November 2, 2018 12:42 PM GMT

Mexico Sovereign Credit Strategy | Latin America

MEXCAT: Mapping the Path Ahead

MORGAN STANLEY & CO. LLC
Simon Waever
STRATEGIST
Simon.Waever@morganstanley.com +1 212 296-8101

We expect the bonds to remain weak and do not recommend buying the recent weakness yet. Longer term we see upside by working through various restructuring scenarios, yet there is too much uncertainty, plus downside from rating agencies. We recommend switching out of MEXCAT 2026 into 2046.

Anticipate a negotiated settlement: Our base case is that we end with a negotiated settlement between bond holders and the government that results in full repayment. For instance, a 50% cash repayment in one year's time combined with a sinkable schedule of 3% principal repayment per year (i.e., over 34 years) would result in a cash price of 89 under the assumption of an exit yield of 6.5%, or 85 at 7.5%, both higher from current levels.

However, time is crucial: First, negotiations are unlikely to be quick given logistical issues, legal issues and a new administration which does not have all the details (and isn't even in power yet). Second, risks are that the upfront cash payment is much smaller than 50% despite recent statements from the incoming administration that budget resources could be used.

Bear case scenario would bring material downside: There is also a bear case scenario in which either side digs in, which may very well end in a protracted legal argument. In this case, our initial read is that creditors would be at a disadvantage given it would come down to the ability to realise the value of the collateral which is uncertain. Of course, such a scenario would have negative repercussions on the wider Mexico investment climate yet it has clearly been wrong to underestimate such scenarios so far.

Technicals matter: Downside risks due to ratings are in particular important due to the likely large holdings by crossover investors and the fact that Moody's already downgraded by two notches. Both S&P and Fitch are now on negative outlooks and multiple-notch downgrades have not been excluded yet they want to await the new administration actually coming in.

We expect a flat priced curve for now: We think the curve will trade flat in price terms unless the unlikely scenario materialises where the building of NAICM is allowed to continue. Privatization of the concession is not impossible and should also see bonds recover over time yet only after digesting selling due to dropping out of EMBI benchmarked funds in and potentially also IG funds.

Recommend switching out of MEXCAT 2026 into MEXCAT 2046: In a downside scenario we think the prices will converge from the current near 5-point differential. In an upside scenario the one-year average price difference stands at 5 as well. Meanwhile, as uncertainty persists, the 2046 has a higher coupon.

Sovereign credit strategy: Mapping the path ahead

A different path ahead? We have published extensively on the impact of the recent announcement from the incoming administration that the building of the New Mexico City International Airport (NAICM) will be canceled following the results of the consultation. This includes both taking a more cautious view before the consultation (see Mexico Economics & Strategy: In a Holding Pattern (17 Oct 2018) and after (see Mexico Strategy and Economics: Mexico's Plan B Airport Receives Hard Landing, 30 Oct 2018). In the following we take a deeper look at the implications for the MEXCAT bonds.

Will the bonds default?

No default for now…: Canceling the new airport (NAICM) does not in itself constitute an event of default for the bonds (see table below for a summary of all default events). Clearly it could eventually end up in a default if bond payments are not made, any adverse changes are made to the amount, alterations are made with respect to the ability to collect or ownership of the passenger fees (TUA) or if the sponsor GACM ceases to be majority owned by the government (privatization).

…yet not a stretch to get there: The other event of default to watch out for is the 7th one listed below which relates to the concession being suspended, revoked or terminated leading to a material adverse effect. This clause may be vague enough to not trigger in case the current airport continues and potentially Santa-Lucia is added. However, we find it hard to believe that terminating the building of the airport that the bonds were specifically issued to finance would not be a material adverse event.

From the 2028/2047 OM:

Each of the following events, acts, occurrences or conditions, will constitute an event of default under each series of Existing Notes
Failure to pay principal on any Existing Note when it becomes due or failure to **pay interest on any existing Note within 30 days** after it becomes due
A **misrepresentation** by us or any of the Sponsors under any of the Project Agreements
Failure to comply with certain **covenants** under the Existing Indentures
An **insolvency** or similar procedure with respect to us or any of the Sponsors
Our or the Sponsors' **failure to make a payment under any indebtedness or guarantee having an aggregate principal amount of more than US$150,000,000,** or the acceleration of such indebtedness
Final judgments against us in an aggregate amount exceeding US$150,000,000 or nonmonetary judgments that could reasonably be expected to have, individually or in the aggregate, a material adverse effect
The **Sponsors' failure to comply with the material terms of the Concessions or if any of them is suspended, revoked or terminated or amended in a manner that could reasonably be expected to have a material adverse effect**
Any **Sponsor ceases to be directly or indirectly majority owned and controlled by the Mexican federal government**
A **violent political or civil disturbance that causes the cessation of a material part of the operation of the Airports or a material damage to the Sponsors' assets**, if as a result of such event, the projected debt service coverage ratio determined on the basis of projected passenger traffic at the Airport is less than 1.15 to 1.00
Certain **expropriation events with respect to the Concessions, the Collateral or the Airports**
A **declaration of moratorium** that lasts for more than 10 days
9 different clauses that deal with the passenger fees (TUA) and the relationship detailed in the Projet Agreement and Security Trust. In short, any adverse changes to the amount, ability to collect, ownership of the TUA is an event of default. This includes **not being the sole person allowed to collect the TUA**, **TUA determined/published in other currency than US dollar**, **inability to deliver TUA to Security Trust** and **reduction in the international or domestic tariff**.

The path to avoiding default: While any of the above events of default can lead to an acceleration if triggered by at least 25% of holders, a simple majority of holders can also waive most of these defaults (the exception is an amendment related to the amount and/or extending timing of either interest and/or principal which needs all holders to agree). Additionally, this means that in theory default can be avoided in a scenario where there is a negotiated transfer to Santa Lucia. Not only is this required to avoid the potential default clauses above, but it would also be needed to amend the definition of the "New Airport" since, without this, potential TUA payments from Santa Lucia would not be included since this is not defined as the "New Airport".

That said, while it may be possible to amend all above provisions in the indentures, in the end it would seem easier, at least from a contractual standpoint, to completely rewrite the documents with whatever ends up being a the agreed plan going forward. In other word, there could end up being a bond exchange (more below in the scenarios).

Setting out scenarios

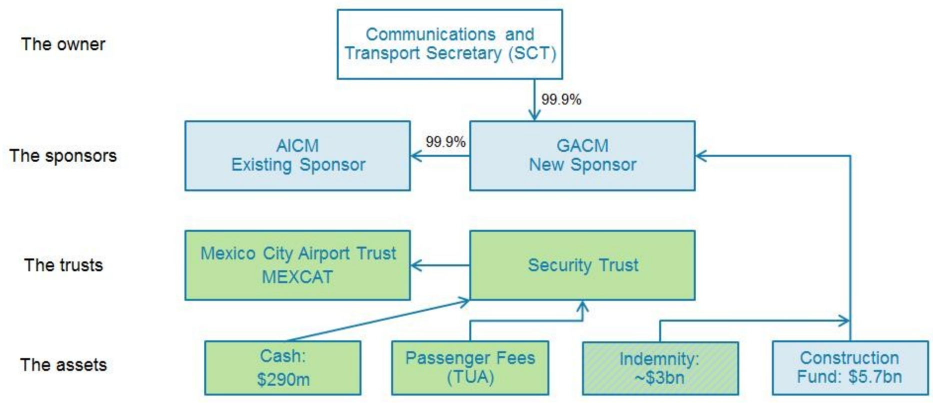
What has transpired over the past few days was expected by very few, including the current - and likely even parts of the incoming - administration. Multiple outcomes, solutions and costs have come up, but, in short, we think it's much too early for the incoming administration to have fully grasped all the details that will need to be worked through, on the legal, construction and expenditures sides. To us, the only clear take-aways are that the incoming administration seems intent on canceling the new airport, sees the new Santa Lucia site as perfectly feasible and, importantly, wants to reassure investors and contractors that everyone will be treated fairly. While this last point should contain any further significant weakness for now, it's likely to be a complex process from here. In the following, we outline the different scenarios we see as possible and their impact on the bonds.

1) Unwinding of structure and repaying bonds

Given that the project the bonds were issued to finance is being canceled, this may seem like the obvious solution. The incoming administration has even noted that there would be enough cash and assets available to repay bond holders, including making use of budget resources. It's, however, unlikely to be as simple as this.

We provide a simplified overview of the financing structure and available assets in the below exhibit (Exhibit 1). The assets where there is the least uncertainty, is the cash held by the security trust (MXN5.8bn as of end June 2018, or US$290 million) and the collateral itself, the TUA. Then there is also the reportedly MXN115 billion or US$5.7 billion held in an escrow trust, funded by the debt issuance and to be used for the construction. Our understanding is that bond holders do not have the right to this cash, at least not directly. Our assumption would be that this cash is first used to repay contractors, which could be around US$2.32 billion according to the CEO of GACM, Patino. After that it would be up to the government to determine how the funds are used. They could be used to repay bonds but they could also go towards potentially funding the building of Santa Lucia airport. Another source of funds would potentially be the compensation payments from the government to the concessionaire GACM in case the concessions are revoked. The amount would be equal to the amount already invested which CEO Patino put at around US$3 billion and, importantly, this should be used to prepay debt according to the indenture. The final source would simply be from the budget itself as alluded to by advisors from the new administration in recent days.

Exhibit 1: Not all assets are immediately available to MEXCAT bond holders



Source: GACM, Morgan Stanley Research

In a very optimistic scenario the government may repay the bonds in full, yet this seems unlikely. A more realistic scenario is for there to be a combination of an upfront cash amount together with an amortizing structure that will depend on future TUA payments. We map out where we see the bonds on aggregate trading in various scenarios further down.

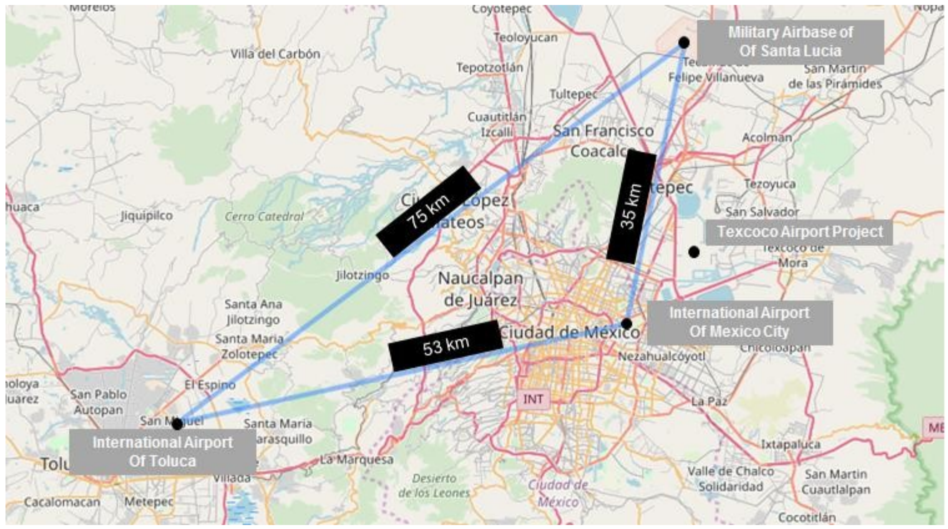
The incoming administration is hinting at this being the most likely approach yet until they know the full details this cannot be said for sure. Additionally, even if this does become the base case, it's likely to be a complex and time consuming process given it will involve negotiations with both contractors and debt holders. It would nonetheless likely be seen as a relatively positive outcome with bond prices moving higher from current prices.

2) Negotiated transfer to Santa- Lucia

The government's chosen option: It seems clear that the government's intention is to scrap the building of the new airport (NAICM) and instead move to a trio of airports consisting of the current airport (NAIM) and expanded airports at Santa Lucia and Toluca. The above scenario involving repayment of bonds can of course also involve the new trio of airports, with a TUA from Santa Lucia airport potentially making the repayment period shorter. A TUA from Toluca seems less likely given this airport is only half owned by the government. However, another scenario is that bond documentations are amended so that this becomes the new project the bonds are supporting, meaning there is no up-front cash payment and coupon payments simply continue as normal. A clean exchange would probably be more likely yet whether this is realistic is another issue.

Financing still an issue: With this alternative option the government may be willing to provide a larger share of the remaining funding. This was even suggested by the incoming administration in which case this would need to be included in the 2019 budget proposal. Alternatively, further market funding could be sought yet this may prove to be difficult, not only because of the negative investor perception of the project but also because there are limits to how much further bonded debt or Fibra E issuance can be issued due to already pledged revenues. The cost of this alternative project has been estimated at MXN100 billion pesos by the incoming administration yet with Mexico's Civil Engineering College (CICM) warning that it could reach as high as MXN280 billion (MXN217 billion for the airport and MXN63 billion for access works). Finally, in addition to the costs of building the amended airport project, there would also be the cancellation costs from stopping NAICM. The independent think tank IMCO and NAIM themselves have estimated these at between US$6-6.5 billion dollars, with up to half in penalties and non-recoverable expenses

Exhibit 2: New trio of airports are far apart



Source: Google maps

Feasibility also an issue: From the contractors' point of view it is not obvious that everyone will be willing to simply switch works to the new airport. Instead, some may prefer to take the route of suing the government, a process which is likely to slow the move down. Recent comments suggest domestic contractors may feel obliged to go along with changes, yet this may not be the case for foreign ones. Assuming this plan goes ahead, instead of one airport there could now be three (existing AICM, Santa Lucia and Toluca) which would all be more than 40 kilometers from each other. While capacity constraints may therefore be alleviated over time, it is unlikely to offer the same growth as the NAICM. The incoming administration has noted that the new set-up would have capacity for 60-70 million passengers per year. This compares to 57mn under phase 1 of NAICM and 125 million under phase 2. While it is not unusual for larger cities to have multiple airports, there would also be risks to whether passengers and airlines would fully take advantage of this potential set-up. For instance, would passengers want to have connecting flights via different airports? Finally, there have also been questions raised around whether the airspace can actually be shared between these airports.

Assessing bond holder willingness: Amendments approved by a majority or a bond exchange could help this scenario work out. However, the question is whether bond holders actually want to make this switch. First, it will likely take a long time until it's fully decided how the cancelation is dealt with. Second, the logistics highlighted above are an issue, so it would seem clear that this is a worse alternative with less scope for passenger growth. Third, the current bonds are green. As far as we know, there has been no determination whether this alternative set-up would also be green. Given these downsides, the government would have to provide some incentive to switch.

An upside with this scenario is that the government could provide the remaining funding needs. However, this is more than offset by all the above risks. In the end, this would be a worse and riskier set-up than the initial plan involving NAICM. This means bonds should not trade back to previous levels pre-cancelation. However, if there ends up being a successful transfer, bonds should end up at tighter levels than today. We detail specific prices further down (see next section).

Pricing scenarios 1 and 2

Scenario 1 and 2 outlined above can in the end be combined into a restructuring analysis. We see the main drivers of the value depending on how much is repaid up front as a cash payment and how much of the TUA can be used to repay bonds over time. For the upfront cash payments, we vary from 100% (repaid entirely) to 0%. Note that we assume these are made one year out to account for uncertainty around negotiations. For the rest of the repayment we set out two scenarios. In one, the entire TUA is used to repay bonds. In other words, the coupons continue to be paid as usual but with the remaining excess cash flow used to pay down the principal over time. Note that this would clearly disadvantage the Fibra E which depends on this excess cashflow. We therefore lay out a second scenario where there is a fixed repayment of 3% of the initial principal every year. This means that over time there will also be excess cash flow that can be used to repay the Fibra Es. We set it at 3% since 4% would not be covered by current TUA while 2.5% would make it a 40y repayment period which would likely be too long for investors to accept. These determinations would also have to be made jointly with the covenants to make sure debt service coverage ratios are properly managed.

Note that for all this analysis we use our existing cautious assumption of zero passenger growth, given capacity constraints at the existing airport, and a domestic TUA which is unchanged while the international TUA increases in line with US CPI as prescribed in the indentures. This does leave the potential for upside in case the Santa Lucia option actually becomes a working concern and adds to passenger growth and hence TUA. Yet, we think this would seem like a bull case.

Finally, to simplify the analysis we collapse all four bonds into one claim with a coupon of 5.02% which is equivalent to the weighted average. While an argument can be made that the 2026 bond holders should perhaps be paid a higher amount of cash up front compared to the 30y bonds, we see a bond maturing 8 years out as being far enough out to not warrant special treatment.

The final input needed to arrive at a fair value is to make an assumption where the so-called exit yield would be for each scenario. We run numbers for yields of 5.5%, 6.5% and 7.5%. 7.5% is slightly higher than current yields and would be in an adverse scenario while 5.5% would be back to the lows and probably less likely.

Exhibit 3: Scenario analysis on potential MEXCAT restructuring

5.5% Post Restructuring Yield

	Entire TUA		3% annual repay	
Cash upfront	PV	Years	PV	Years
0	91.47	17	90.27	34
25	92.81	12	91.80	25
50	93.69	8	93.10	17
75	94.19	4	94.02	9
100	94.36	1	94.36	1

6.5% Post Restructuring Yield

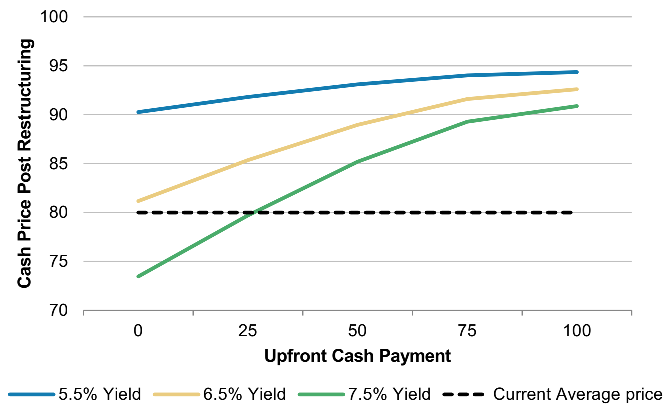
	Entire TUA		3% annual repay	
Cash upfront	PV	Years	PV	Years
0	84.30	17	81.17	34
25	88.08	12	85.36	25
50	90.64	8	88.97	17
75	92.11	4	91.60	9
100	92.59	1	92.59	1

7.5% Post Restructuring Yield

	Entire TUA		3% annual repay	
Cash upfront	PV	Years	PV	Years
0	77.90	17	73.46	34
25	83.72	12	79.70	25
50	87.74	8	85.19	17
75	90.09	4	89.29	9
100	90.88	1	90.88	1

Source: NAIM, Bloomberg, Morgan Stanley Research. See our earlier piece for more details on passenger and TUA projections. Cash upfront is the amount upfront paid to bond holders by end 2019. Entire TUA means all of the TUA is used to pay down bond holders, while 3$ annual repay means 3% of the initial principal is paid down every year. PV is the present value of the cash flows, discounted by the noted yield, years is the time until all has been repaid.

Exhibit 4: Current average bond price vs. restructuring scenarios under various exit yield assumptions under the 3% annual principal repayments scenario



Source: NAIM, Bloomberg, Morgan Stanley Research

3) Privatization / Selling the concession

We saw this as a possible outcome ahead of the consultation as it would mean the government would not have to provide any further funding. However, given the strong result against the new airport and seemingly detailed plans around the use of the three existing airports, the chances of privatization have reduced materially, in our view. That said, we would not assign zero chance, particularly given that the investment could look attractive to the other private airport operators in the country. The downsides are that this option would take time and would also trigger default under the bonds since the concession would no longer be majority government owned. While the default clause could presumably be waived through a majority vote, technical downside to bonds would remain. No longer being fully government owned means that ratings would lose the government support uplift and potentially even drop below IG given that Moody's stand-alone credit rating is BB+. This would come in addition to the bonds dropping out of EMBI indices as a result of losing government ownership.

In this scenario, near-term uncertainty would remain and selling pressure could materialize if it becomes clear that the bonds will lose IG and drop out of EMBI indices. However, over time this could end up a positive outcome if the current airport starts operations and is effectively managed by a private operator.

4) Hostile stance towards creditors

Such a stance would further deteriorate the investment narrative of Mexico and thus suggests this would be an unlikely situation. However, this was also the argument against a "no" in the consultation, so it's a scenario that should be considered. In short, it would appear that the creditors have limited options to force the government's hand given that the bonds are not guaranteed by the sovereign. Any remedies under the indenture will be limited to the collateral (the TUA collections) and any cash on hand (the US$290 million). However, foreclosing on this collateral will be far from easy, as indeed detailed in the offering memorandum, and the rights cannot be sold on either without the approval of the government.

While a tail risk, this is the worst case scenario and could see significant downside in the bonds. At this point, it would become a distressed valuation exercise dependent largely on the perceived collateral value which would be challenging to determine, particularly given that it is the government that is in charge of setting the TUA levels. This would open up significant further downside.

5) Airport continues as it is - with private funding

Given this would represent a complete reversal this is now the least likely scenario. Arguments can be made that the consultation is not binding, brings legal uncertainty and should thus be rejected, as indeed noted by the head of the Business Coordination Council (CCE). This is also the stance of the current administration and the airport operators who have said that operations will continue as normal until the end of November. In this case, private funding would need to be raised via a combination of additional debt issuances, bank loans, Fibra E, concessions and land sales and potentially a transfer TUA.

In this scenario, spreads should retrace most but not all the recent weakness, with the 10y spread over sovereign trading back to around 80bp-100bp. This is still wide to the previous tights but would be warranted, in our view, due to (1) the deterioration in fundamentals if additional debt is raised; and (2) the potential for a reversal in policies.

What about the Fibra E? The Fibra E is a hybrid equity-like instrument that was used to raise US$1.6 billion dollars earlier this year. It targets a specific real return in MXN with the cash flows also coming from the TUA but subordinated to the bond payments. Specifically, only after certain tests have been made, the Fibra E holders are paid a share of the distributable cash flows. Normally these would be 39% starting in 2021, yet in a cancellation scenario this would increase to 80% of distributable cash flows and begin the following year. This should in theory mean that they are repaid much faster. However, in a scenario in which passenger capacity does not increase materially, and bond holders are paid first, the amount of distributable cash flow would likely fall.

Ratings impact: As with most of Mexico's recent sovereign, quasi-sovereign and corporate IG rated bond issues, participation is likely to have been high by IG-only funds. This means that the path of the rating will play an important role in how the technicals impact the prices of the MEXCAT bonds. This is particularly the case following Moody's already downgrading by two notches to leave the rating only just inside IG with Baa3. However, there is still a negative outlook and no changes have been made to the rating due to changing fundamentals of the airport. For now the two-notch downgrade was solely due to a lower perception of government support (from very high to moderate). While this means that further downgrades from Moody's would likely only come in December when the new administration has the powers to make actual changes, it nonetheless leaves risks skewed to a HY rating from Moody's in a scenario in which leverage metrics worsen at the current airport.

Both Fitch and S&P have placed their BBB+ ratings on negative watch but do not want to make any changes before more information is available. That said, Fitch appears more negative, noting that discontinuation of the new airport would cap airport volume growth, and when added to uncertainty, it could result in a multiple-notch downgrade. It also mentioned that even just the absence of meaningful progress in a few months may result in a downgrade, possibly below IG.

S&P appears less negative as it doesn't want to act before the new administration comes in while it also never factored the new airport into its rating framework in the first place. That said, it still notes a 50% chance of a downgrade in the coming 90 days if the odds of an event of default being triggered increase.

If one or even both downgrade by two notches, this is very likely to lead to some selling ahead of an anticipated loss of IG.

Strategy implications

In short, we expect the bonds to trade weak from here and do not recommend buying into the recent weakness. Longer term we see potential upside by working through various restructuring scenarios, yet there is too much uncertainty at this point in addition to downside from ratings. At a bond level, we recommend switching out of the front-end MEXCAT 2026 into the long-end MEXCAT 2046. Here is why:

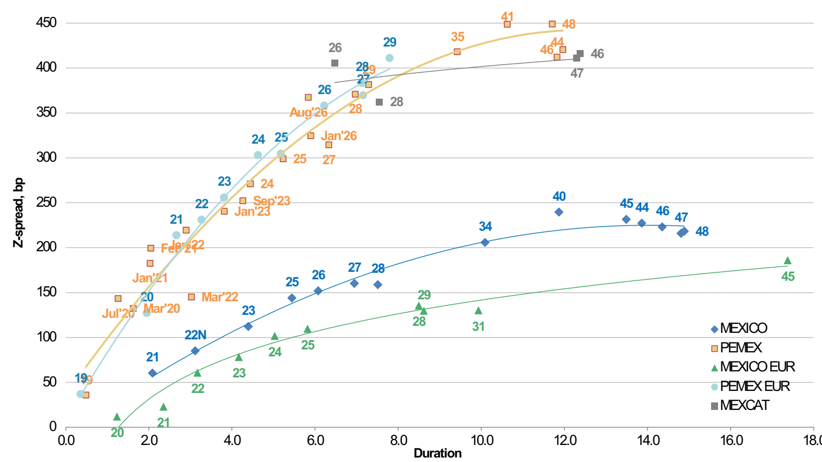
- Our base case is that we end with a negotiated settlement between bond holders and the government that results in full repayment.
- For instance, a 50% cash repayment in one year's time combined with a sinkable schedule of 3% principal repayment per year (so over 34 years) would result in a cash price of 89 under the assumption of an exit yield of 6.5%, or 85 at 7.5%, both higher from current levels.
- However, time is crucial. First, negotiations are unlikely to be quick given logistical issues, legal issues and a new administration which does not have all the details (or is even in power yet). Second, risks are that the upfront cash payment is much smaller than 50% despite recent statements from the incoming administration that budget resources could be used.
- There is also a bear case scenario in which either side digs in which may very well end in a protracted legal argument. In this case, our initial read is that creditors would be at a disadvantage given it would come down to the ability to realise the value of the collateral which is uncertain. Of course, such a scenario would have negative repercussions on the wider Mexico investment climate yet it has clearly been wrong to underestimate such scenarios so far.
- Finally, technicals also matter, with downside risks due to ratings in particular important due to the likely large holdings by crossover investors and the fact that Moody's already downgraded by two notches. Both S&P and Fitch are now on negative outlooks and multiple-notch downgrades have not been excluded yet they want to await the new administration actually coming in.

- We think the curve will trade flat unless the unlikely scenario materialises where the building of NAICM (the new airport) is allowed to continue. Privatization of the concession is not impossible and should see bonds recover over time, yet only after digesting selling due to dropping out of EMBI benchmarked funds in and potentially also IG funds.

- We recommend switching out of MEXCAT 26 into MEXCAT 46 on a notional neutral basis. In a downside scenario we think the prices will converge from the current near 5 point differential. In an upside scenario the one-year average price difference stands as 5 as well, even though there is scope for the short end to outperform in the very near term if the curve steepens. Meanwhile, as uncertainty persists, the 46 has a higher coupon. Note that we prefer the 46s to 47s purely for technical reasons, as the 47s larger issue size leaves it with potential for more selling, even though coupons are the same and they should be closely tracking each other in the end.

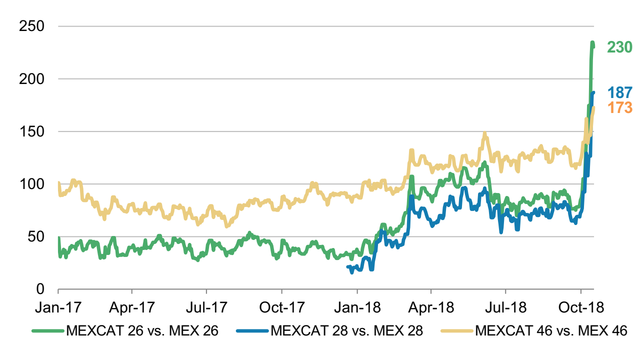
- For the Mexico complex overall, we maintain our dislike stance and expect spreads to widen across MEX, MEXCAT and PEMEX. We think MEXCAT can trade wide to PEMEX as indeed the front-end bonds are already doing given the lower level of government support. The outlook for PEMEX will depend on the budget in early December.

Exhibit 5: MEXCAT curve has inverted



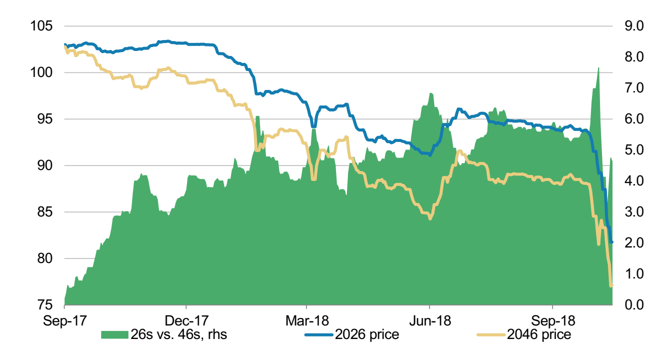
Source: Bloomberg, Morgan Stanley Research

Exhibit 6: MEXCAT spread vs. sovereign at record wides



Source: Bloomberg, Morgan Stanley Research

Exhibit 7: Expect prices to converge in an adverse scenario



Source: Bloomberg, Morgan Stanley Research

Exhibit 8: Valuation methodology and risks

Trade	Date	Entry Level	Target	Stop	Rationale	Risks
Dislike Mexico Hard Currency Bonds	29-Oct-18	NA	NA	NA	We expect risk premium to remain high to account for the uncertainty around future policy-making. Positioning has also become heavier.	Investor-friendly budget, and pragmatic policy actions around the quasis Pemex and Mexcat.
Switch out of MEXCAT 2026 into MEXCAT 2046 (notional basis)	2-Nov-18	4.8	0	8	Expect bond prices to converge in a downside scenario while 5 points is still in line with the one year average. Higher carry in long-end	Different treatment in a potential restructuring

Source: Morgan Stanley Research

Exhibit 9: History of recommendations for MEXCAT 2026

Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re-assess	Size of Trade or Unit/Notional	CUSIP / ISIN / BLOOMBERG	Gross P&L BP	Gross P&L US$K
MEXCAT 4.250 10/31/2026	31-Oct-26	Buy Mexcat 26 vs. Pemex Jan'26	25-Jun-18	-18bp	11-Jul-18	-68bp	-65bp	10bp	US$10m	USP6629MAA01	50bp	294k
PEMEX 4.500 01/23/2026	31-Oct-26	Buy Mexcat 26 vs. Pemex Jan'26	25-Jun-18	-18bp	11-Jul-18	-68bp	-65bp	10bp	US$10m	US71654QBW15	50bp	294k

Source: Morgan Stanley Research

Exhibit 10: History of recommendations for Mexico hard currency bonds

Trade	Entry Date	Exit Date
Dislike Mexico Hard Currency Bonds	09-Apr-18	24-Sep-18

Source: Morgan Stanley Research

Definition of terms

Buy/Long: The analyst expects the total or excess return (depending on the nature of the recommendation) of the instrument or issuer that is the subject of the investment recommendation to be positive over the relevant time period.

Sell/Short: The analyst expects the total or excess return (depending on the nature of the recommendation) of the instrument or issuer that is the subject of the investment recommendation to be negative over the relevant time period.

Selling protection or Buying Risk: The analyst expects that the price of protection against the event occurring will decrease over the relevant time period.

Buying protection or Selling Risk: The analyst expects the price of protection against the event occurring will increase over the relevant time period.

Pay: The analyst expects that over the specified time period the variable rate underlying the swap agreement that is the subject of the investment recommendation will increase.

Receive: The analyst expects that over the specified time period the variable rate underlying the swap agreement that is the subject of the investment recommendation will decrease.

Like: Based on current market conditions as of the date of this report the analyst expects that the relevant securities of the issuer that is subject of the recommendation will perform favorably over the relevant time period as compared to the overall market of comparable securities by other issuers. This is not intended to be, nor should it be interpreted as a formal fundamental rating of the issuer or its creditworthiness.

Dislike: Based on current market conditions as of the date of this report the analyst expects that the relevant securities of the issuer that is subject of the recommendation will perform favorably over the relevant time period as compared to the overall market of comparable securities by other issuers. This is not intended to be, nor should it be interpreted as a formal fundamental rating of the issuer or its creditworthiness.

Unless otherwise specified, the time frame for recommendations included in the Morgan Stanley Fixed Income Research reports is 1 - 3 months and the price of financial instruments mentioned in the recommendation is as at the date and time of publication of the recommendation.

When more than one issuer or instrument is included in a recommendation, analyst expects one part of the trade to outperform the other trade or combination of other trades included in the recommendation on a relative basis.

For important disclosures related to the proportion of all investment recommendations over the past 12 months that fit each of the categories defined above, and the proportion of issuers corresponding to each of those categories to which Morgan Stanley has supplied material services, please see the Morgan Stanley disclosure at https://ny.matrix.ms.com/eqr/article/webapp/a5cdea6a-d95a-11e8-9388-71fc4ae660a6?ch=rpint&sch=ar

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.
For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.
For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Simon Waever.
Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictpolicies.

Important US Regulatory Disclosures on Subject Companies

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from PETROLEOS MEXICANOS, Mexico.
Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from PETROLEOS MEXICANOS.
Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: PETROLEOS MEXICANOS, Mexico.
Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: PETROLEOS MEXICANOS, Mexico.
The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.
Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.
Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Global Stock Ratings Distribution

(as of October 31, 2018)
The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm.
For disclosure purposes only (in accordance with NASD and NYSE requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

STOCK RATING CATEGORY	COVERAGE UNIVERSE COUNT	COVERAGE UNIVERSE % OF TOTAL	INVESTMENT BANKING CLIENTS (IBC) COUNT	IBC % OF TOTAL IBC	IBC % OF RATING CATEGORY	OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC) COUNT	MISC % OF TOTAL OTHER MISC
Overweight/Buy	**1157**	**37%**	**305**	**42%**	**26%**	**544**	**39%**
Equal-weight/Hold	**1380**	**44%**	**335**	**46%**	**24%**	**632**	**45%**
Not-Rated/Hold	**47**	**1%**	**7**	**1%**	**15%**	**7**	**0%**
Underweight/Sell	**553**	**18%**	**82**	**11%**	**15%**	**220**	**16%**
TOTAL	**3,137**		**729**			**1403**	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

Analyst Stock Ratings

Overweight (O or Over) - The stock's total return is expected to exceed the total return of the relevant country MSCI Index, on a risk-adjusted basis over the next 12-18 months.
Equal-weight (E or Equal) - The stock's total return is expected to be in line with the total return of the relevant country MSCI Index, on a risk-adjusted basis over the next 12-18 months.
Not-Rated (NR) - Currently the analyst does not have adequate conviction about the stock's total return relative to the relevant country MSCI Index on a risk-adjusted basis, over the next 12-18 months.
Underweight (U or Under) - The stock's total return is expected to be below the total return of the relevant country MSCI Index, on a risk-adjusted basis, over the next 12-18 months.
Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.
Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.
Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Important Disclosures for Morgan Stanley Smith Barney LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at www.morganstanley.com/online/researchdisclosures. For Morgan Stanley specific disclosures, you may refer to www.morganstanley.com/researchdisclosures.
Each Morgan Stanley Equity Research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval is conducted by the same person who reviews the Equity Research report on behalf of Morgan Stanley. This could create a conflict of interest.

Other Important Disclosures

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of MEXICO CITY AIRPORT TRUST, PETROLEOS MEXICANOS, Mexico. Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions.
Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.
Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at http://www.morganstanley.com/matrix.
Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at http://www.morganstanley.com/matrix.
Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (http://www.morganstanley.com/terms.html). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (http://www.morganstanley.com/terms.html). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html).
If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies