styrene, synthetic rubber, and polystyrene in Argentina. In 2022, 31% of total sales were exports.

Through its holdings, Pampa owns 29.3% of Transportadora de Gas del Sur (TGS) and 26.3% of Transener. TGS is the largest gas transporter in the country, accounting for 60% of gas consumption, and is the second-largest LPG processor (1,120 tons per year) with 44% of sales in exports in 2022. TGS is also expanding its business as a midstream player in Vaca Muerta. On the other hand, Transener operates 86% of Argentina's high-voltage transmission network. As a highly regulated sector, Transener's income depends on tariff policies.

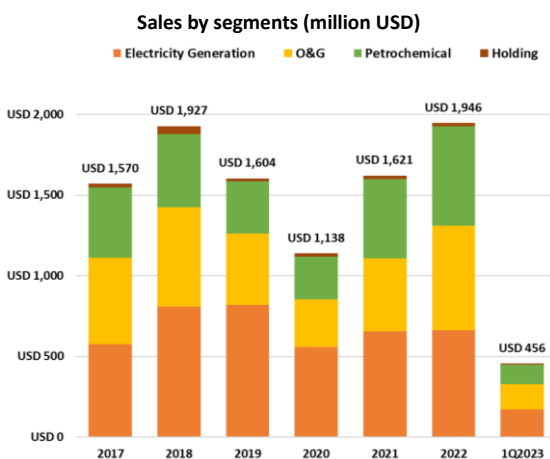
Regarding other investments, in September 2022, Pampa sold its 28.5% stake in Refinor for USD 5.7 million, incurring an accounting loss of USD 11 million. Pampa also participates in Ecuador's Oleoducto de Crudos Pesados (OCP). With a length of 485 km, OCP can transport up to 450,000 barrels per day. In May of this year, Pampa acquired a higher stake, increasing its total shareholding to 59.7%, in exchange for USD 15 million.

Regarding Pampa's own shareholder composition, 26% of Pampa's shares are held by its management led by Marcelo Mindlin, 22% by the National Social Security Administration (ANSES), and the remaining 51% are traded on the New York (PAM) and Buenos Aires (PAMP) stock exchanges.

Sales and Financial Results

Pampa's financial information is reported in US dollars as its functional currency. Therefore, for this analysis, results, assets, and liabilities have been valued in dollars at the official exchange rate (MULC) applicable to each period. The latest financial statements available are for the first quarter of 2023, as of March 31, 2023.

2022 ended with significant sales growth, exceeding those of 2021 by over 20% as a result of the productive expansion of unconventional gas reserves and the growth in electricity generation due to an increase in installed capacity. Sales in 2022 were even higher than those of 2018, if we exclude Edenor's distribution income, a participation that Pampa sold and stopped consolidating in 2021.



Source: Cucchiara Research based on balance sheet data.

At the end of 1Q2023, Pampa achieved net sales of USD 456 million, 5% higher YoY and 31% higher than the same period in 2021.

Analyzing operating cash flows through adjusted EBITDA, in the first quarter of 2023, Pampa reached USD 201 million. This represented a decrease of 10% compared to the same period in 2022 and nearly the same value as in 2021. As seen in recent quarters, despite the gradual growth in revenues, both operating and EBITDA margins have been deteriorating. Furthermore, 2022 saw a 900 basis points decrease in EBITDA margin compared to 2021.

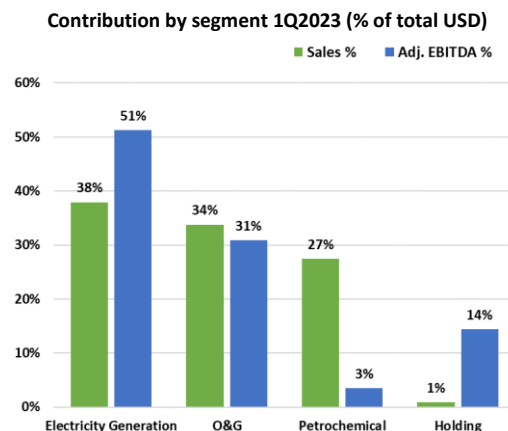
In recent quarters, the EBITDA performance has varied significantly among segments. The decline was explained by a sharp decrease in EBITDA in the electricity generation and holding segments, which was not offset by improvements in petrochemicals and O&G.

Millions of dollars	3M2023	3M2022	Var (%)	3M2021	Var (%)	2022	2021	Var (%)
Sales	456	436	5%	349	31%	1,946	1,621	20%
Operating Results	129	133	-3%	109	18%	631	579	9%
Operating Margin	28%	31%	-200bp	31%	-300bp	32%	36%	-300bp
Adj. EBITDA	201	223	-10%	202	0%	907	899	1%
EBITDA Margin	44%	51%	-700bp	58%	-1400bp	47%	55%	-900bp

Source: Cucchiara Research based on balance sheet data.

Segment Results

Looking at each segment during 1Q2023, electricity generation accounted for 38% of total revenues and 51% of adjusted EBITDA. O&G accounted for 34% of revenues and 31% of adjusted EBITDA, while petrochemicals represented 27% of revenues but only 3% of adjusted EBITDA. The holding segment contributed 14% of adjusted EBITDA and 1% of sales.



Source: Cucchiara Research based on balance sheet data.

The O&G segment has been gaining more weight in the company's operations, increasing from 26% of sales in 2020 to 33% in 2022. In contrast, during the same period, electricity generation decreased from 49% to 34% of Pampa's annual revenues.

Electricity Generation: Sales in 1Q2023 totaled USD 173 million, 4% higher than 1Q2022, and 7% higher than 1Q2021. In terms of operational performance,

net energy generation (GWh) increased significantly by 18% compared to 2022 (outpacing the country's 8% increase) and 30% compared to 2021. Over the last 12 months, Pampa added 8% of MW in installed capacity due to the commissioning of the PEPE 3-4 Wind Farm, the PEA Wind Farm, and the Combined Cycle of the CTEB Thermal Power Plant. Additionally, the company took full ownership of the PEMC Wind Farm, consolidating higher sales.

Regarding prices in dollars, as identified in previous periods, there has been a continuous decline. Average USD/MWh prices fell by 27% YoY, and average gross margins in USD/MWh weakened by 32%. This was mainly due to the end of the PPA (Power Purchase Agreement) in the Gas Turbine of the CTEB Thermal Power Plant. The new PPA contract for the Combined Cycle of the CTEB plant only began operating at the end of February. Additionally, the average availability decreased to 93% due to accidents, maintenance tasks, and tests at thermal power plants during 1Q2023.

Regulated “Energía Base” contracts in pesos represented 69% of the MW operated by Pampa but accounted for only 33% of segment sales. Due to the price drop and the increase in labor costs in dollars, the segment generated USD 103 million of adjusted EBITDA, a 14% decrease compared to 1Q2022.

Regarding investments in electricity generation, Pampa continues to add renewable energy to its portfolio. It has already executed 89% of the PEPE 4 wind farm budget (45 MW remaining to be incorporated in 2Q2023) and initiated the PEPE 6 project, aiming to add 140 MW by 2024. The plant will operate under the Energy Futures Market of Argentina (MATER) in US dollars.

E. Generation (mill. USD)	3M2023	3M2022	Var (%)	3M2021	Var (%)	2022	2021	Var (%)
Sales	173	166	4%	161	7%	663	656	1%
Operating Result	84	97	-13%	91	-8%	336	350	-4%
Adj. EBITDA	103	120	-14%	114	-10%	394	467	-16%
EBITDA Margin	60%	72%	-1300bp	71%	-1100bp	59%	71%	-1200bp

Source: Cucchiara Research based on balance sheet data.

O&G: In 1Q2023, O&G sales increased by 12% compared to 1Q2022 and nearly doubled compared to 1Q2021. This variation was mainly explained by the increase in average gas prices (+11% YoY) and higher local oil demand (+14% YoY). Gas prices were driven by high export prices to Chile and increased prices for supplying the local industry.

Oil production increased by 2%, while gas production remained unchanged compared to 1Q2022. At the end of 1Q2023, productive wells totaled 812, compared to 895 the previous year. Gas production accounted for 91% of the total hydrocarbon production in terms of thousands of barrels per day.

Sales in the local market increased by 27%, while exports decreased by 9% compared to the same quarter of the previous year. Exports totaled USD 50 million, representing 32% of segment sales.

Gas deliveries were allocated as follows: 27% to CAMMESA, 27% to electricity generation and petrochemical dispatch by Pampa, 21% to the industrial market, 15% for exports, and the remaining 10% to the retail segment. Thanks to increased local demand and lower export prices, average barrel prices only decreased by 2% YoY (USD 67.7/bbl). 20% of the volume was exported, 4 percentage points less than in 1Q2022.

In terms of EBITDA, the segment showed strength. Adjusted EBITDA grew by 11% compared to 1Q2022. Inflation and higher costs in the gas and transportation activities did not have a significant impact on the operating cash flow.

O&G (mill. USD)	3M2023	3M2022	Var (%)	3M2021	Var (%)	2022	2021	Var (%)
Sales	154	137	12%	79	95%	646	453	43%
Operating Result	32	29	10%	0	+	194	130	49%
Adj. EBITDA	62	56	11%	33	88%	347	255	36%
EBITDA Margin	40%	41%	-100bp	42%	-200bp	54%	56%	-300bp

Source: Cucchiara Research based on balance sheet data.

Petrochemicals: Sales remained stable compared to 1Q2022, only declining by 1%. The total volume sold increased by 13%, strongly driven by reformate products, but average prices per ton decreased by 12%. Sales in the local market increased by 5%, while

exports decreased by 12%. The foreign market represented 29% of segment sales.

EBITDA had a growth of 17% compared to 1Q2022. Increased local sales of styrene and polystyrene and lower propane costs were more than enough to offset the decline in rubber and polystyrene exports and higher labor costs.

Petrochem. (mill. USD)	3M2023	3M2022	Var (%)	3M2021	Var (%)	2022	2021	Var (%)
Sales	125	126	-1%	103	21%	617	490	26%
Operating Result	6	5	20%	17	-65%	52	45	16%
Adj. EBITDA	7	6	17%	18	-61%	59	50	18%
EBITDA Margin	6%	5%	100bp	17%	-1200bp	10%	10%	-100bp

Source: Cucchiara Research based on balance sheet data.

Holding: In terms of adjusted EBITDA, the holding segment decreased by 29% compared to the first quarter of the previous year.

In TGS, adjusted EBITDA by Pampa's ownership was USD 28 million, 30% less than 1Q2022. The decline was due to lower international LPG prices and a decrease in transportation revenues, tariff adjustments taking place after 1Q2023 and higher labor and gas costs, which higher midstream revenues in Vaca Muerta were unable to offset.

On the other hand, Transener's contribution was an adjusted EBITDA of USD 10 million, four times higher than 1Q2022. Transener benefited from tariff adjustments that started in January 2023 (with increases of 155% and 154% for Transener and Transba, respectively).

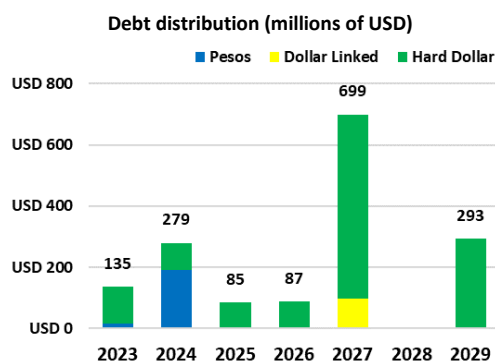
Holding (mill. USD)	3M2023	3M2022	Var (%)	3M2021	Var (%)	2022	2021	Var (%)
Sales	4	7	-43%	6	-33%	20	22	-9%
Operating Result	7	2	250%	1	600%	49	54	-9%
Adj. EBITDA	29	41	-29%	37	-22%	107	127	-16%
EBITDA Margin	725%	586%	13900bp	617%	10800bp	535%	577%	-4200bp

Source: Cucchiara Research based on balance sheet data.

Debt Profile

As of the end of 1Q2023, Pampa's total financial debt amounted to USD 1.671 million (adjusted for holdings excluding affiliates). 86% of the debt is denominated in hard currency and consists mostly of bonds in USD under NY legislation.

The total debt increased by 4% compared to the end of 2022 and grew by 15% YoY. In 1Q2023, Pampa issued Class XV bond in pesos with a variable interest rate of BADLAR+2% and maturity in 2024 for ARS 18.3 million. Additionally, the company reopened Class XIII Dollar Linked bonds with a 0% interest rate and maturity in 2027 for USD 48.2 million, which had been issued again at the end of 2022 for USD 49.8 million extras. The company also obtained pre-financing for imports in USD and paid off bank debts. The new issuances resulted in a controllable maturity profile with an average life of 3.4 years and an average interest rate of 8.5% for the USD debt.



Source: Cucchiara Research based on institutional presentation.

Subsequently, after the last reporting period, Pampa redeemed all the outstanding 2023 bonds under NY legislation for USD 93 million. Additionally, it issued Class XVII with a rate of BADLAR+2% and maturity in 2024 for ARS 5.98 billion to finance the PEPE 6 wind farm. Pampa also took advantage of high demand to issue a hard dollar Class XVI under Argentine legislation with a 5% rate and maturity in 2025 for USD 55.7 million.

Regarding net debt at the end of 1Q2023, it reached USD 906 million, which was 1% less than the end of 2022 but 7% higher than the end of 1Q2022. Net debt remains stable, and the increased borrowing compared to the previous year was partially offset by a 27% increase in cash and financial assets.

In a conservative projection, annualizing Pampa's adjusted EBITDA of 1Q2023 the company would reach a net leverage level of 1.1x, slightly worse than

the end of 2022. A very low level of debt for a sector that requires high capital investments. Additionally, looking at the annual interest payments the interest coverage is 5.9x, thanks to the low rates on newer debt.

Millions of dollars	1Q2023	4Q2022	Var (%)	1Q2022	Var (%)
Financial Debt	1,671	1,613	4%	1,452	15%
Cash & Fin. Assets	765	696	10%	603	27%
Net Debt	906	917	-1%	849	7%
Adj. EBITDA	804	907	-11%	892	-10%
Net Debt/Adj. EBITDA	1.1	1.0	0.1	1.0	0.2
Interests	137	165	-17%	165	-17%
Adj. EBITDA/Interests	5.9	5.5	0.4	5.4	0.5

Source: Cucchiara Research based on balance sheet data.

However, due to the significant increase in exchange restrictions by the Central Bank of Argentina (BCRA), it is necessary to consider a scenario of tighter access to the foreign exchange market, dollarizing flows and stocks at the blue chip swap rate.

Due to the devaluation effect, since 86% of the financial debt and 81% of cash and equivalents is denominated in USD, the net financial debt would be reduced to approximately USD 861 million. Besides, the operating flows reflected by the Adjusted EBITDA would decrease by 41% due to the exchange rate gap that has averaged 94% so far this year, reaching USD 475 million. The foreign currency obtained by Pampa through its O&G and petrochemical exports and LPG exports through TGS helps mitigate the decline.

As a result of this stress scenario, Pampa's net leverage would increase to 1.8x, and the interest coverage would decrease to 3.5x. The credit risk would increase, but there would be no significant liquidity issues considering the average debt maturity of over 3 years. Pampa would have several years to recover from a stressful exchange rate situation. There are no significant foreign currency maturities until 2027. It should be noted that this stress test does not consider the depreciation of operating expenses in pesos, which have been impacting results in all segments.

Fixed Income

After the call of the 2023 issuance in June, Pampa has 3 hard dollar bonds under NY legislation trading in markets: 2026, 2027, and 2029.

The 2026 bond was issued as a result of the exchange of the 2023 one and pays a semi-annual coupon of 9.5%, with a sink schedule in three installments starting in December 2024. Its modify duration is 2.16 years. The outstanding amount is USD 293 million, and it stands out for its minimum trading size of only 1. Since its issuance, the bond has remained very strong. The bond trades clean at 106% with a yield to maturity (YTM) of 6.77%, only 180 basis points above the risk-free rate with the same duration.



Source: Bloomberg.

The 2027 bond, issued in 2017 and aimed at large investors, has a minimum trading size of 150,000 and USD 636 million in circulation. It pays a 7.5% annual coupon semi-annually and has a bullet maturity. Its duration at maturity is 2.9 years. The bond trades clean at 94.5% with a YTM of 9.3%. Naturally, due to its duration, it exhibits higher volatility. Currently, it trades near its maximum values, approaching its lowest YTM post-2018 crisis at 9%.

Bond Description		Issuer Description		Identifiers	
Pages					
Bond Info					
12 Bond Info	Name	PAMPA ENERGIA SA		FIGI	BBG00FRY9R67
13 Adm Info	Industry	Electric (BCLASS)		ISIN	USP7464EAA49
14 Reg/Tax	Security Information		ID Number	AM2017649	
15 Covenants	Mkt Iss		EURO-DOLLAR		Bond Ratings
16 Bond Ratings	Ctry/Reg	AR	Currency	USD	Moody's Caa3
17 Identifiers	Rank	Sr Unsecured	Series	REGS	S&P CCC-
18 Exchanges	Coupon	7.500000	Type	Fixed	Fitch B
19 Inv Parties	Cpn Freq	S/A	Iss Price		99.13600
20 Fees, Restrict	Day Cnt	ISMA-30/360	Maturity		01/24/2027
21 Schedules	Impact	CALL 07/17/23@102.50	Aggregated Amount Issued/Out		USD 750,000.00 (M) / USD 635,990.00 (M)
22 Coupons	Quick Links	Iss Yield	7.625		Min Piece/Increment
23 Impact	32 ALLQ Pricing	Calc Type	(1)STREET CONVENTION		150,000.00 / 1,000.00
24 GRD	34 TDH	Pricing Date	01/09/2017		Par Amount
25 CACS	36 CF	Missed Payment Date	07/24/2020		Book Runner
26 CF	37 CN	Grace Period			Reporting
27 CN	38 HDS	Coupon Paid Date	08/10/2020		TRACE
39 HDS	40 Send Bond				



Source: Bloomberg.

Finally, the 2029 bond pays semi-annual coupons of 9.125% and amortizes at maturity. It has an outstanding amount of USD 293 million, and its minimum trading size is 150,000. The bond is trading at clean levels of 95.5%, offering a YTM of 10.2%. Similar to the 2027 bond, it reflects credit quality and has been trading at lower yields since its issuance.

Bond Description		Issuer Description		Identifiers	
Pages					
Bond Info					
12 Bond Info	Name	PAMPA ENERGIA SA		FIGI	BBG00PMHRS64
13 Adm Info	Industry	Electric (BCLASS)		ISIN	USP7464EAB22
14 Reg/Tax	Security Information		ID Number	A24704823	
15 Covenants	Mkt Iss		EURO-DOLLAR		Bond Ratings
16 Bond Ratings	Ctry/Reg	AR	Currency	USD	Moody's Caa3
17 Identifiers	Rank	Sr Unsecured	Series	REGS	S&P CCC-
18 Exchanges	Coupon	9.125000	Type	Fixed	Fitch B
19 Inv Parties	Cpn Freq	S/A	Iss Price		98.44900
20 Fees, Restrict	Day Cnt	ISMA-30/360	Maturity		04/15/2029
21 Schedules	Impact	MAKE WHOLE @50.000 until 04/15/24/ CALL 04/15/24/	Aggregated Amount Issued/Out		USD 300,000.00 (M) / USD 292,525.00 (M)
22 Coupons	Quick Links	Iss Yield	9.375		Min Piece/Increment
23 Impact	32 ALLQ Pricing	Calc Type	(1)STREET CONVENTION		150,000.00 / 1,000.00
24 GRD	34 TDH	Pricing Date	07/02/2019		Par Amount
25 CACS	36 CF	Interest Accrual Date	07/10/2019		Book Runner
26 CF	37 CN	1st Settle Date	07/10/2019		Reporting
27 CN	38 HDS	1st Coupon Date	10/15/2019		TRACE
39 HDS	40 Send Bond				

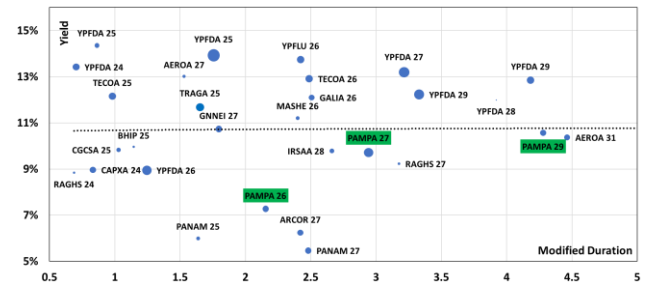


Source: Bloomberg.

Pampa's bond yields are slightly below the curve of Argentine corporate bonds. In contrast to YPF,

Pampa rewards extending duration. Other comparable private issuers such as Capex and CGC trade at similar yields, between 9% and 10%, but have significantly shorter durations.

Argentine Corporate Bonds Yield Curve (NY Legislation)

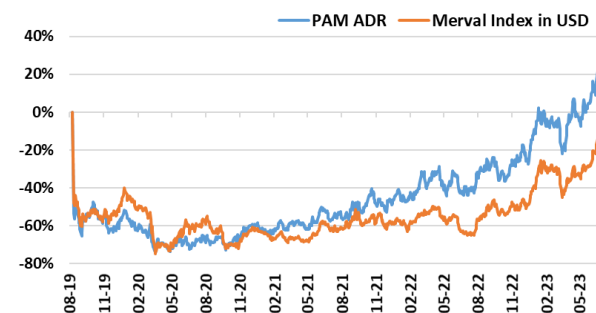


Source: Cucchiara Research based on Bloomberg data.

Equity

Since late 2020, Pampa's ADR has experienced a phenomenal recovery. The combination of tariff delays and the post-pandemic drop in O&G prices had pushed it to nearly historic lows. The sales recovery, driven by its productive expansion in electricity generation, O&G attractive international prices, and some tariff corrections, propelled PAM's market capitalization. The ADR has already recovered its pre-PASO 2019 value and is currently 20% higher than the day before the election, which marked a drastic change in expectations.

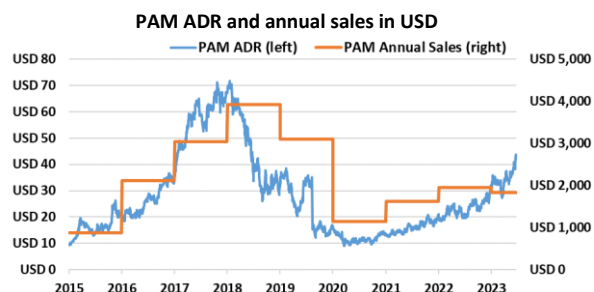
PAM ADR vs. MERVAL in USD since primaries elections 2019



Source: Cucchiara Research based on Reuters data.

Since 2023, PAM has risen by 32% and is now trading at 41% of its historical high in early 2018. In comparison, the Merval index has increased by 38%

over the same period but is still 54% below its 2018 peak when it nearly reached USD 1800.



Source: Cucchiara Research based on Reuters data.

PAMP's price-to-book ratio (P/BV) stands at 295%, with a price-to-earnings ratio (P/E) of 18x. These ratios are similar to the levels seen in early 2017 when the P/BV was 590% and P/E was 18x. At the peak in 2018, driven by high expectations, P/BV reached 689%, and P/E stood at 46x. During negative market conditions like the pre-PASO period in August 2019, P/BV was 190% and P/E was 10x. In the post-pandemic context in early 2021, P/BV reached a minimum of 94%, and P/E was 4x.

Outlook

Due to Pampa's strong financial management and its debt profile, we see no credit risk in Pampa's corporate debt. We recommend holding bonds to collect attractive coupons until maturity. Our local and foreign investment funds hold significant positions in Pampa's bonds. We particularly like the 2027 and 2029 bonds.

However, for retail clients seeking to accumulate NY legislation 2026 bonds, current prices may not appear very attractive. Spreads against the yields of Treasury bonds or other emerging market bonds from comparable regional companies remain very low. Better buying opportunities may arise if there are further restrictions on access to dollars for corporate debt payment or if some form of currency exchange policy affects the outflow of dollars. It's worth noting that during 2023 the suffered a sharp

decline in foreign currency reserves and negative net international reserve accounting.

On the other hand, due to the effects of the exchange market controls, it is possible that the company will take advantage of the low-interest rates resulting from the over-demand for local legislation corporate debt and continue to offer new bonds with payments in hard currency or dollar-linked.

Regarding equity, thanks to its remarkable business integration, is one of the best assets to be positioned in the Argentina market. However, the recent rally of the Merval index makes us more cautious. In terms of fundamentals, the recent price increases are beginning to reflect very optimistic future expectations. The first quarter of 2023 has shown a slowdown in Pampa Energía's business growth, so good results in the coming quarters will be needed to justify PAM's current valuation. There is still room for improvement in the tariff sector, both in electricity generation and gas and electricity transportation (due to Pampa's holdings). In line with this view, our local Argentine equity fund holds 4% of its assets in PAMP. We like the long-term outlook for the stock, but it is already trading at more reasonable multiples, and the stock price does not appear as attractive as it did in the 2020/2022 period.

Best regards,

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