GRUPO FINANCIERO BANORTE

3Q22 Outlook

Markets start to price-in the possibility of a global recession

July 5, 2022

3Q22 Outlook – Markets start to price-in the possibility of a global recession

The world is facing a challenging backdrop in 2022, with stagflation risks –the combination of low growth rates and high inflation, not seen in decades– increasing significantly in several regions. This difficult scenario has been steered by several factors, stressing out three main drivers. The first is closely related to the COVID-19 pandemic, with adverse effects that prevail, affecting global supply chains and trade dynamics (*e.g.* recent lockdowns in China). The second is the war between Ukraine and Russia, resulting in several disruptions in production, logistics and distribution of energy commodities, fertilizers, grains, and other goods. The third comes from the significant reduction of the stimuli governments and central banks provided to tackle the Coronavirus crisis. The most relevant is the tightening of worldwide monetary conditions with a faster speed and higher magnitude than originally thought, especially led by the Federal Reserve.

This complex environment has increased the likelihood of a US recession, as well as in several parts of the world between 2023 and 2024, with a global economy that will be losing steam by the end of this year. As a result, financial markets have faced a spike in volatility and risk aversion. The third quarter may provide us with more clarity in terms of the scope, duration, and magnitude of all the above-mentioned risks. In turn, this may result in global investors holding a more cautious stance, albeit still trying to take advantage of much more attractive valuations in some assets.

So far, Mexico has been relatively resilient despite this adverse environment, with an economy supported by strong external demand and some positive signs coming from private consumption, although factoring-in that the country is still at pre-pandemic activity levels. Despite some buffers that could assist Mexico, we must acknowledge that one or several of these global risks could weigh in economic performance in coming quarters. In terms of inflation, the annual reading is at a two-decade high and will likely experience persistent pressures going forward. In this context, the combination of difficult inflation dynamics and more hawkish Fed rhetoric will keep pressuring Banxico to extend its tightening cycle, with a high probability of reaching a 10% reference rate by year-end.

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Winners of the award for best economic forecasters for Mexico in 2021, granted by *Refinitiv*

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Mexico's main macroeconomic and financial forecasts
End of period

	1Q22	2Q22	3Q22	4Q22	2020	2021	2022	2023
GDP (% y/y)	1.8	1.3	2.5	2.7	-8.1	4.8	2.1	1.0
Inflation (% y/y)	7.5	8.0	8.2	8.1	3.2	7.4	8.1	4.1
USD/MXN	19.87	20.12	20.28	20.70	19.91	20.53	20.70	21.80
Banxico's reference rate (%)	6.50	7.75	9.00	10.00	4.25	5.50	10.00	8.50
28-day TIIE (%)	6.72	8.03	9.35	10.35	4.48	5.72	10.35	8.77
Mexbol (points)	56,537	47,524	--	53,500	44,067	53,272	53,500	57,500

Source: Banorte. Underlined data represents our forecasts

Mexico

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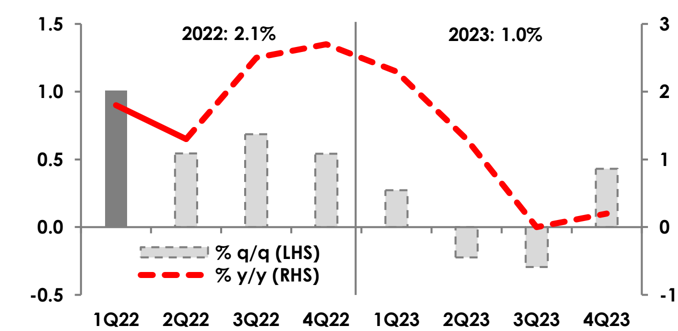
Economic activity is poised to extend its recovery throughout the year despite increased challenges, including a further deterioration of the war in Ukraine, lockdowns in China, higher inflation, and a rebound in COVID-19 cases. Specifically, we see higher than anticipated industrial growth in 2Q22 –both in manufacturing and construction–, and an additional recovery in services. Given this evolution, we revise our forecast for the quarter's GDP, now expecting +0.5% q/q (previous: 0.3%). Nevertheless, we maintain our full-year 2022 estimate at 2.1% y/y, anticipating additional challenges in the second half of the year. Among the most relevant, we identify: (1) Persistent inflationary pressures, impacting businesses' costs and households' real disposable incomes; (2) further tightening of monetary policies globally and locally; and (3) a deceleration in US activity. In addition, recognizing the effect of a more challenging outlook that will probably extend to the following year, we now expect 2023 GDP at 1.0% (previous: 2.0%). The largest impact would come from a deceleration in the US, with heightened fears of a global recession impacting both directly (through exports and manufacturing) and indirectly (remittances and tourism). We believe negative sequential prints could be in store for 2Q23 and 3Q23, with a moderate recovery by the end of the year (see chart below, left).

Regarding prices, we recently revised up our estimates for this year and 2023 to 8.1% and 4.1% y/y, respectively. Our path assumes a high in annual inflation in August close to 8.3%, only breaching 5% to the downside until August 2023. Considering this, as well as our views on activity, Banxico could cut rates in the second half of 2023, expecting it by year-end at 8.50% from 10.00% in December 2022. We believe cuts could begin in September at a pace of -50bps per meeting.

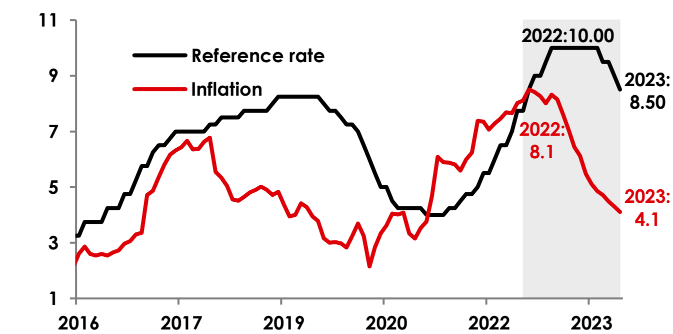
Among the most relevant events in 3Q22, we highlight the meeting between President López Obrador and President Biden on July 12th. In addition, the Ordinary Session of Congress will start on September 1st, with the first efforts concentrated in the 2023 Budget, which by law should be presented no later than September 8th. In addition, representatives from Morena have anticipated that, during this legislative period, they may introduce their electoral reform proposal, as well as the one to incorporate the National Guard to the Ministry of Defense.

GDP
% y/y nsa; % q/q sa



Source: INEGI, Banorte

Inflation and reference rate
% y/y; %



Source: INEGI, Banxico, Banorte

United States

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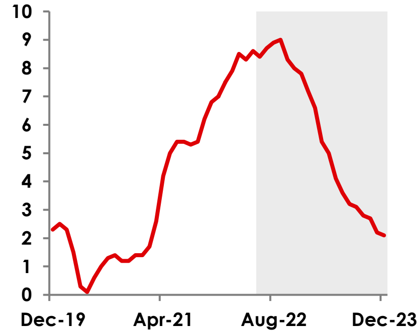
Like the rest of the world, the US faces a complex scenario given the sharp rise in inflation, forcing the central bank to accelerate its rate hiking cycle. With this, fears of a recession have exacerbated. At the same time, we have seen a deterioration in consumer confidence and a slowdown in household spending, which we estimate at 1.2% q/q saar in 2Q22 and at 1.6% for the third quarter. Despite this, the slowdown so far has been gradual, with consumers turning to debt. In particular, the number of credit cards has reached a record, which should be closely monitored given the burden that it could represent in an environment of higher interest rates. On the contrary, according to Bullard from the St. Louis Fed, available resources from the pandemic's stimulus packages have not yet been fully spent, with households maintaining close to 10% of GDP. The savings rate stands at 5.4% despite falling from 33.8% in April 2020. On the other hand, residential and non-residential investment will probably be impacted by the rise in rates and net exports will likely subtract from GDP given the impact of a strong dollar. After the latest data, we adjust our GDP forecast for this year from 2.8% to 2.2%. Furthermore, with a more aggressive tightening cycle, little chances of fiscal stimulus, and a likely global slowdown, we anticipate growth of just 1.4% in 2023 (see table below).

Inflation will hit new highs in coming months, with pressures on energy, food, autos and shelter prices, among the most relevant. We see an average of 8.9% y/y in 3Q22, with the year-end close at 8.0%, still very high. In this backdrop, inflation expectations are quite important, with Fed members expressing growing concerns about a potential de-anchoring. Following the latest FOMC decision, in which the hiking cycle accelerated, we now estimate +75bps in July, followed by +50bps each in September, November, and December. With this, the interest rate would close 2022 in a 3.75% - 4.00% range. This is above market pricing, closer to 3.25% - 3.50%. For 2023, we expect some stability, followed by cumulative cuts of 150bps in the last quarter, reaching 2.25% - 2.50% by December.

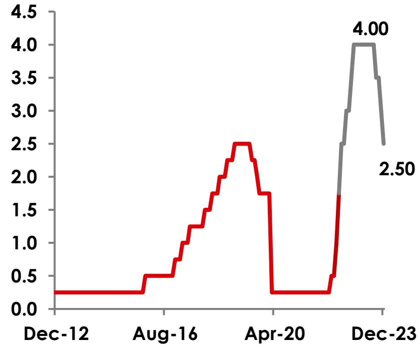
Political tensions will be on the rise ahead of the midterm elections on November 8th, where we expect Democrats to lose control of the House and Senate. This will make it harder to implement fiscal stimulus measures to deal with the economic slowdown.

Inflation forecasts*
% y/y



* Note: Figures from June 2022 to December 2023 correspond to Banorte estimates
Source: Banorte with data from Bloomberg

Upper bound of *Fed funds* rate range*
%



* Note: The estimated hikes for 2022 and 2023 correspond to Banorte estimates
Source: Banorte with data from Bloomberg

US: Banorte Estimates

	1Q22	2Q22	3Q22	4Q22	2022*	2023*
GDP (% q/q annualized rate)*	-1.6	1.5	2.0	1.2	2.2	1.4
Private Consumption	1.8	1.2	1.6	1.8	2.4	1.7
Fixed Investment	7.4	4.1	3.2	3.0	3.8	2.5
Exports	-4.8	2.8	1.6	-1.6	3.0	-1.8
Imports	18.9	10.4	7.4	4.1	12.7	3.0
CPI (% y/y, average)	8.0	8.4	8.9	8.1	8.3	4.0
Unemployment rate (%, eop)	3.6	3.6	3.7	3.9	3.9	4.3
Non-farm payrolls (thousands)	1,616	1,116	670	390	3,792	-643

* Note: All GDP estimates are % q/q saar, except for 2021, and 2022 which is % y/y. eop: end of period.
Source: Banorte

Global

Although the world is facing a new wave of COVID-19 infections due to Omicron –and its strains–, it seems that the population has coped with the idea that it is an endemic disease, and that social and economic activities must continue. However, and unlike other regions, China maintains its 'COVID-zero' policy, exacerbating global supply chain problems due to the country's key role in many industries. Although there are tentative signs that stress on this front have been decreasing, the truth is that the situation remains quite fragile (see first graph, right). In turn, this has kept imbalances between supply and demand. On the other hand, the war between Russia and Ukraine keeps influencing commodity prices. Despite certain relief in June in food and energy prices (see *Commodities* section below), global inflation reached even higher levels in several countries and regions. This has obliged most central banks to accelerate the pace of withdrawal of monetary stimulus measures implemented since the beginning of the pandemic. Intentions to move financial conditions into restrictive territory –or at least to neutrality– are causing additional headaches. Specifically, if inflation does not come down, the world is at least closer to a stagflation scenario. Not only that, but concerns are growing that it may not just result in stagnation, but a global recession. In this sense, international organizations have raised their voices, warning that the latter scenario could trigger political and social unrest in several countries. Thus, policymakers almost everywhere in the world face growing challenges and more limited room for action.

Unfortunately, the war continues and there is no end in sight for the foreseeable future. Among new retaliation measures currently in debate, the G-7 is developing a mechanism to establish a price ceiling on Russian crude-oil. However, some analysts say that Russia has room to cut its production levels without damaging its public finances and the economy. Moreover, a sharp reduction could induce yet another supply shock if it leads to a sharp rise in oil prices, further complicating the global picture for both inflation and economic growth.

In this scenario, the European Central Bank, which had defended a lax monetary policy earlier this year, has shifted gears and given clear signals that it will start its hiking cycle in July. Notwithstanding this, we think that economic conditions in the region will not allow the ECB to be as aggressive as the Fed. In this respect, the ECB's latest statement signaled a 25bp hike. Moreover, they are preparing a mechanism to deal with "market fragmentation". However, June inflation hit a new high of 8.6% y/y (second graph, right). This has raised market speculation of a more aggressive adjustment of 50bps which might not happen in July, but it could yet materialize in September. The scenario for the Eurozone is very complex as it is the region most affected by the war, especially due to its strong dependence on Russia energy. Despite of the above, Lagarde has been clear that the risks of high inflation are greater than those stemming from an economic slowdown. Considering all, we estimate that the deposit rate will close the year at 1.0% and reach 1.5% in 2023, a level that is seen as consistent with a neutral stance.

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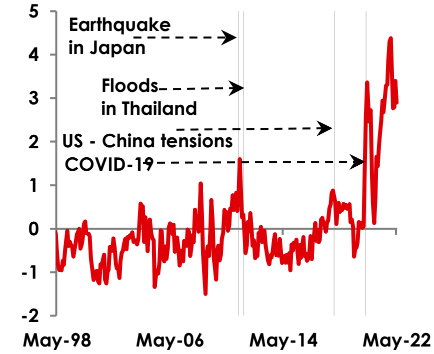
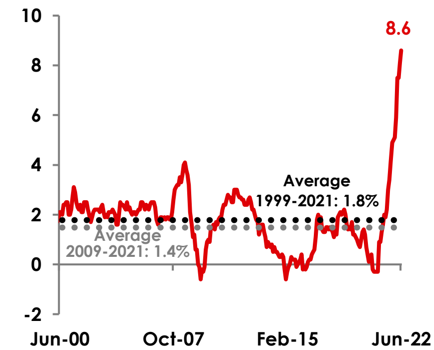
Global Supply Chain Pressure Index*
Standard deviations



* Note: The index includes a series of metrics such as the *Baltic Dry* Index, *Harpex* Index and transportation prices Compiled by the BLS. Values greater than zero indicate higher pressures than the historical average.
Source: Banorte with data from the New York Fed

Eurozone inflation
% y/y



Source: Banorte with data from Bloomberg

Fixed Income (Sovereign Debt)

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The Mbonos' curve flattened more, and even inverted, in 2Q22. Local rates reacted to Banxico's more hawkish stance with a deep sell-off of 105bps at the short-end. Specifically, the market recalibrated towards a more accelerated tightening cycle after Deputy Governor Irene Espinosa's dissenting vote in favor of a +75bps hike on May 12th, event that triggered the inversion of the Mbonos' curve from the 2-year benchmark. With this, the 2s10s spread went to negative territory for the first time in almost three years, reaching historical lows of -63bps and closing June at -35bps.

Attractive valuation in long-term Mbonos. We expect further flattening of the nominal curve for the rest of the year. Short-term rates will continue to be exposed to volatility in a currently complex scenario, without ruling out further negative inflation surprises in the short term. This could induce additional pressures in this segment as the restrictive cycle continues. Mid-term rates are trading at stressed levels, very close to +2σ from their 90-day MA; however, they still have room for higher additional adjustments as they look overvalued. Previously, we flagged there was value in the belly due to the high probability that this segment would invert. At the start of 2Q22, we highlighted the 2s5s spread (+9bps), which effectively shifted to negative, reaching -35bps and closing the month at -12bps. In relative terms, we continue believing that long-term tenors reflect a much more attractive valuation. In the second quarter, the 20- and 30-year benchmarks were impacted by volatility and moved from 8.38% to 9.09% and 8.38% to 8.95%, respectively. This limited us to open directional positions. Nevertheless, we think this segment may become supported by the accelerated pace of central bank hikes and their credibility, starting to contribute to a decline in long-term inflation expectations. In this context and based on the analysis of duration-adjusted yields, we favor longs on Mbono Jul'53 above 9.00%. Also, in the Nov'38, Nov'42, and Nov'47 benchmarks after the adjustment seen in 2Q22, albeit to a lesser extent. On real rates, we still do not see enough relative attractiveness in Udibonos. For example, the 3-year breakeven stands at 4.96%, well above Banxico's target. Given the current backdrop, we have adjusted our estimated path for interest rates, now expecting 28-day TIIE to close the year at 10.35% (previous: 9.85%) and the 10-year Mbono at 8.90% (previous: 8.95%). Furthermore, we expect the 10-year Treasury by year-end 2022 below the 3.00% psychological level, at 2.90% (previous: 3.03%), supported by heightened fears of a global recession. As a result, the local risk premium would hover around 600bps.

Banorte forecasts of benchmark interest rates in the US and Mexico

Security	2018	2019	2020	2021	1Q22	2Q22	3Q22	4Q22
Banxico's reference rate								
End of period	8.25	7.25	4.25	5.50	6.50	7.75	9.00	10.00
Average	7.64	8.05	5.44	4.38	6.00	6.85	8.42	9.50
28-day Cetes								
End of period	8.06	7.30	4.25	5.51	6.47	7.70	9.08	10.08
Average	7.64	7.87	5.33	4.44	5.95	6.99	8.50	9.58
28-day TIIE								
End of period	8.59	7.56	4.48	5.72	6.72	8.03	9.35	10.35
Average	8.00	8.31	5.69	4.63	6.36	7.09	8.73	9.85
10-year Mexican bond (Mbono)								
End of period	8.63	6.85	5.54	7.57	8.24	9.02	8.95	8.90
Average	7.93	7.61	6.25	6.81	7.96	8.89	8.99	8.93
10-year US Treasury								
End of period	2.71	1.92	0.91	1.51	2.34	3.01	3.05	2.90
Average	2.91	2.14	0.88	1.44	1.95	2.92	3.03	2.98
10-year Spread Mex-US								
End of period	592	493	463	606	590	601	590	600
Average	502	547	534	538	601	597	596	595

Source: Bloomberg and PiP for observed data, Banorte for rate forecasts. Underlined numbers indicate forecasts

Foreign Exchange

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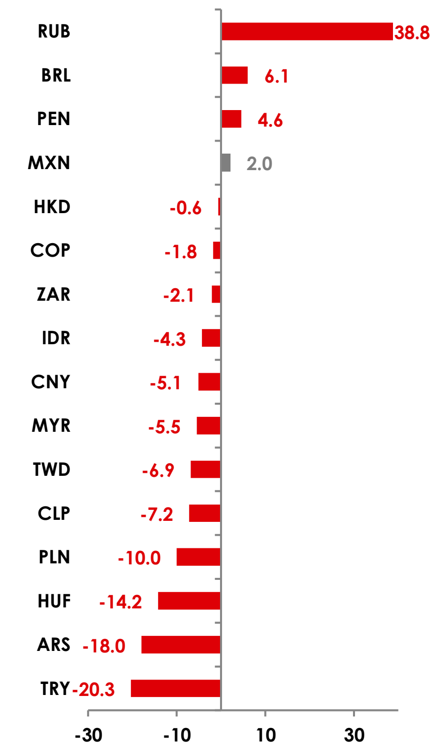
The dollar as a safe haven… In 2Q22, the USD strengthened further after pricing-in the possibility of an accelerated Fed funds rate hike, with appetite for riskier currencies limited as fears of a global recession picked up. Hence, the BBDXY gained 5.7% q/q amid strong volatility. Meanwhile, the MXN continued as one of the most resilient currencies among peers, losing just 1.2%. In our view, this was because of the expectation of further Banxico tightening –in tandem with the Fed– and the absence of idiosyncratic political events, unlike Latam. Nonetheless, trading ranges widened and implied vols increased, although they remained below levels at the beginning of the pandemic. Nevertheless, our fair value model indicates an overvaluation of 7.1%, so the peso remains vulnerable.

...with fears of a global recession keeping it well bid. We hold our view of a structural strengthening of the dollar despite accumulated gains. In our view, a necessary, but not sufficient condition for the USD to pivot, is that the Fed needs to show greater concern about growth and signal a possible end of its tightening cycle. However, we are not there yet, as the market anticipates the Fed funds rate about 50bps below our 3.75% - 4.00%. Adding to the case, despite the complex backdrop and more stressed financial conditions, global USD positioning remains light relative to other periods of stress. We expect further volatility spikes ahead of negative inflation surprises and the war in Ukraine. In Europe, the outlook is weaker, with EUR/USD down 5.3% q/q despite the market recalibrating its view and pricing-in a rate hiking cycle. Given current dynamics and risks, we revise our year-end EUR/USD call from 1.07 to 1.03, with a high likelihood that it will test parity at some point during 2H22.

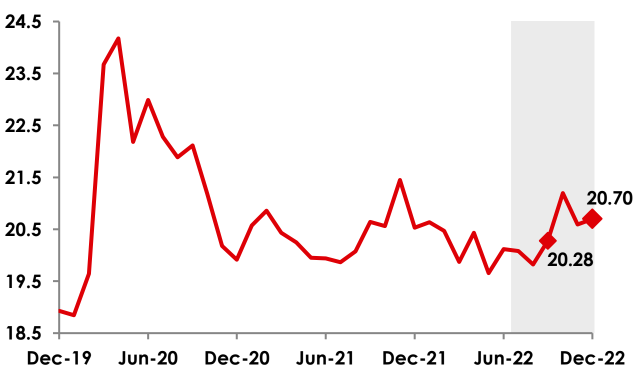
The MXN will keep depreciating gradually. We modify our expected path for USD/MXN, but the year-end remains at 20.70. By December 2023 we see 21.80 vs. 21.25 previously. In the second half of this year, the MXN will stay supported by Banxico's high interest rate and wide spread to the US (estimated at 600bps). In addition, the main tailwinds remains our proximity to the US, positive through exports, remittances and tourism. However, it will be difficult to maintain the peso's overvaluation in the mid-term if local growth doesn't budge higher. We see USD buying attractive below 20.00 per dollar.

EM currency performance
%, YTD



Source: Banorte with data from Bloomberg

USD/MXN
Pesos per dollar



Source: Bloomberg, Banorte

USD/MXN forecasts
Pesos per dollar

Period	End of period	Previous forecast	Forecast	Period Average
1Q21	20.43			
2Q21	19.94			
3Q21	20.64			
4Q21	20.53			
1Q22	19.87			
2Q22	20.11			
3Q22		20.05	20.28	20.06
4Q22		20.70	20.70	20.83

Banorte *Underlined numbers indicate forecasts
Source: Bloomberg,

Stock market indices

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Lower liquidity and recession fears impacting risk appetite. 1H22 has been characterized by significant challenges for economic growth and high stock market volatility. Declines in the main stock indexes have averaged ~16% in US dollars, with significant losses in Europe and Asia. US profit-taking stood out, as even some indexes, such as the S&P500 and Nasdaq, have entered a '*bear market*', defined as a drop of more than 20% since its January peak. A backdrop with high inflationary pressures and more restrictive central banks, particularly the Fed, has led to significant downward revisions in the expected economic performance for both the US and Mexico. This keeps investors concerned about the likelihood of a global recession and, in this case, its possible magnitude. This is key, as it would affect companies' earnings growth. On the other hand, valuations remain below historical averages. Nevertheless, given the significant adjustments we have made to our views on growth and interest rates, we are revising downward the reference levels for the S&P500 and Mexbol. The next few months will be decisive. Until inflation begins to ease, investors will keep facing high volatility, staying cautious on risky positions. The preference for Value companies should persist, and 3Q22 results in the Energy and Industrials sectors will likely stand out. Signs of greater clarity in the environment, and the possibility of the start of easing cycles in 2023 –also faster than anticipated– could lead to less punished valuations.

S&P500 forecast. We cut the reference level to 4,050pts from 4,950pts previously, assuming a P/E *fwd* ratio of 17.0x (consistent with T12M and below our previous estimate of 20.0x, similar to the 5Y average) and 8.5% y/y earnings growth. Although consensus expectations remain at 10.4% y/y, our view is less sanguine as we see potential downward revisions to earnings.

Mexbol forecast. In Mexico, the Mexbol accumulated a 10.8% and 9.1% loss in local-currency and USD in 1H22, respectively. We believe prospects of an additional economic slowdown will impact expected earnings growth, albeit to a lesser extent. Meanwhile, a more restrictive scenario has increased market risk premia and should cap valuations. That said, considering a FV/EBITDA multiple similar to the T12M of 6.7x –below the 3Y average of 7.5x–, expected EBITDA growth of 3.3% y/y and net debt rising 1.2% y/y, we lower our 2022 reference level to 53,500pts vs. 58,000pts previously. Although we believe that the current valuation already discounts our baseline scenario, the evolution of remaining challenges will determine how far multiples can recover. For 3Q22, commodities' dynamics will favor Alfa, Alpek, and Orbia. Higher interest rates should support Gentera's results. Asur and Oma will stand out in Airports. Finally, Liverpool is especially interesting due to its appealing valuation.

S&P 500 forecast for 2022
Pts

P/E fwd	S&P 500 (pts)	Potential Return (%)
17.5x	4,173	9.1
17.3x	4,114	7.5
17.0x	**4,054**	**6.0**
16.8x	3,995	4.4
16.5x	3,935	2.9

Source: Bloomberg, Banorte

Mexbol forecast for 2022
Pts

FV/EBITDA	Mexbol (pts)	Potential Return (%)
7.1x	57,932	20.6
6.9x	55,723	16.0
6.7x	**53,515**	**11.4**
6.5x	51,306	6.8
6.3x	49,098	2.2

Source: Bloomberg, Banorte

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Commodities

Commodity rallies halted by recession fears. The GSCI and BCOM indices recorded their first losses since the beginning of the pandemic at -2.1% and -5.9% q/q, respectively. These adjustments were the result of a collapse in industrial metals' prices, followed by more modest declines in precious metals and grains.

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The balance of risks in the energy market remains to the upside. At the end of 2Q22, commodities were affected by growing fears of a global recession. In June, crude-oil had its first negative month since November 2021, although the price remains high relative to the last 7 years. Thus, Brent closed at 114.8 $/bbl (+6.4% q/q) and WTI at 105.8 $/bbl (+5.5% q/q), extending the 1Q22 rally. Even though OPEC+ has agreed to supply back all the crude-oil withdrawn during the pandemic, balances remain tight. On one hand, supply remains pressured by sanctions on Russian imports, potential cuts in Libya and Ecuador, and doubts about production capacity in most OPEC+ countries. On the other, demand for oil-related goods –such as gasoline and diesel– remains strong, refinery margins are close to record highs, and inventories are low. In this sense, scarcity in the energy market is reflected in the backwardation structure of crude-oil (spot price higher than futures). Considering the US driving season and the hurricane season in the Atlantic –which could impact refineries in Texas and is predicted to be stronger than normal with 65% probability–, in addition to war tensions in Europe, we think the balance of risks remains skewed to the upside. We continue seeing Brent between 95 and 125 $/bbl for the remainder of the year. For other fuels, the EIA estimates the average US gasoline price for 2H22 at 4.20 $/gal vs. its current historical high of 5.00 $/gal; for natural gas, at 2.50 $/MMBtu vs. the 1H22 average of 2.85 $/MMBtu.

Performance in metals was negative, with the highest losses in industrials. Copper collapsed to 17-month lows (-20.4% q/q), with its worst quarter in a decade amid recession fears and China's "COVID-zero" policy. We expect prices to stabilize and gain ground at the margin; however, dynamics will be driven by global economic conditions. In precious metals, gold lost 6.7% due to an increasing carry disadvantage due to tighter central bank policies. Despite this, we expect gold to return towards its 100-day MA at 1,890 $/oz t (current: 1,808), supported by higher risk aversion. Grains lost ground; however, risks persist in the face of blockades at Ukrainian ports that distribute corn and wheat, low inventories, shortages, and high fertilizer costs.

Commodities price performance and market consensus forecasts

Commodity	Unit	Spot*	Performance (%)			Market consensus' forecasts					
			2019	2020	2021	3Q22	4Q22	1Q23	2Q23	2022	2023
WTI	$/bbl	108.43	34.46	-20.54	55.01	103.50	93.50	92.00	87.00	101.46	86.48
Brent	$/bbl	113.50	22.68	-21.52	50.15	100.00	95.00	95.00	90.00	105.18	91.18
Natural Gas (H. Hub)	$/MMBtu	5.73	-25.54	15.99	46.91	6.05	5.52	5.47	4.50	6.11	4.64
Gasoline (RBOB)	$/gal	3.69	0.28	-0.17	0.58	3.65	3.49	3.37	3.45	3.53	3.35
Gold	$/t oz	1,808	18.31	25.12	-3.64	1,900	1,883	1,850	1,825	1,893	1,866
Silver	$/t oz	19.99	15.21	47.89	-11.72	23.75	23.50	23.00	23.00	23.72	22.97
Copper	$/mt	8,006	3.50	25.79	25.17	9,900	9,817	9,292	9,167	10,000	9,208
Corn	¢/bu	755	3.40	24.82	22.57	795	740	730	680	740	648
Wheat	¢/bu	831	11.03	14.63	20.34	1,150	1,017	900	826	1,033	801

Source: Bloomberg *Last closing price; RBOB (Reformulated gasoline blendstock for oxygenate blending)

Corporate Debt

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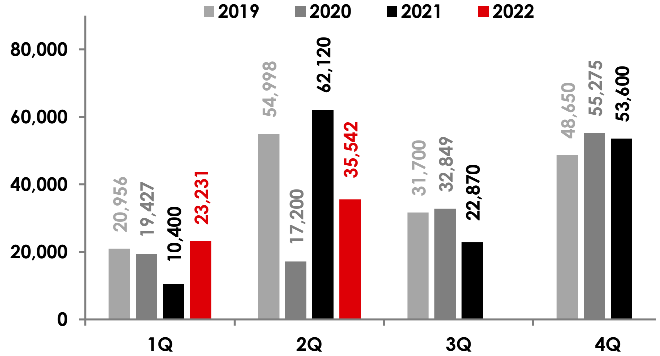
In 1H22, corporate debt market placements declined (-19.0% y/y to MXN 58.8 billion) due to a difficult base effect (record month of issuances in May 2021). Despite the backdrop of higher interest rates and global liquidity withdrawal, we expect greater dynamism for the third quarter of the year. However, it is likely that bondholders will remain cautious, exacerbated by fears of a global recession and, thus, in businesses' financial health. By June-end, 82% of the amount issued and bought had the highest local-scale credit ratings ('AAA/AA+'). Moreover, preference for unsecured bonds was notable with 89.1% of the issued amount, while Asset Backed Securities (ABS) accounted for 10.9%. Floating-rate notes (TIIE-28 and O/N TIIE) represented 68.8%, followed by fixed rates with 28% and real fixed rates with 3.2%. Given this scenario, these trends probably are likely to linger around.

Specifically, for 3Q22 we expect more placement activity vs. 3Q21, based on the current pipeline. We forecast the preference to remain on unsecured securities with high credit ratings, focused on bonds from issuers on "more secure" sectors (*e.g.* Food, Consumer Discretionary, and Federal Agencies) in a risk aversion environment. Also, we expect lower ABS placements, after a slight rebound in the first semester. With central banks leaning towards more restrictive cycles because of inflation pressures, investors will keep showing greater appetite for floating-rate notes with shorter tenors. In this context, we reiterate our issuance forecast to a level close to MXN 165.0 billion for year-end 2022, which would imply 11% annual growth.

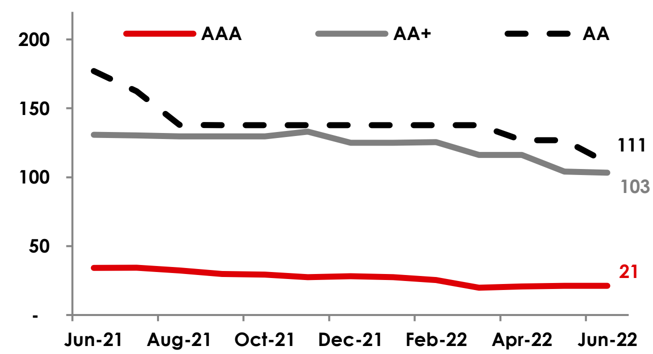
Regarding spreads, credit rating samples stand at slightly lower levels than those seen before the pandemic, with high bid-to-cover ratios in auctions. This meant that premium rates at issue date went down, as well as spreads of the rest of the bond universe (-13bps for 'AAA' and -27bps for 'AA+' y/y). For the rest of 2022, we expect further adjustments that could continue this downward path, following the trend seen in recent months. This is a consequence of strong demand for highly rated notes and ample liquidity among corporate debt investors, a very positive thing in an ever more challenging scenario.

Issued amount by quarter, long-term
Million pesos



Source: Banorte / BMV / BIVA / PiP

Spreads – Unsecured 28-day TIIE
Bps



Source: Banorte, BMV, PiP. As of June, 2022

Quantitative Analysis

Nowcasting Mexico's Economic Activity. Information about Mexico's current economic outlook is essential for successful decision-making. However, a problem with Mexico's macroeconomic data is that key economic indicators are available with a significant delay.

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One of the most relevant among them is the IGAE (Global Economic Activity Indicator), which allows to monitor Mexico's growth dynamics. However, despite the IGAE's usefulness as a good monthly GDP proxy –since it covers around 95% of Mexico's GDP in one month– it has a 56-day lag.

Hence, we developed a model that produces a nowcast of IGAE's growth, using high-frequency financial and transactional data, as well as incorporating a wide range of macroeconomic information as soon as it becomes available. With this approach, we aim to read the real-time flow of information and evaluate its effects on current economic conditions.

As already mentioned, IGAE's strongest weakness is its 56-day lag. Our nowcast model has a high accuracy forecasting IGAE's growth just 13 days after the end of the month. Our model also gives us a fair estimate of IGAE's economic growth just one day after the end of each month.

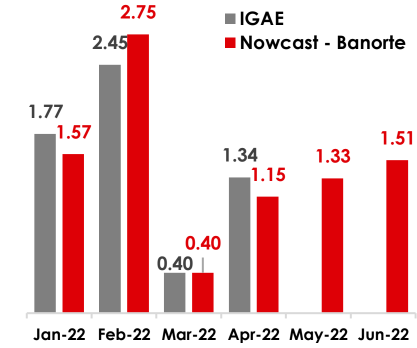
We estimate the model using MIDAS regressions, which allows us to use high frequency data. To preserve parsimony, we also use factor analysis techniques to summarize the information from 300 daily financial and transactional series.

With this approach, **our goal is to have an accurate and timely diagnosis of Mexico's economic growth** and to assess its effects on current economic conditions. We highlight that our model has been shown to be more accurate than other market forecasts, and even improves on the predictive power of other nowcast indicators, such as INEGI's Timely Indicator of Economic Activity (IOAE).

Our model forecasts:

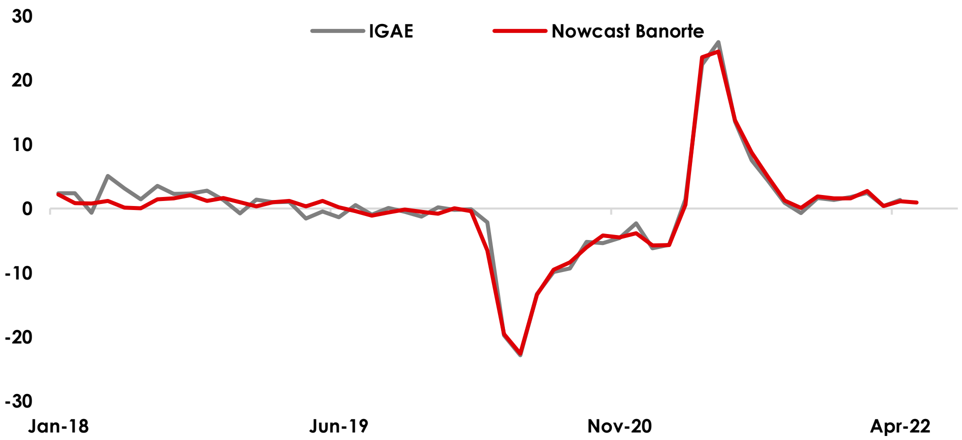
- A 1.33 y/y nsa expansion in May's economic activity; and
- A 1.51% y/y nsa growth in June's output

IGAE vs Nowcast Banorte
% y/y



Source: Banorte

IGAE vs Nowcast Banorte
% y/y



Source: Banorte

Quantitative Analysis

Fed monetary policy. We developed a machine learning (ML) model, which uses Natural Language Processing (NLP) techniques to: (1) Achieve an objective interpretation about the Fed's monetary policy statements; (2) measure its language coherence; and (3) predict the terminal rate of the current restrictive monetary cycle.

The language contained in the Fed's monetary policy statements can reveal trends and some future perspectives regarding the Fed's monetary policy and the US economic outlook. Taking this into account, the ML model developed in this essay enables us to extract valuable information and understand objectively the future decisions of the central bank.

We analyzed the last 325 monetary policy statements (from 1978 to 2022) to achieve the above-mentioned goals. Using NLP techniques, we grouped each of these statements in 23 'central topics', given that every topic derived from the unsupervised learning model is explained by a set of words which prioritizes their importance in each statement. It is important to highlight that these models allow us to classify if any of the statements departs from its main semantic.

The main result of using these NLP techniques within our ML model is that the semantic classification obtained from every statement shows a significant relationship with the federal funds rate (refer to the chart below). The most relevant discovery is that our model explains at least 91% of target rate movements and establishes sound and effective ranges for future FOMC decisions.

After June's meeting, our model classified the statement to a topic that anticipates the terminal rate's upper bound will stand between 3.5% and 4%. We highlight that the model also confirms that the Fed's communications are coherent with their monetary policy actions.

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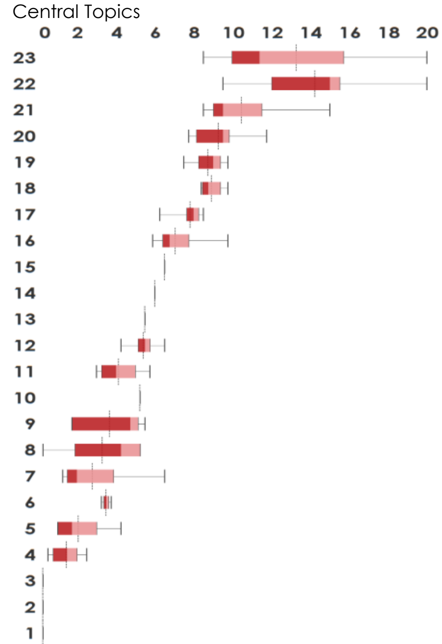
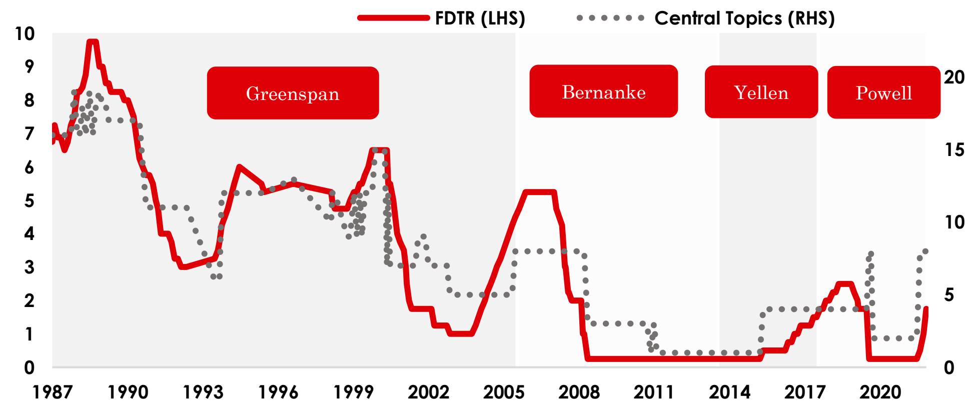
Fed Fund Rate
Central Topics



Source: Banorte, Federal Reserve and Bloomberg

Banorte's Topic Index vs. Fed's Upper Bound
%; central topics



Source: Banorte, Federal Reserve and Bloomberg

Quantitative Analysis

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Nowcasting Model for Mexico's Private Consumption. The current international macroeconomic environment has exposed EM economies to supply and demand shocks. The COVID-19 pandemic, the war between Russia and Ukraine, inflationary pressures, and the rise in interest rates have led policymakers to require economic indicators that can provide a better and timely framework for better decisions.

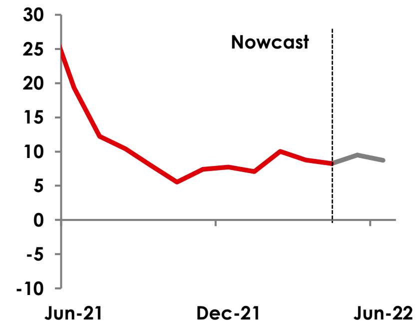
Private consumption is one of Mexico's main economic indicators. In 1Q22, it represented approximately 50.9% of Mexico's GDP. The behavior of this variable gives a good approximation of the joint trajectory of relevant economic activities, such as: (1) Retail sales; (2) recreational services; (3) restaurant services; (4) transportation services; (5) real estate leasing services; (6) medical services, and (7) mobile and internet services, among others.

INEGI's private consumption indicator is published with a 66-day lag after the reference period. At Banorte, we have developed a nowcasting model that allows us to monitor private consumption's current growth dynamics in real-time. This model is specified through Principal Components Analysis, using SARIMAX regressions that incorporates a set of predictive variables whose information is already available.

To estimate the model, we use traditional data that includes demand for gasoline and diesel, employment, mobility indicators, transactions and operations with credit/debit cards, as well as other data related to private consumption, such as the CPI and PPI. Finally, US economic data was also incorporated, such as CPI and the Industrial Production Index (INPRO). The model was validated throughout the first quarter of '22 and currently has an estimation error of 49bps when compared to INEGI's official indicator.

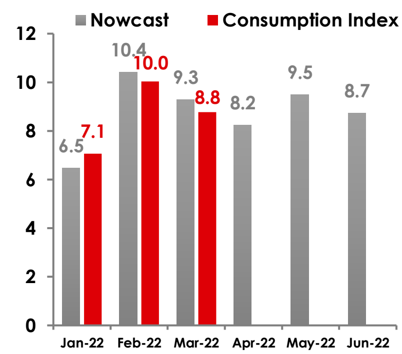
The nowcasting model estimates that private consumption grew at 8.2%, 9.5%, and 8.7% y/y (nsa) in April, May, and June, respectively. It follows that in 2Q22, private consumption posted 8.8% growth. Our growth forecast implies that many consumer activities will show better growth dynamics and will exceed pre-pandemic levels, partly attributed to lower COVID-19 cases, the reactivation of several economic activities, and domestic sales strategies such as the Hot Sale campaign and Mother's Day. Moreover, it also suggests that these consumption activities have not yet been seriously affected by inflationary pressures or interest rates.

Mexico´s private consumption
%, y/y



Source: Banorte, with data from INEGI

Nowcasting model vs. official statistics
%, y/y



Source: Banorte, with data from INEGI

Recent research notes

Mexico

- *Banxico – We expect a 10% reference rate by year-end,* June 23, 2022, <pdf>
- *1H-June inflation – Now seeing higher price increases for longer given the difficult backdrop,* June 23, 2022, <pdf>
- *1Q22 GDP – We reiterate our 2.1% full-year forecast after an upward revisión,* May 25, 2022, <pdf>
- *Fitch affirms Mexico 'BBB-' rating, with a stable Outlook,* May 17, 2022, <pdf>
- *Plan against inflation – Actions to mitigate further pressures in basic goods' prices,* May 4, 2022, <pdf>
- *2023 Preliminary Budget Criteria – Fiscal outlook still favorable despite relevant changes,* April 4, 2022, <pdf>
- *FDI – Inflows of US$31.6 billion in 2021, up 8.7% y/y,* February 22, 2022, <pdf>
- *S&P maintains Mexico's rating at 'BBB', with a negative outlook on fiscal and GDP challenges,* December 7, 2021, <pdf>
- *Minimum wage – 22% increase in 2022,* December 2, 2021, <pdf>
- *Banxico – Victoria Rodríguez is nominated as next Governor,* November 24, 2021, <pdf>
- *The IMF renews Mexico's Flexible Credit Line for a new two-year term*, November 22, 2021, <pdf>
- *Moody's affirms Mexico rating on a prudent fiscal stance and the impulse from the US,* April 29, 2021, <pdf>

Fixed-Income, FX, and Commodities

- *Fixed-Income and FX Weekly,* July 4, 2022, <pdf>
- *OPEC+: All crude-oil withdrawn during the pandemic returns to the market*, june 30, 2022 <pdf>
- *3Q22 Auction Calendar: Lower amounts in Mbonos and Udibonos*, june 30, 2022, <pdf>
- *New 30-year Mbono Jul'53 syndicated auction results*, june 29, 2022, <pdf>
- *Pension Funds Outlook – May 2022,* June 20, 2022, <pdf>
- *Profit taking on 2-year TIIE-IRS payer,* March 4, 2022, <pdf>
- *New levels to protect profits in our trade idea of paying 2-year TIIE-IRS,* February 16, 2022, <pdf>
- *MoF - Refinancing operation in the euro market,* February 8, 2022, <pdf>
- *The MoF issued USD bonds and refinanced its external debt,* January 5, 2022, <pdf>
- *Mexico announces global USD bond offering and public offering,* January 4, 2022, <pdf>
- *MoF's Financing Plan 2022: Active liability management reduced financing requirements,* December 28, 2021, <pdf>
- *Collective release of crude oil reserves,* November 23, 2021, <pdf>
- *New Development Bonds indexed to the TIIE funding,* Bondes F, August 18, 2021, <pdf>

Equities

- *Flash: Alfa calls a Shareholders' Meeting to spin-off Axtel,* June 27, 2022, <pdf>
- *Flash GENTERA: 2022 Guidance to the upside,* June 9, 2022, <pdf>
- *AIRPORTS: Growth in passengers' moderates,* June 7, 2022, <pdf>
- *Flash: VOLAR, Strong demand and increased capacity boost passengers in May*, June 2, 2022, <pdf>
- *Flash: 'Orbia Day', value creation and a vertically growth strategy*, May 18, 2022, <pdf>
- *Flash OMA: Dividend proposal with a 3.9% yield,* April 4, 2022, <pdf>
- *Flash AMX: Shareholder's remuneration proposal of up to 4.0% return,* March 23, 2022, <pdf>
- *Flash LIVEPOL: Cash dividend with a 1.7% yield,* March 14, 2022, <pdf>
- *Flash ASUR: Dividend proposal with a 3.8% yield,* March 11, 2022, <pdf>
- *Flash FEMSA: Proposes dividend with a 2.0% yield,* March 7, 2022, <pdf>
- *Flash ALFA: 2022 Guidance,* February 21, 2022, <pdf>
- *Flash ALPEK: 2022 Guidance,* February 21, 2022, <pdf>
- *Flash CEMEX: Digital innovation for strengthening competitive advantages,* February 8, 2022, <pdf>
- *Flash ALPEK: Agrees to buy Octal,* February 1, 2022, <pdf>
- *Flash ALFA: Sigma continues to sell non-core assets,* January 12, 2022, <pdf>
- *Flash PINFRA: Will propose a dividend with a 4.6% yield*, January 10, 2022, <pdf>

Corporate Debt

- *Corporate Bond Market Review: May 2022*, June 6, 2022, <pdf>
- *PEMEX – Better results on higher crude oil prices*, May 2, 2022, <pdf>
- *MoF announced strategy to support PEMEX*, December 6, 2021, <pdf>
- *Moody's downgrades PEMEX's ratings; outlook remains negative*, July 28, 2021, <pdf>
- *PEMEX received an additional fiscal credit of MXN 73.3 billion,* February 22, 2020, <pdf>
- *Effects of the pandemic in 2020,* December 17, 2020, <pdf>
- *Credit Ratings Tutorial,* December 17, 2020, <pdf>
- *Pemex's assets exchange for Federal Government Development Bonds*, December 15, 2020, <pdf>

Note: All our publications are available in the following link.

Recent trade ideas

Trade idea	P/L	Initial date	End date
Pay 2-year TIIE-IRS (26x1)	P	4-Feb-22	4-Mar-22
Tactical longs in Mbono Mar'26	P	14-May-21	7-Jun-21
Receive 6-month TIIE-IRS (6x1)	P	17-Dec-20	3-Mar-21
Long positions in Udibono Nov'23	L	11-Feb-21	26-Feb-21
Long positions in Mbono May'29 & Nov'38	P	7-Sep-20	18-Sep-20
Long positions in Udibono Dec'25	P	23-Jul-20	10-Aug-20
Long positions in Udibono Nov'35	P	22-May-20	12-Jun-20
Long positions in Mbono May'29	P	5-May-20	22-May-20
Tactical longs in 1- & 2-year TIIE-28 IRS	P	20-Mar-20	24-Apr-20
Long positions in Udibono Nov'28	P	31-Jan-20	12-Feb-20
Long positions in Udibono Jun'22	P	9-Jan-20	22-Jan-20
Long positions in Mbono Nov'47	L	25-Oct-19	20-Nov-19
Long positions in Mbonos Nov'36 & Nov'42	P	16-Aug-19	24-Sep-19
Long positions in the short-end of Mbonos curve	P	19-Jul-19	2-Aug-19
Long positions in Mbonos Nov'42	L	5-Jul-19	12-Jul-19
Long positions in Mbonos Nov'36 & Nov'38	P	10-Jun-19	14-Jun-19
Long positions in Mbonos Jun'22 & Dec'23	P	9-Jan-19	12-Feb-19
Long floating-rate Bondes D	P	31-Oct-18	3-Jan-19
Long CPI-linkded Udibono Jun'22	L	7-Aug-18	31-Oct-18
Long floating-rate Bondes D	P	30-Apr-18	3-Aug-18
Long 20- to 30-year Mbonos	P	25-Jun-18	9-Jul-18
Short Mbonos	P	11-Jun-18	25-Jun-18
Long CPI-linkded Udibono Jun'19	P	7-May-18	14-May-18
Long 7- to 10-year Mbonos	L	26-Mar-18	23-Apr-18
Long CPI-linkded Udibono Jun'19	P	20-Mar-18	26-Mar-18
Long 5- to 10-year Mbonos	P	5-Mar-18	20-Mar-18
Long floating-rate Bondes D	P	15-Jan-18	12-Mar-18
Long 10-year UMS Nov'28 (USD)	L	15-Jan-18	2-Feb-18

P = Profit, L = Loss

Track of directional fixed-income trade recommendations

Trade idea	Entry	Target	Stop-loss	Closed	P/L	Initial date	End date
Long Udibono Dec'20	3.05%	2.90%	3.15%	3.15%	L	9-Aug-17	6-Oct-17
5y10y TIIE-IRS steepener	28bps	43bps	18bps	31bps	P[2]	15-Feb-17	15-Mar-17
5y10y TIIE-IRS steepener	35bps	50bps	25bps	47bps	P	5-Oct-16	19-Oct-16
Long Mbono Jun'21	5.60%	5.35%	5.80%	5.43%	P	13-Jul-16	16-Aug-16
Long Udibono Jun'19	1.95%	1.65%	2.10%	2.10%	L	13-Jul-16	16-Aug-16
Receive 1-year TIIE-IRS (13x1)	3.92%	3.67%	4.10%	3.87% [1]	P	12-Nov-15	8-Feb-16
Long spread 10-year TIIE-IRS *vs* US Libor	436bps	410bps	456bps	410bps	P	30-Sep-15	23-Oct-15
Receive 9-month TIIE-IRS (9x1)	3.85%	3.65%	4.00%	3.65%	P	3-Sep-15	18-Sep-15
Spread TIIE 2/10 yrs (flattening)	230bps	200bps	250bps	200bps	P	26-Jun-15	29-Jul-15
Long Mbono Dec'24	6.12%	5.89%	6.27%	5.83%	P	13-Mar-15	19-Mar-15
Relative-value trade, long 10-year Mbono (Dec'24) / flattening of the curve					P	22-Dec-14	6-Feb-15
Pay 3-month TIIE-IRS (3x1)	3.24%	3.32%	3.20%	3.30%	P	29-Jan-15	29-Jan-15
Pay 9-month TIIE-IRS (9x1)	3.28%	3.38%	3.20%	3.38%	P	29-Jan-15	29-Jan-15
Pay 5-year TIIE-IRS (65x1)	5.25%	5.39%	5.14%	5.14%	L	4-Nov-14	14-Nov-14
Long Udibono Dec'17	0.66%	0.45%	0.82%	0.82%	L	4-Jul-14	26-Sep-14
Relative-value trade, long Mbonos 5-to-10-year					P	5-May-14	26-Sep-14
Receive 2-year TIIE-IRS (26x1)	3.75%	3.55%	3.90%	3.90%	L	11-Jul-14	10-Sep-14
Receive 1-year TIIE-IRS (13x1)	4.04%	3.85%	4.20%	3.85%	P	6-Feb-14	10-Apr-14
Long Udibono Jun'16	0.70%	0.45%	0.90%	0.90%	L	6-Jan-14	4-Feb-14
Long Mbono Jun'16	4.47%	3.90%	4.67%	4.06%	P	7-Jun-13	21-Nov-13
Receive 6-month TIIE-IRS (6x1)	3.83%	3.65%	4.00%	3.81%	P	10-Oct-13	25-Oct-13
Receive 1-year TIIE-IRS (13x1)	3.85%	3.55%	4.00%	3.85%	--	10-Oct-13	25-Oct-13
Long Udibono Dec'17	1.13%	0.95%	1.28%	1.35%	L	9-Aug-13	10-Sep-13
Receive 9-month TIIE-IRS (9x1)	4.50%	4.32%	4.65%	4.31%	P	21-Jun-13	12-Jul-13
Spread TIIE-Libor (10-year)	390bps	365bps	410bps	412bps	L	7-Jun-13	11-Jun-13
Receive 1-year TIIE-IRS (13x1)	4.22%	4.00%	4.30%	4.30%	L	19-Apr-13	31-May-13
Long Udibono Jun'22	1.40%	1.20%	1.55%	0.97%	P	15-Mar-13	3-May-13
Receive 1-year TIIE-IRS (13x1)	4.60%	4.45%	4.70%	4.45%	P	1-Feb-13	7-Mar-13
Long Mbono Nov'42	6.22%	5.97%	6.40%	5.89%	P	1-Feb-13	7-Mar-13
Long Udibono Dec'13	1.21%	0.80%	1.40%	1.40%	L	1-Feb-13	15-Apr-13
Receive 1-year TIIE-IRS (13x1)	4.87%	4.70%	5.00%	4.69%	P	11-Jan-13	24-Jan-13
Receive TIIE Pay Mbono (10-year)	46bps	35bps	54bps	54bps	L	19-Oct-12	8-Mar-13
Spread TIIE-Libor (10-year)	410bps	385bps	430bps	342bps	P	21-Sep-13	8-Mar-13
Long Udibono Dec'12	+0.97%	-1.50%	+1.20%	-6.50%	P	1-May-12	27-Nov-12
Long Udibono Dec'13	+1.06%	0.90%	+1.35%	0.90%	P	1-May-12	14-Dec-12

1 Carry + roll-down gains of 17bps

2. Closed below target and before the proposed horizon date due to changes in market conditions that have differed from our expectations.

Short-term tactical trades

Trade Idea	P/L*	Entry	Exit	Initial Date	End date
Long USD/MXN	P	19.30	19.50	11-Oct-19	20-Nov-19
Long USD/MXN	P	18.89	19.35	20-Mar-19	27-Mar-19
Long USD/MXN	P	18.99	19.28	15-Jan-19	11-Feb-19
Long USD/MXN	P	18.70	19.63	16-Oct-18	3-Jan-19
Short USD/MXN	P	20.00	18.85	2-Jul-18	24-Jul-18
Long USD/MXN	P	19.55	19.95	28-May-18	4-Jun-18
Long USD/MXN	P	18.70	19.40	23-Apr-18	14-May-18
Long USD/MXN	P	18.56	19.20	27-Nov-17	13-Dec-17
Long USD/MXN	L	19.20	18.91	6-Nov-17	17-Nov-17
Long USD/MXN	P	18.58	19.00	9-Oct-17	23-Oct-17
Short USD/MXN	L	17.80	18.24	4-Sep-17	25-Sep-17
Long USD/MXN	P	14.40	14.85	15-Dec-14	5-Jan-15
Long USD/MXN	P	13.62	14.11	21-Nov-14	3-Dec-14
Short EUR/MXN	P	17.20	17.03	27-Aug-14	4-Sep-14
Short USD/MXN	L	12.70	13.00	26-Jul-13	21-Aug-13

Source: Banorte

Track of the directional FX trade recommendations*

Trade Idea	Entry	Target	Stop-loss	Closed	P/L*	Initial Date	End date
Long USD/MXN	18.57	19.50	18.20	18.20	L	19-Jan-18	2-Apr-18
Long USD/MXN	14.98	15.50	14.60	15.43	P	20-Mar-15	20-Apr-15
Short EUR/MXN	17.70	n.a.	n.a.	16.90	P	5-Jan-15	15-Jan-15
Short USD/MXN	13.21	n.a.	n.a.	13.64	L	10-Sep-14	26-Sep-14
USD/MXN call spread**	12.99	13.30	n.a.	13.02	L	6-May-14	13-Jun-14
Directional short USD/MXN	13.00	12.70	13.25	13.28	L	31-Oct-13	8-Nov-13
Limit short USD/MXN	13.25	12.90	13.46	--	--	11-Oct-13	17-Oct-13
Short EUR/MXN	16.05	15.70	16.40	15.69	P	29-Apr-13	9-May-13
Long USD/MXN	12.60	12.90	12.40	12.40	L	11-Mar-13	13-Mar-13
Long USD/MXN	12.60	12.90	12.40	12.85	P	11-Jan-13	27-Feb-13
Tactical limit short USD/MXN	12.90	12.75	13.05	--	--	10-Dec-12	17-Dec-12
Short EUR/MXN	16.64	16.10	16.90	16.94	L	03-Oct-12	30-Oct-12

** Total return does not consider carry gain/losses*

*** Low strike (long call) at 13.00, high strike (short call) at 13.30 for a premium of 0.718% of notional amount*

Analyst Certification

We, Alejandro Padilla Santana, Juan Carlos Alderete Macal, Alejandro Cervantes Llamas, Manuel Jiménez Zaldívar, Marissa Garza Ostos, Katia Celina Goya Ostos, Francisco José Flores Serrano, José Luis García Casales, Víctor Hugo Cortes Castro, José Itzamna Espitia Hernández, Carlos Hernández García, Leslie Thalía Orozco Vélez, Hugo Armando Gómez Solís, Yazmín Selene Pérez Enríquez, Miguel Alejandro Calvo Domínguez, Daniela Olea Suárez, José De Jesús Ramírez Martínez, Gerardo Daniel Valle Trujillo, Luis Leopoldo López Salinas, Isaías Rodríguez Sobrino, Paola Soto Leal, Oscar Rodolfo Olivos Ortiz, Daniel Sebastián Sosa Aguilar and Salvador Austria Valencia, certify that the points of view expressed in this document are a faithful reflection of our personal opinion on the company (s) or firm (s) within this report, along with its affiliates and/or securities issued. Moreover, we also state that we have not received, nor receive, or will receive compensation other than that of Grupo Financiero Banorte S.A.B. of C.V for the provision of our services.

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Guide for investment recommendations.

	Reference
BUY	*When the share expected performance is greater than the MEXBOL estimated performance.*
HOLD	*When the share expected performance is similar to the MEXBOL estimated performance.*
SELL	*When the share expected performance is lower than the MEXBOL estimated performance.*

Even though this document offers a general criterion of investment, we urge readers to seek advice from their own Consultants or Financial Advisors, in order to consider whether any of the values mentioned in this report are in line with their investment goals, risk and financial position.

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