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EM Sovereign Credit Strategy | Global

2019 GDP Warrants Outlook

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While we are constructive on the bonds in both Argentina and Ukraine in 2019, we expect the GDP warrants in both to lag due to growth concerns. Comparing the two warrants, there is much more value in Ukraine and it should indeed trade higher in coming months. The Argentina warrant is not a buy.

Warrant structures favour Ukraine... Ukraine benefits from no overall caps, a GDP level trigger that should be exceeded in 2019 and more generous payout terms. In Argentina, overall payouts are capped while potential annual payments are also lower. The Argentine warrant also still faces the unresolved legal uncertainty around the Real_GDP_Base level.

...as do fundamentals: Argentina has entered into yet another recession and is unlikely to emerge before 2H19, yet even 2020 is unlikely to see growth above 3%Y, meaning no payment is triggered. However, if a payment is triggered under our bull case scenario for 2020 with 4%Y growth, the payment would be 2.7 in warrant price terms. Meanwhile, Ukraine's recent years of macro stability should see the nominal GDP in US dollars exceed US$125.4 billion in 2019, the first year that can trigger payment. That said, reaching 3%Y growth in Ukraine has been surprisingly hard and we expect 2019 and 2020 to miss the 3%Y growth target. Assuming a payment is trigged in 2019 with 3.5%Y growth the payout would be 2.50, increasing to a significant 25 under 5.5%Y growth.

Valuations more balanced yet with Ukraine again more attractive: In Argentina, versus the current price of 4, our macro base case implies valuations of 7.2 for the USD warrant and 9.6 in a bull case, using the positive ratio scenario. This is below previous estimates and shows the damage that two years of recession has on payouts. In a negative ratio scenario, prices can fall to 2 or even less, which matters since we think this should be priced with as high as a 50% probability. In Ukraine, compared to a current price of 55, our model suggests valuations should be in a range of 64-104 assuming long-term growth of 2.5-3% and volatility of growth of 3-3.5%. The high sensitivity to volatility explains the wide ranges.

Ukraine the clear winner, yet we still see bonds as the better investment: The Argentina warrants do not look attractive despite trading near record lows. There are simply too many headwinds. Sentiment should improve from current depressed levels yet we think this is better played via the bonds. Ukraine warrants' risk/reward looks attractive and should perform well in the following months if our constructive scenario on the budget, IMF and funding disbursements plays out. However, if forced to pick between the warrants and the bonds, we would stick with the bonds due to their high carry, our expectation that neither 2018 and 2019 growth will end up above 3%Y, unlike consensus, and finally our reservations about the longer-term outlook for Ukraine. See 2019 EM Fixed Income Outlook for more details on the bonds.

GDP warrants into 2019

The past six months have not been kind to the two main GDP warrants in the EM space, with Argentina's down 54% and Ukraine's down 21%. Despite Argentina's GDP warrant trading near record lows at 3, the outlook looks challenging, driven not only by the growth outlook but also the continued legal uncertainty. Ukraine's GDP warrants are by no means near lows but at 55 valuations do look attractive versus our scenarios. In the following, we review the different talking points for these two warrants heading into 2019, starting with the conditions needed to trigger payments before looking at the actual payment amounts and overall valuations.

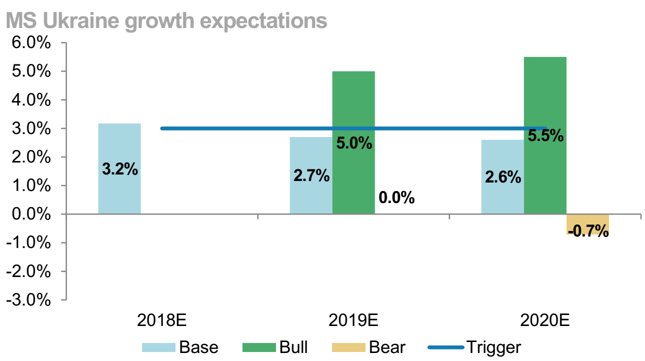
Condition 1: Annual growth of 3%

Both warrants happen to have the same trigger of 3% for annual year-on-year growth.

In Ukraine, we expect growth of 3.2%Y in 2018, higher than 3%Y for the first time since 2011. Unfortunately, the first reference year is 2019 which means no payment is possible for 2018. Looking ahead, our economist forecasts growth at 2.7%Y in 2019 and 2.6%Y in 2020, meaning there would be no payment trigger in these years. That said, undershooting the 3%Y target by 30bp is not much given the historical volatility of Ukraine's GDP. Indeed, our economist has a bull case of 5%Y in 2019, with upside risks mainly coming from a market-friendly election outcome and stronger EU growth. A trigger in 2019 is therefore possible. See 2019 CEEMEA Macro Outlook.

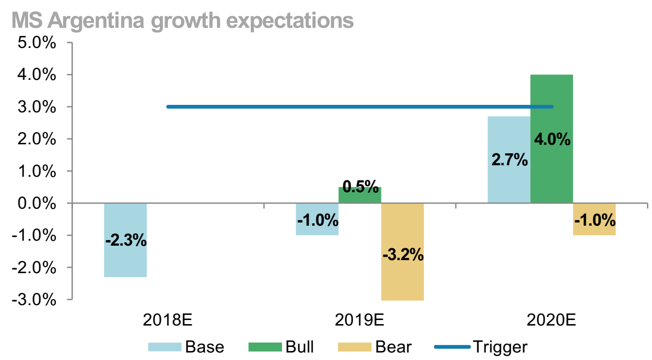
In Argentina, growth is clearly very far from reaching the 3%Y level, with 2018 likely to see growth fall by 2.3%Y before falling another 1%Y in 2019. Our economists only expect growth to return to positive territory in 2020 with 2.7%Y. In the bull case, growth reaches 0.5%Y in 2019 before rebounding strongly to 4%Y in 2020, which would clearly trigger. Upside risks come from a stable FX leading to disinflation occurring faster than anticipated and interest rates falling sooner than expected, helping to revitalise the economy. Overall, the first potential realistic trigger is therefore 2020, even if not our base case. See 2019 LatAm Macro Outlook.

Exhibit 1: Ukraine growth to fall just short of the 3%Y trigger in 2019 and 2020



Source: Morgan Stanley Research forecasts

Exhibit 2: Argentina to fall well short of the 3%Y trigger in 2019, with 2020 expected to miss as well



Source: Morgan Stanley Research forecasts

Condition 2: The outright level of GDP

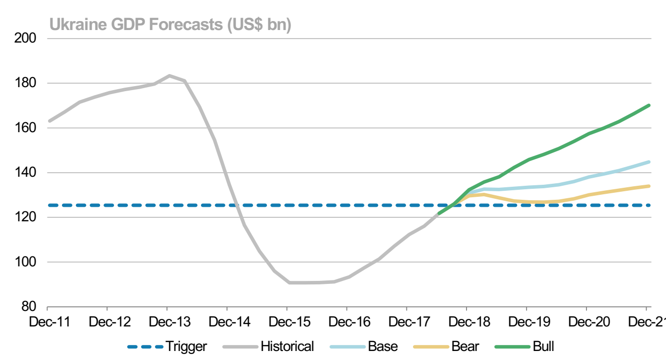
Both warrants also need to have the outright level of GDP above a certain level as a condition to trigger payments in a particular year. However, it's an easier target for Ukraine compared to Argentina.

In Ukraine, it's a static level of nominal USD GDP of US$125.4 billion (as published in the IMF WEO). While GDP fell well below US$100 billion in recent years, 2017 ended at US$112 billion and this year is set to end just a bit higher than US$125 billion. This means that 2019 should end comfortably above the US$125.4 billion limit, assuming positive growth and only moderate currency weakness (Exhibit 3). Specifically, our assumption of 2.7%Y growth, inflation of 9.2%Y and USDUAH at 31 (EOP) results in a nominal GDP of US$133 billion (with GDP calculations done on a quarterly basis).

In Argentina, it's more challenging to reach the trigger level (Real_GDP_Base) for two main reasons. First, the level is not static but increases at 3% in real ARS terms every year. This means any year that sees negative growth, as has indeed been the case recently, makes it much harder for the actual GDP (Real_GDP_Actual) to reach the trigger level (Real_GDP_Base). Second, there is significant uncertainty around what the Real_GDP_Base level actually is due to the legal uncertainty around the definitions of the base year to be used. We have covered this issue in detail before, but in short there is enough leeway for the government to go the way of using a year of 2005 for the ratio calculation (negative ratio scenario) or a base year of 2012 (positive ratio scenario).

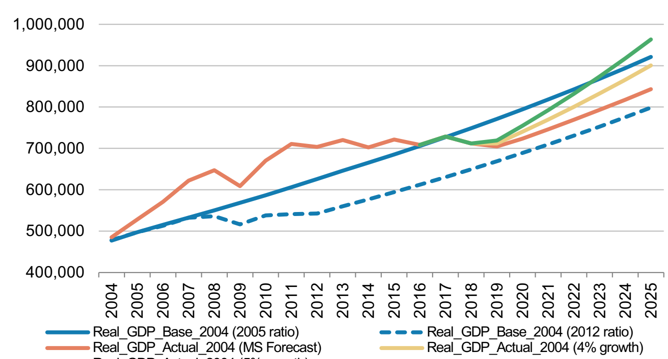
These two scenarios have always been important yet it's even more so currently given that under the negative ratio scenario (2005 ratio), Real_GDP_Actual is unlikely to return above the Real_GDP_Base, meaning no year would trigger. Real_GDP_Actual was comfortably above Real_GDP_Base under any ratios in 2011. However, it was right on the Real_GDP_Base (2005 ratio) threshold in 2017 and will be significantly below by end-2019 (Exhibit 4). This means that even under an optimistic scenario of 4% constant growth from 2020 onwards, the trigger would only be reached by 2028. On the other hand, under the positive ratio scenario (2012 base year) the Real_GDP_Actual would still be above the Real_GDP_Base (2012 ratio) and thus enable payments to be triggered. However, given that the actual payment depends on the excess GDP (Real_GDP_Actual - Real_GDP Base), two years of recession still matters in the positive scenario.

Exhibit 3: Ukraine on track to reach trigger level for nominal US$ GDP by end-2019



Source: Haver Analytics, Morgan Stanley Research forecasts

Exhibit 4: Argentina only above trigger level if positive ratio scenario (2012) used



Source: Haver Analytics, Morgan Stanley Research forecasts

Assessing near-term payments

In Ukraine, 2019 is the first year that can trigger payment if the two conditions above are satisfied. Notably, if triggered, the actual payment to investors is only made on May 31 T+2, meaning May 31 2021 becomes the first possible payment date. While under the official Morgan Stanley forecast this would not occur, we nonetheless look at the potential payout. We reviewed the structure of the warrant in the following piece (see here). In short, the warrant pays out 15% of the GDP growth between 3%Y and 4%Y (multiplied by the YoY GDP deflator and the previous year's nominal GDP) and 40% of the GDP growth above 4%Y (again multiplied by YoY GDP deflator and the previous year's nominal GDP). The overall payment is then split proportionally across all the GDP warrants with the outstanding balance used being US$3.6 billion. The only cap is for a max annual payout of 1% of GDP during the first five years, although this is a tall order to breach since it needs growth to exceed 6.1%Y. Note that the lack of any overall payment cap is why the Ukraine warrant can end up extremely valuable to investors and, conversely, costly to the Ukraine government. This is particularly the case if there was to be a year of abnormally high growth from 2025 onwards.

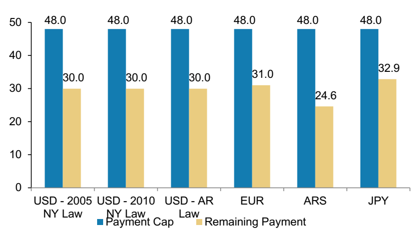
Exhibit 5: Ukraine GDP warrant payment projections under various growth scenarios

		Payment (Warrant points, FV)			Payment (Total, USD bn)			Payment (Total, % GDP)		
Ref. Year	Payment Date	3.50%	4.50%	5.50%	3.50%	4.50%	5.50%	3.50%	4.50%	5.50%
2019	May'21	2.50	11.65	24.96	0.09	0.42	0.90	0.07%	0.33%	0.71%
2020	May'22	2.66	12.52	27.09	0.10	0.45	0.98	0.07%	0.33%	0.71%
2021	May'23	3.02	14.36	31.36	0.11	0.52	1.13	0.07%	0.33%	0.71%
2022	May'24	3.36	16.13	35.57	0.12	0.58	1.28	0.07%	0.33%	0.71%
2023	May'25	3.68	17.86	39.77	0.13	0.64	1.43	0.07%	0.33%	0.71%
2024	May'26	4.10	20.10	45.17	0.15	0.72	1.63	0.07%	0.33%	0.71%
2025	May'27	4.73	23.38	53.05	0.17	0.84	1.91	0.07%	0.33%	0.71%
2026	May'28	5.22	26.03	59.63	0.19	0.94	2.15	0.07%	0.33%	0.71%
2027	May'29	5.75	28.97	67.00	0.21	1.04	2.41	0.07%	0.33%	0.71%
2028	May'30	7.09	36.06	84.19	0.26	1.30	3.03	0.07%	0.33%	0.71%

Source: Haver Analytics, Morgan Stanley Research forecasts. Above scenarios only change growth, not the GDP deflator and USDUAH.

Exhibit 5 shows the near-term payments under various growth scenarios (with GDP deflator and USDUAH unchanged from our base case). Assuming growth of 3.5%Y in 2019, the payment that would be made in May 2021 would be 0.07% of GDP or around US$0.09 billion dollars. In warrant point terms, this comes to 2.50 (non-discounted). These numbers are all manageable from a fiscal standpoint. If growth turns out to be 5.5%Y then a total payment of US$0.90 billion starts to look challenging. Over time this would clearly add up. This brings up a difficult part of the warrant valuations. High growth would tend to see credit spreads fall and the currency strengthen, all positive. However, this ignores that as the payouts add up, the willingness to pay may no longer remain as strong. While this is not an issue for now, it's a reason why very high valuations given by the model in bullish scenarios should be taken with care.

Exhibit 6: Payment caps in the Argentina warrants



Source: Bloomberg, Morgan Stanley Research

In Argentina, unlike Ukraine, any year can trigger payment as long as the two conditions above are satisfied. If triggered in a year, the actual payment is made on December 15 T+1, meaning December 15, 2019 is technically the next possible payment date. In reality, it's near certain that there will be no payment triggers in the coming two years, with 2020 the potential first year where growth may exceed 3%Y. We reviewed the structure of the Argentina warrant in the following piece (see here for the calculations, and here for the legal uncertainty). In short, the payment made equals 5% of the excess GDP where excess GDP is defined as the *(Real_GDP_Actual – Real_GDP_Base) x GDP deflator*. Importantly, this base level increases by 3% every year. This means that a bad growth year (i.e., recession) not only lowers the likelihood of triggering in the future, but also reduces all future payouts. To finish off, the Argentine warrants also have overall payment caps, unlike Ukraine.

According to our economist's base case we don't actually hit 3%Y even in 2020, so to project potential payments we instead work with our economist's bull case that sees 2019 growth at 0.5%Y and 2020 growth rebound strongly to 4%Y. For the USD warrant, under the positive ratio scenario, the warrant payment would come to a total of US$1.3 billion or around 2.7 in warrant price terms. In a negative ratio scenario, as highlighted earlier, there would be no payment as the Real_GDP_Base would not be reached.

Assessing overall valuations

Exhibit 7: Ukraine GDP warrant scenario analysis with our base case in blue

	Warrant Price (Current sprd.)	Volatility 2.5%	3.0%	3.5%	4.0%
Growth	1.0%	14	25	35	42
	1.5%	23	34	45	58
	2.0%	33	47	60	75
	2.5%	50	64	79	97
	3.0%	69	85	104	120
	3.5%	98	118	132	157

	Warrant Price (-100bp sprd)	Volatility 2.5%	3.0%	3.5%	4.0%
Growth	1.0%	17	28	37	52
	1.5%	26	39	51	67
	2.0%	38	56	73	84
	2.5%	59	77	96	115
	3.0%	84	102	122	144
	3.5%	116	138	162	184

Source: Bloomberg, Morgan Stanley Research forecasts

For Ukraine, the warrant is an attractive instrument with plenty of upside in even our base case macro scenario. The question is simply how much of this can be realised in the near term, given an uncertain outlook for the economy. Given that there are no legal uncertainties and payments can be triggered as soon as 2019, we run valuations for a variety of growth and volatility of growth combinations, only keeping 2018-20 growth numbers fixed in line with our economist's base case. We use our economists' long-term growth estimate for Ukraine of around 3%Y. The historical volatility of Ukraine is north of 6%, but our assumption is that macro stability continues and volatility falls towards peers somewhere just above 3%. The results are as volatile as ever but also still demonstrate the possible upside. This results in a warrant price range of 64 to 104. Given the recent weakening in spreads we also re-run the sensitivity with spreads 100bp tighter. Since this discounts at a lower rate in our model, it increases the warrant prices, now putting the range between 77 and 122.

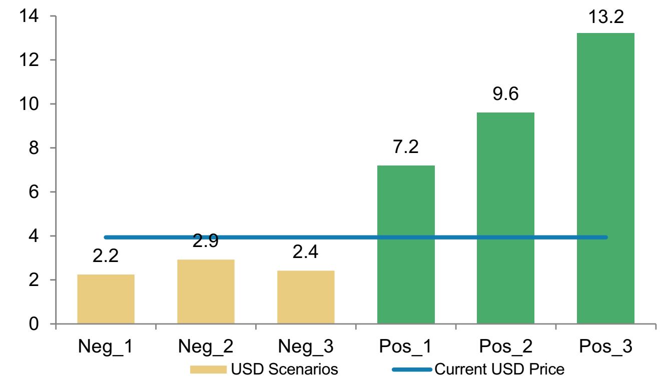
For Argentina, unlike Ukraine, the main question is whether the warrants are worth anything at all and we thus focus on the near-term growth outlook and trigger levels. Near term there are no upcoming payments to support valuations. In a negative ratio scenario (2005 ratio) there is no upside from current prices either. Our valuation model suggests a price around 2.5 even in a bullish growth scenario, with a worst case valuation being 0 (or at least zero plus any value that may be realised in future litigation scenarios). This means a bullish position would need to be predicated on a positive ratio scenario (2012 ratio) and a rapid rebound in growth. Under the positive ratio scenario, our valuation model suggests a valuation of 7.2 under our growth base case and 9.6 under our growth bull case. Stretching assumptions to constant growth of 4%Y from 2020-24 pushes valuations to 13.2. Notably, this is much lower than previous bullish scenarios that showed possible valuations in excess of 20. There are two main reasons for this change, both relating to the fact that in the end the model is simply a discounted set of cash flows. First, it's negative that we no longer under any scenario see growth before 2020 triggering. Second, as outlined earlier, the anticipated recession of 2018-19 drastically reduces the excess GDP which affects the end payment. This in turn pushes payments further out and hence lowers the value.

Exhibit 8: Argentina GDP warrant scenarios

Argentina GDP Warrant Price Scenarios	USD	EUR	JPY	ARS
Current price	3.9	3.8	4.3	5.1
2005 ratio				
MS Base (Neg_1)	2.2	3.2	3.3	0.6
MS Bull (Neg_2)	2.9	4.0	4.2	1.0
Bull case with 4% constant growth from 2020-24 (Neg_3)	2.4	3.6	3.8	0.4
2012 ratio				
MS Base (Pos_1)	7.2	9.2	9.4	3.3
MS Bull (Pos_2)	9.6	11.7	11.8	7.1
Bull case with 4% constant growth from 2020-24 (Neg_3)	13.2	15.9	16.1	7.1

Source: Haver Analytics, Morgan Stanley Research forecasts

Exhibit 9: Argentina GDP warrant scenarios

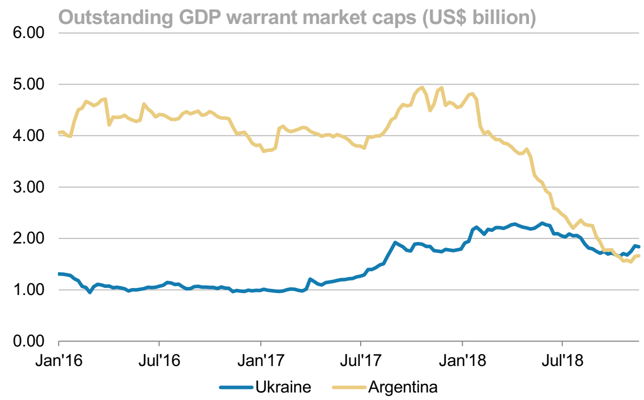


Source: Haver Analytics, Morgan Stanley Research forecasts

Assessing buyback potential

While the warrants formed important parts of each respective restructuring process, they're not viewed positively by either administration any longer.

Exhibit 10: It would cost either country around US$1.6-1.8 billion to buy back the warrants



Source: Bloomberg, Morgan Stanley Research. Note that above are just the outright market caps. Any potential buybacks would likely be higher as added incentives.

In Ukraine, the administration has noted its desire to buy back the warrants in the past but there is no cash to do so at the moment. Outstanding market cap is currently around US$1.8 billion. This set-up looks unlikely to change in 2019, given high external funding needs. As a result, we don't see any potential for a Ukranian buyback either.

In Argentina, there have been large payouts in the past, restated GDP series and now the legal confusion around the base year. The current administration has noted a desire to buy back the warrants in the past. Given the recent drop in price it would not take much either, with the current market cap standing at around US$1.7 billion. However, there is a clear lack of funding to do so at the moment. Additionally, the administration is currently fighting multiple other issues and is unlikely to focus on the warrant. As a result, we think it's unlikely there are any official updates around the warrant or attempts to buy it back in 2019.

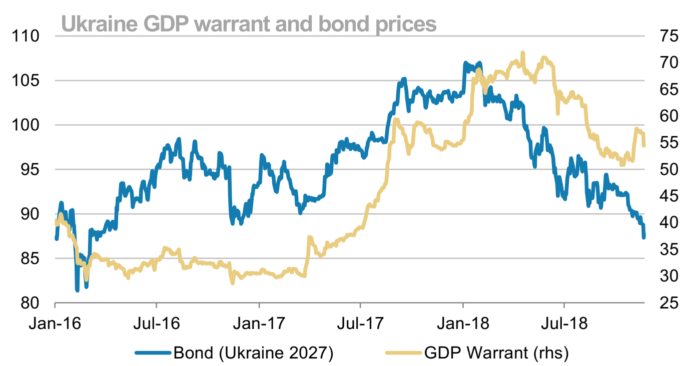
Strategy implications

The Ukraine warrants have the more attractive structure compared to Argentina and also more supportive fundamentals in the coming years. Additionally, there is clearly upside from current prices based on our pricing models. The main headwinds are threefold. First, upcoming elections bring a lot of uncertainty with them, particularly if they were to endanger the co-operation with the IMF. Second, the rebound in growth has so far been very weak given the extent of the previous recession. This is in large part due to sluggish investments and FDI. If this outlook does not change, then it will be hard to argue that Ukraine has a chance of growing sustainably above 3%Y. Finally, the conflict in the East of the country still represents a risk.

We turned bullish on Ukraine bonds a month ago (see here) and see a window of opportunity for bonds trading at a yield around 10% to perform well as the budget is delivered in line with IMF guidelines, triggering executive board approval for the new SBA and in turn allowing other funding flows to come through. This should see GDP warrants perform well. If forced to pick between the warrants and the bonds we would however stick with the bonds due to their high carry, our expectation that neither 2018 and 2019 will end up above 3%Y, unlike consensus, and finally our reservations about the longer-term outlook for Ukraine.

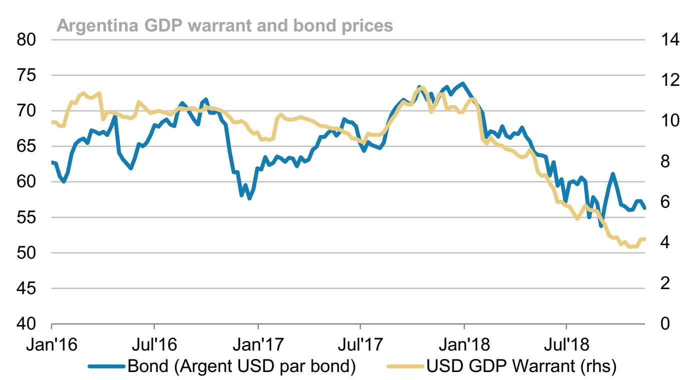
The Argentina warrants do not look attractive despite trading very near record lows (currently around 4 versus lows of near 2 reached in 2008). There are simply too many headwinds at this point. We don't expect growth to move above 3%Y before 2021 at the earliest and expect the country to remain in a recession in 2019. The longer-term outlook also depends on the outcome of the elections and while we expect policy continuity there is bound to be volatility. Finally, the legal uncertainty around the base GDP has not gone away and, just as highlighted back in January when we were stopped out of our long trade and did not recommend re-entering, a best estimate would be 50/50 between a positive and negative outcome, in turn drastically reducing the risk/reward. That's not to say that prices can't move higher, particularly given the current depressed sentiment, universal low growth expectations and low liquidity. However, to play this story we would still stick with the bonds instead. Indeed, it's notable that the few rebounds there have been in bond prices in the past months did not translate into higher GDP warrant prices.

Exhibit 11: Ukraine GDP warrant has fallen yet outperformed bonds



Source: Bloomberg, Morgan Stanley Research

Exhibit 12: Argentina GDP warrants and bond remain under pressure yet rebounds are better played via bonds



Source: Bloomberg, Morgan Stanley Research

Exhibit 13: Valuation, methodology risks

Trade	Date	Entry Level	Target	Stop	Rationale	Risks
Like Argentina Hard Currency Bonds	24-Sep-18	NA	NA	NA	A more supportive external backdrop and manageable funding needs should see Argentina spreads rally further given they're still cheap, and the curve should also steepen further	The risk to the trade is renewed currency weakness requiring FX interventions and use of FX reserves, which would again question the sustainability of the balance of payment flows
Like Ukraine Hard Currency Bonds	29-Oct-18	NA	NA	NA	Outright valuations are attractive with yields around 9.5%, and with the recent bond issuance supply in the very near term is unlikely.	Pick-up in political uncertainty ahead of election or the final 2019 budget not being in line with IMF expectations.

Source: Morgan Stanley Research

Exhibit 14: History of recommendations

History of recommendations for Argentina Hard Currency Bonds		
Trade	**Entry Date**	**Exit Date**
Like Argentina Hard Currency Bonds	14-Jul-16	25-Jun-18

History of recommendations for Ukraine Hard Currency Bonds		
Trade	**Entry Date**	**Exit Date**
Like Ukraine Hard Currency Bonds	9-Apr-18	2-Jul-18

Source: Morgan Stanley Research

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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.

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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.

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Global Stock Ratings Distribution

(as of October 31, 2018)

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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.

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Overweight (O or Over) - The stock's total return is expected to exceed the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis over the next 12-18 months.
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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.
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