

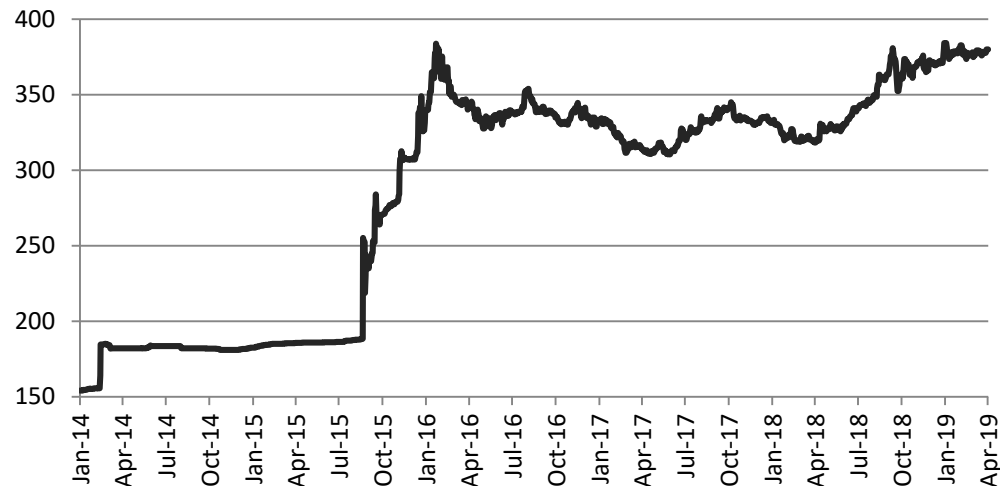


Kazakhstan's Bond Market

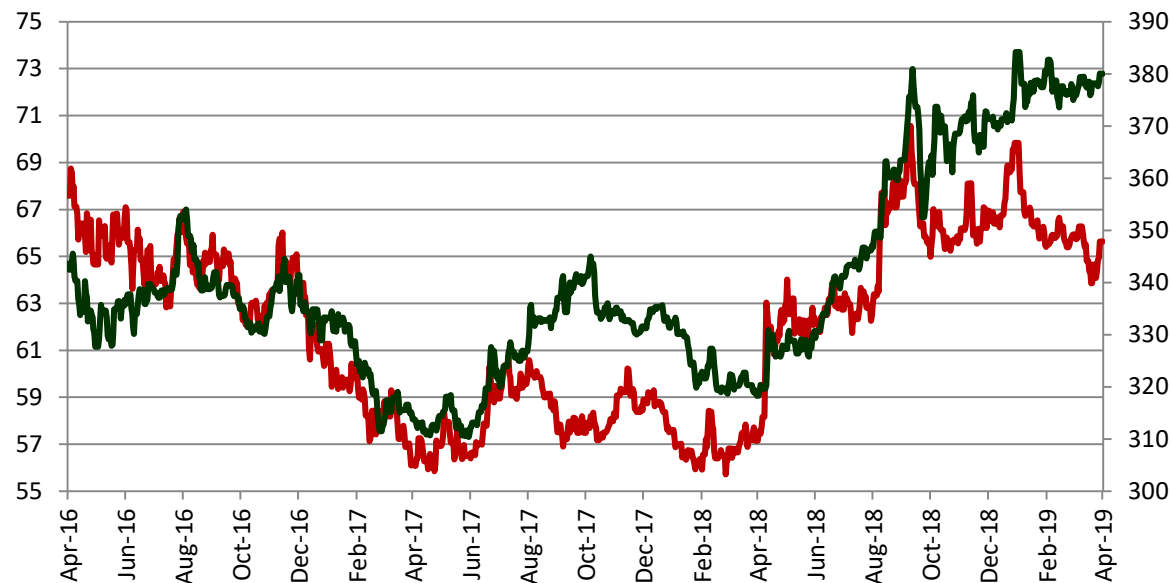
April 2019

KZT exchange rate dynamics

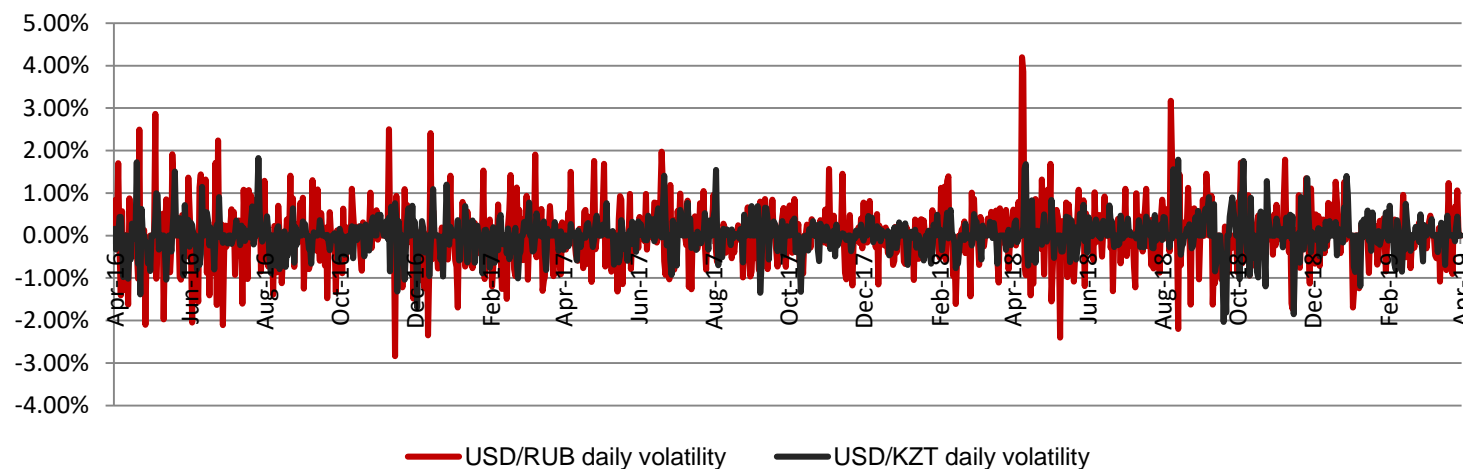
USD/KZT exchange rate over 5-year history



USD/KZT vs USD/RUB exchange rate dynamics



USD/KZT vs USD/RUB exchange rate daily volatility



— USD/RUB exchange rate (LHS) — USD/KZT exchange rate (RHS)

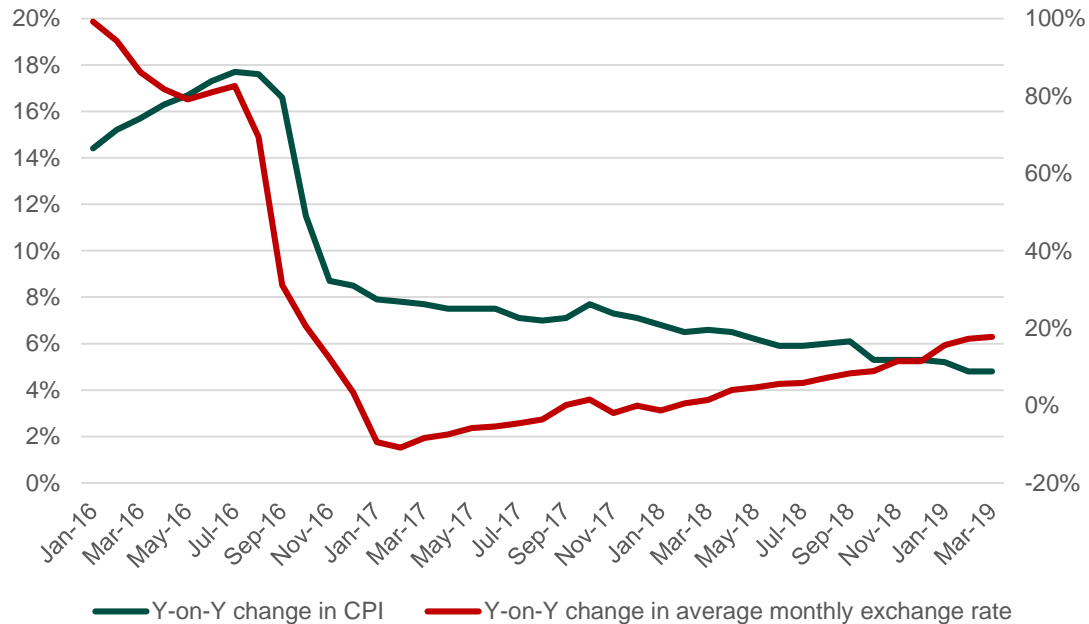
Selected statistics over 3-year history:

| | USD/KZT | USD/RUB |
|---------------------------|---------|---------|
| Average daily volatility | 0.40% | 0.66% |
| Average annual volatility | 6.41% | 10.61% |

Correlation between USD/KZT and USD/RUB **0.78**

KZT exchange rate dynamics

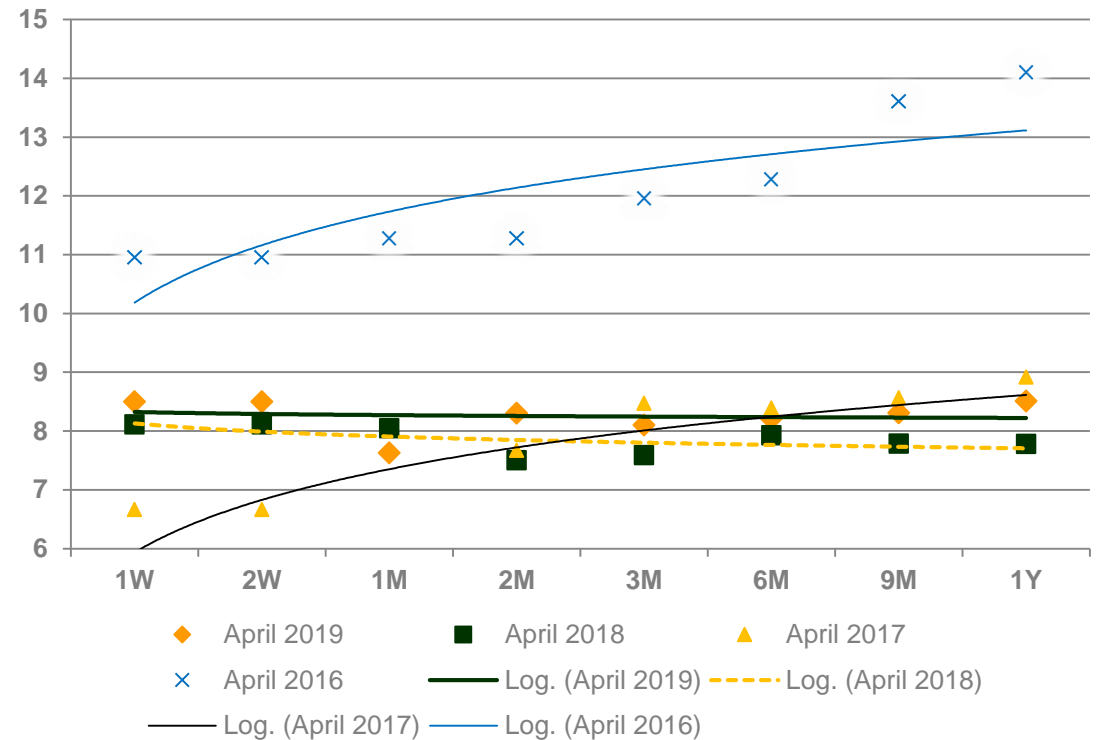
Annual inflation vs annual exchange rate movements



NBK's inflation target is 4%-6%

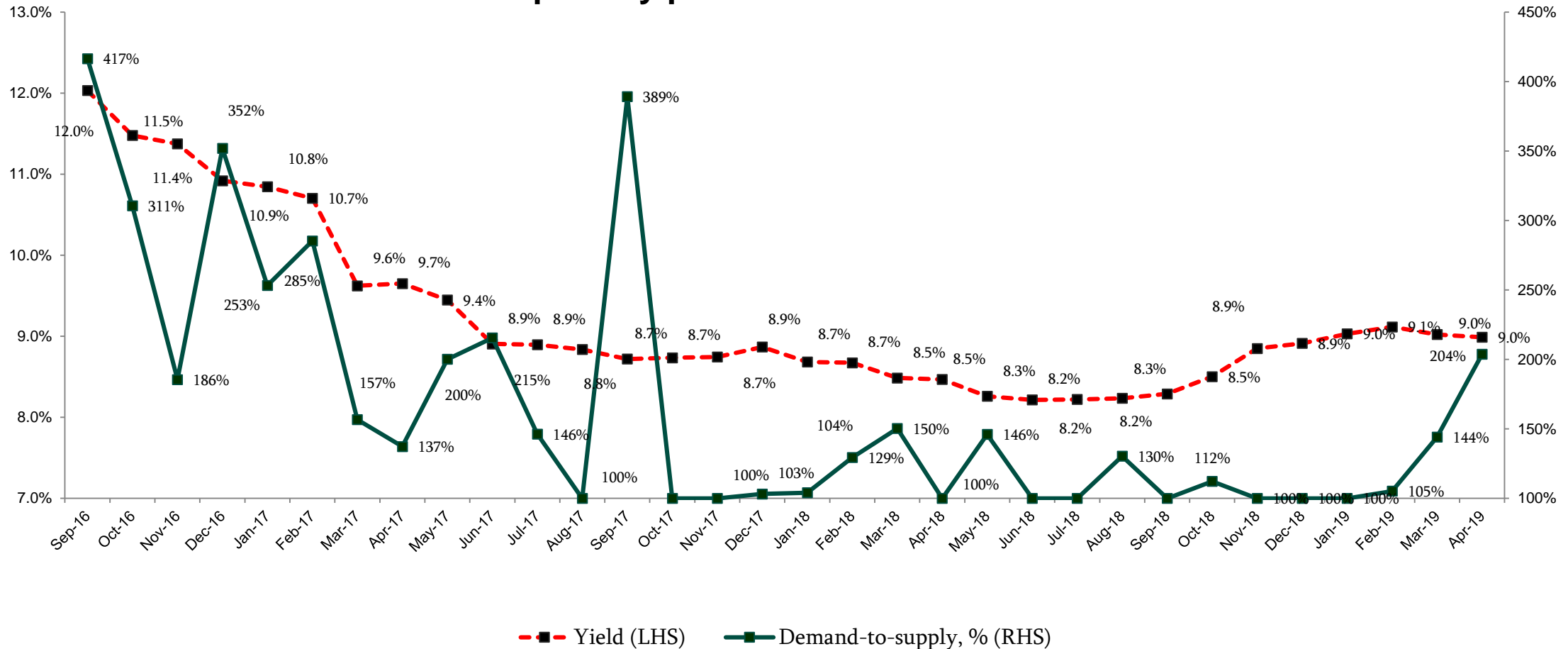
USD/KZT NDFs suffer from poor liquidity but tend to reflect market expectations on the exchange rate movements

USD/KZT NDFs mid-YLD curve (% p.a.)



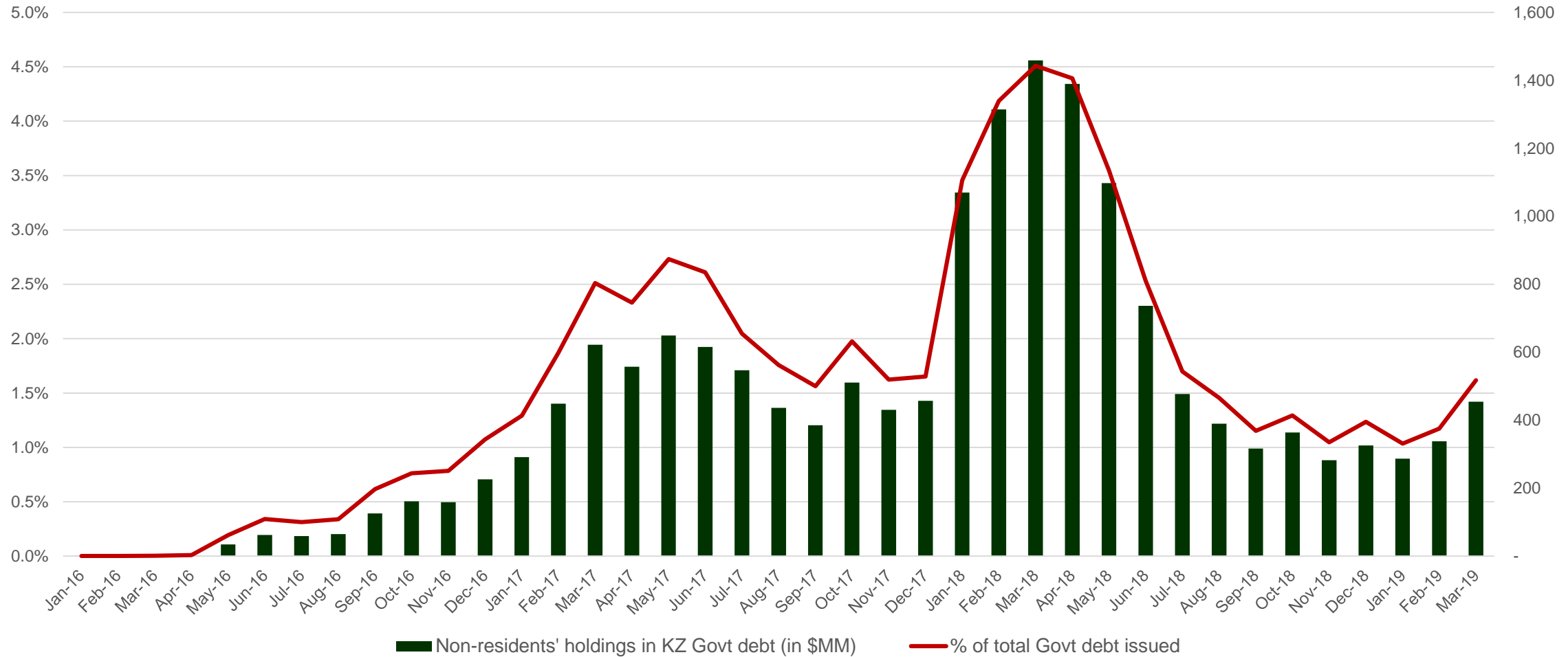
Government securities – primary placements by NBK

Yield on primary placements of NBK's 1-YR bills



Government securities – non-residents' holdings

Non-residents' holdings in Kazakhstan's government debt securities



Source: KACD, Halyk Finance

Government securities – primary placements by Ministry of Finance

| | Code | Date | Status | Tenor | Coupon | YTM | Offered, KZT MM | Placed, KZT MM | # of orders | # of investors |
|------|-------------|------------|---------|-------|--------|-------|-----------------|----------------|-------------|----------------|
| 2018 | MOM036_0090 | 15.01.2018 | Fail | 2,6 | 8,40% | - | 20 000 | - | - | - |
| | MUM084_0014 | 22.01.2018 | Fail | 3,2 | 6,65% | - | 20 000 | - | - | - |
| | MUM120_0011 | 29.01.2018 | Success | 4,1 | 5,30% | 8,55% | 20 000 | 5 600 | 6 | 3 |
| | MUM180_0011 | 20.03.2018 | Success | 11,4 | 7,68% | 8,60% | 30 000 | 33 200 | 8 | 3 |
| | MUM180_0013 | 04.04.2018 | Success | 15,0 | 8,66% | 8,66% | 5 000 | 7 500 | 5 | 3 |
| | MUM168_0003 | 16.04.2018 | Success | 14,0 | 8,45% | 8,45% | 20 000 | 20 000 | 4 | 4 |
| | MUM180_0014 | 23.04.2018 | Success | 15,0 | 8,46% | 8,46% | 10 000 | 12 000 | 4 | 4 |
| | MUM180_0012 | 02.05.2018 | Success | 11,6 | 7,68% | 8,44% | 30 000 | 30 000 | 4 | 2 |
| | MUM156_0006 | 10.05.2018 | Success | 13,0 | 8,44% | 8,44% | 25 000 | 25 000 | 4 | 2 |
| | MUM168_0003 | 14.05.2018 | Success | 13,9 | 8,45% | 8,45% | 20 000 | 20 000 | 2 | 2 |
| | MUM180_0014 | 21.05.2018 | Success | 14,9 | 8,46% | 8,46% | 10 000 | 11 000 | 3 | 3 |
| | MUM240_0002 | 28.05.2018 | Success | 16,0 | 8,07% | 8,47% | 5 000 | 5 000 | 2 | 2 |
| | MUM180_0012 | 04.06.2018 | Success | 11,7 | 7,68% | 8,43% | 30 000 | 30 000 | 2 | 2 |
| | MUM156_0006 | 11.06.2018 | Success | 12,9 | 8,44% | 8,44% | 25 000 | 25 000 | 2 | 2 |
| | MUM168_0003 | 18.06.2018 | Success | 13,8 | 8,45% | 8,45% | 20 000 | 22 500 | 4 | 4 |
| | MUM240_0004 | 25.06.2018 | Success | 16,6 | 8,07% | 8,47% | 5 000 | 17 500 | 3 | 3 |
| | MUM180_0014 | 02.07.2018 | Success | 14,8 | 8,46% | 8,46% | 10 000 | 10 250 | 3 | 3 |
| | MUM180_0012 | 09.07.2018 | Success | 11,6 | 7,68% | 8,43% | 30 000 | 50 000 | 3 | 2 |
| | MUM156_0006 | 16.07.2018 | Success | 12,8 | 8,44% | 8,44% | 25 000 | 50 300 | 4 | 3 |
| | MUM168_0003 | 23.07.2018 | Success | 13,7 | 8,45% | 8,45% | 20 000 | 42 935 | 3 | 3 |
| | MUM216_0001 | 30.07.2018 | Success | 18,0 | 8,48% | 8,48% | 5 000 | 10 500 | 5 | 3 |
| | MUM180_0012 | 06.08.2018 | Success | 11,5 | 7,68% | 8,43% | 30 000 | 60 000 | 3 | 2 |
| | MUM156_0006 | 13.08.2018 | Success | 12,7 | 8,44% | 8,44% | 25 000 | 50 000 | 3 | 2 |
| | MUM168_0003 | 20.08.2018 | Success | 13,7 | 8,45% | 8,45% | 20 000 | 40 000 | 3 | 2 |
| | MUM240_0002 | 27.08.2018 | Success | 15,7 | 8,07% | 8,47% | 5 000 | 10 000 | 3 | 2 |
| | MUM180_0014 | 03.09.2018 | Success | 14,6 | 8,46% | 8,46% | 10 000 | 20 595 | 3 | 2 |
| | MUM180_0012 | 10.09.2018 | Success | 11,4 | 8,43% | 8,43% | 30 000 | 53 504 | 3 | 2 |
| 2019 | MUM156_0006 | 17.09.2018 | Fail | 12,6 | 8,44% | - | 25 000 | - | - | - |
| | MUM240_0004 | 24.09.2018 | Fail | 16,3 | 8,07% | - | 5 000 | - | - | - |
| | MUM180_0011 | 26.12.2018 | Success | 10,6 | 7,68% | 8,60% | 80 400 | 77 599 | 6 | 2 |
| | MEUKAM_180 | 14.01.2019 | Success | 10,6 | 7,68% | 8,60% | 25 000 | 26 000 | 5 | 3 |
| | MEUKAM_156 | 21.01.2019 | Success | 12,3 | 8,44% | 8,62% | 25 000 | 25 000 | 5 | 3 |
| | MEUKAM_216 | 28.01.2019 | Success | 17,5 | 8,48% | 8,82% | 35 000 | 35 000 | 5 | 2 |
| | MEUKAM_240 | 30.01.2019 | Success | 16,0 | 8,07% | 8,78% | 30 000 | 31 000 | 5 | 3 |
| | MEUKAM_240 | 04.02.2019 | Success | 15,3 | 8,07% | 8,74% | 30 000 | 30 000 | 4 | 2 |
| | MEUKAM_216 | 11.02.2019 | Success | 18,0 | 8,70% | 8,70% | 25 000 | 6 800 | 4 | 3 |
| | MEUKAM_180 | 18.02.2019 | Success | 14,2 | 8,46% | 8,70% | 35 000 | 35 000 | 4 | 2 |
| | MEUKAM_168 | 25.02.2019 | Success | 13,1 | 8,45% | 8,66% | 25 000 | 29 600 | 5 | 3 |
| | MEUKAM_216 | 04.03.2019 | Success | 17,4 | 8,48% | 8,82% | 35 000 | 38 175 | 6 | 4 |
| | MEUKAM_300 | 11.03.2019 | Success | 19,8 | 7,90% | 8,94% | 25 000 | 25 000 | 4 | 2 |
| | MEUKAM_240 | 18.03.2019 | Success | 15,9 | 8,07% | 8,78% | 30 000 | 32 611 | 5 | 3 |
| | MEUKAM_180 | 26.03.2019 | Success | 10,9 | 7,68% | 8,61% | 25 000 | 25 000 | 4 | 2 |

NBK's base rate development

| Date | Interest rate, % | Interest rate corridor, % |
|------------|------------------|---------------------------|
| 16.01.2018 | 9,75% | 8.75 - 10.75 |
| 06.03.2018 | 9,50% | 8.5 - 10.5 |
| 17.04.2018 | 9,25% | 8.25 - 10.25 |
| 05.06.2018 | 9% | 8.00 - 10.00 |
| 10.07.2018 | 9% | 8.00 - 10.00 |
| 04.09.2018 | 9% | 8.00 - 10.00 |
| 16.10.2018 | 9,25% | 8.25 - 10.25 |
| 05.12.2018 | 9,25% | 8.25 - 10.25 |

The volatility of interest rates and the Kazakhstan tenge's exchange rate put pressure on investors' appetite in the direction of increasing the required level of yield.

The placements of the Ministry of Finance that failed at the end of September, and the long pause almost until the end of the year proves this situation - the lack of a compromise between investors and the Ministry of Finance regarding required yield after the NBK's decision to increase the base rate in October 2018. The Ministry eventually increased the yield in 2019.

Source: KASE, Halyk Finance



Fail



Market placements

*Market placement mean the placements in which at least 3 investors took part

Corporate bonds – primary placements

| Year | Issuer | Date | Tenor | Coupon | YTM | Placement, KZT MM | # of orders | # of investors |
|------|-------------------|------------|-------|----------------|----------------|-------------------|-------------|----------------|
| 2018 | KAF | 08.11.2018 | 5,0 | 12,00% | 12,00% | 3 903 | 10 | 3 |
| | AlfaBank | 26.11.2018 | 1,0 | - | 9,50% | 876 | 1 | 1 |
| | Sberbank | 27.11.2018 | 3,0 | 11,00% | 11,00% | 4 160 | 8 | 4 |
| | Kaspi Bank | 27.11.2018 | 4,2 | 9,70% | 11,50% | 5 000 | 1 | 1 |
| | Kaspi Bank | 28.11.2018 | 4,2 | 9,70% | 11,50% | 5 000 | 1 | 1 |
| | KazAgro | 29.11.2018 | 15,0 | 10,00% | 10,00% | 450 000 | 1 | 1 |
| | Samryk Energy | 30.11.2018 | 7,0 | 11,20% | 11,20% | 21 736 | 1 | 1 |
| | Baspana | 06.12.2018 | 1,0 | - | 9,91% | 20 000 | 9 | 4 |
| | Baspana | 06.12.2018 | 0,9 | 8,50% | 9,29% | 10 000 | 1 | 1 |
| | Kaspi Bank | 11.12.2018 | 4,1 | 9,70% | 11,50% | 6 000 | 1 | 1 |
| | Home Credit Bank | 12.12.2018 | 4,0 | 13,00% | 13,00% | 4 800 | 2 | 2 |
| | Home Credit Bank | 12.12.2018 | 3,0 | 13,00% | - | - | - | - |
| | Kaspi Bank | 13.12.2018 | 4,1 | 9,70% | 11,50% | 1 300 | 4 | 4 |
| | Home Credit Bank | 13.12.2018 | 4,0 | 13,00% | 13,00% | 4 800 | 1 | 1 |
| | Kaspi Bank | 14.12.2018 | 4,1 | 9,70% | 11,50% | 7 458 | 1 | 1 |
| | DAMU | 14.12.2018 | 1,1 | 8,70% | 8,70% | 16 000 | 1 | 1 |
| | Home Credit Bank | 19.12.2018 | 3,0 | 13,00% | - | - | - | - |
| | Home Credit Bank | 20.12.2018 | 3,0 | 13,00% | 13,50% | 2 800 | 2 | 2 |
| | Faeton | 25.12.2018 | 6,6 | 11,00% | 11,00% | 250 | 1 | 1 |
| | Baiterek | 27.12.2018 | 15,0 | 9,50% | 9,50% | 77 700 | 6 | 3 |
| 2019 | Home Credit Bank | 27.12.2018 | 3,0 | 13,00% | 13,50% | 5 048 | 1 | 1 |
| | BCC Bank | 27.12.2018 | 7,0 | 10,95% | 10,95% | 15 000 | 2 | 2 |
| | Home Credit Bank | 28.12.2018 | 3,0 | 13,00% | 13,50% | 7 848 | 1 | 1 |
| | Sberbank | 17.01.2019 | 2,9 | 11,00% | 11,00% | 800 | 1 | 1 |
| | ADB | 28.01.2019 | 5,0 | inflation+1,0% | inflation+1,0% | 15 234 | 3 | - |
| | ADB | 28.01.2019 | 7,0 | inflation+1,3% | inflation+1,3% | 15 234 | 4 | - |
| | Faeton | 29.01.2019 | 6,5 | 11,00% | 11,00% | 130 | 1 | 1 |
| | Baspana | 29.01.2019 | 0,9 | - | 9,75% | 5 000 | 6 | 3 |
| | Problem Loan Fund | 29.01.2019 | 15,0 | 9,00% | - | - | - | - |
| | Problem Loan Fund | 30.01.2019 | 15,0 | 9,00% | - | - | - | - |
| | Problem Loan Fund | 01.02.2019 | 15,0 | 9,00% | 9,00% | 604 000 | 1 | 1 |
| | Baspana | 05.02.2019 | 0,9 | - | 9,75% | 5 000 | 7 | 3 |
| | KAF | 06.02.2019 | 4,8 | 12,00% | 12,00% | 4 040 | 5 | 2 |
| | IFC | 07.02.2019 | 2,0 | 8,95% | 8,95% | 22 900 | 15 | 5 |
| | Faeton | 20.02.2019 | 7,0 | 10,50% | 10,50% | 1 654 | 1 | 1 |
| | EABR | 22.02.2019 | 3,0 | 9,70% | 9,70% | 20 000 | 8 | 7 |
| | Nurbank | 27.02.2019 | 7,0 | 10,95% | 10,95% | 10 000 | 2 | 2 |
| | Kcell | 28.02.2019 | 1,9 | 11,50% | 11,50% | 16 804 | 14 | 6 |
| | EBRD | 28.02.2019 | 7,0 | inflation+1,0% | inflation+1,0% | 20 000 | 10 | - |
| | EABR | 05.03.2019 | 0,3 | 9,20% | 9,20% | 10 000 | 8 | 4 |
| | ATF Bank | 14.03.2019 | 7,0 | 10,95% | 10,95% | 60 000 | 2 | 2 |
| | BCC Bank | 19.03.2019 | 6,8 | 10,95% | 10,95% | 27 000 | 2 | 2 |
| | Baspana | 05.04.2019 | 1,0 | 8,50% | 9,60% | 10 000 | 8 | 5 |

Source: KASE, Halyk Finance

2019

- There were 19 placements in the 4M2019, with 3 of them issued NBK's mortgage subsidiary (Baspana, BBB/Stable rating from Fitch) and 4 issues of international development institutions.
- The most recent market placements such as Baspana and Kcell, saw high demand from investors due to limited number of attractive alternatives in the market.
- Kcell's bond placement for a total nominal amount of KZT 16,8 bn at a YTM of 11,5%.
- Baspana's bond placement for a total nominal amount of KZT 10 bn at a YTM of 9,6001%.

2018

- In 2018 corporates placed 71 issues on the KASE with only 14 market placements
- The 14 issues were mostly represented by non-Kazakhstan development institutions and issuers with a BBB/Stab rating (equal to KZ sovereign rating).
- Yields generally followed the domestic yield curve with slightly increased rates in the second half of the year. For example EBRD's YTM increased by 40-60 bp compared to earlier placements in 2018.
- Excluding the non-Kazakhstan organizations, the demand from investors did not exceed KZT 10 billion.

*Under the market placement means the placement in which 3 or more participants (investors) took part.



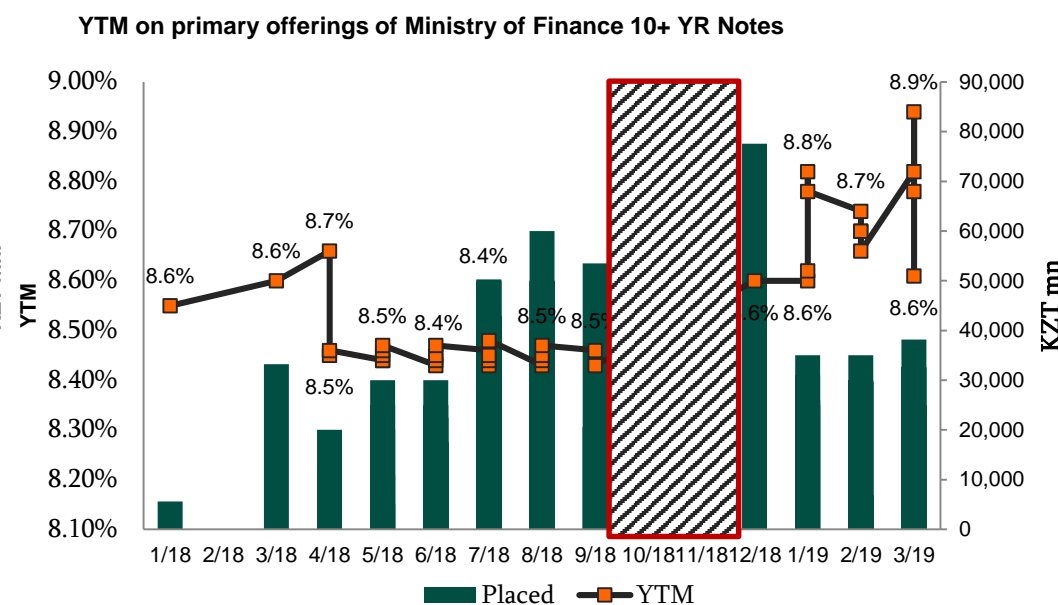
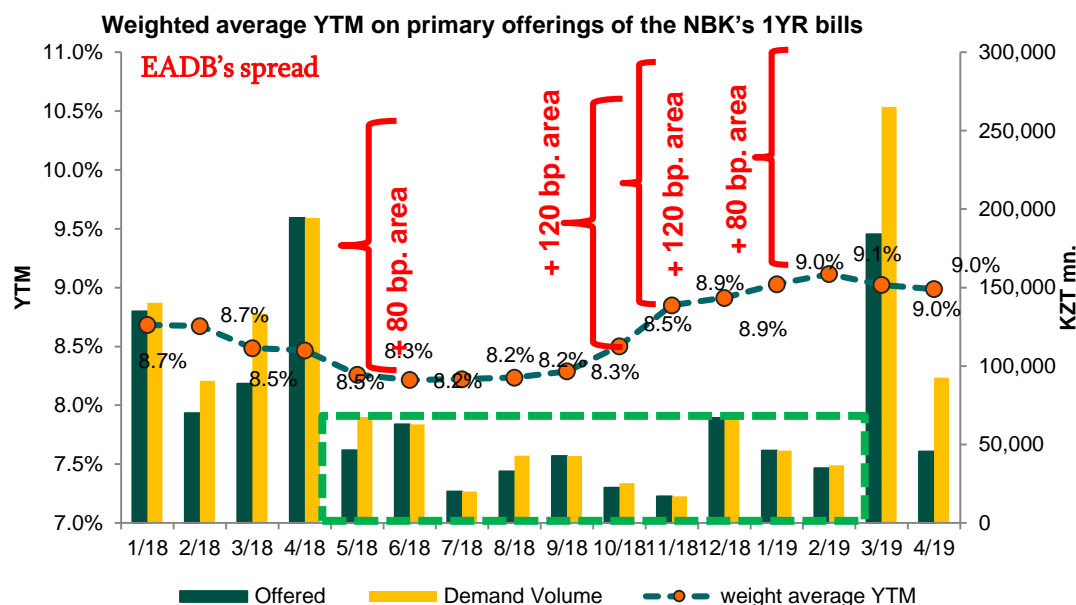
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Market placements

Analysis of EADB's KZT bond offerings in 2018-2019

| # | Issuer | Fitch | Moody's | S&P | Code | Issue Date | Tenor | Coupon | YTM | Offered, KZT MM | Placed, KZT MM | # of orders | # of investors |
|---|--------|-----------|-----------|-----|---------------|------------|-------|--------|-------|-----------------|----------------|-------------|----------------|
| 1 | EADB | BBB-/Stab | Baa3/Stab | - | EABRK120621_1 | 12.06.2018 | 3,0 | 9,10% | 9,10% | 20 000 | 20 000 | 8 | 7 |
| 2 | EADB | BBB-/Stab | Baa3/Stab | - | EABRK120621_1 | 12.06.2018 | 3,0 | 9,10% | 9,10% | 20 000 | 20 000 | 7 | 7 |
| 3 | EADB | BBB-/Stab | Baa3/Stab | - | EABRK120621_3 | 12.06.2018 | 3,0 | 9,10% | 9,10% | 10 000 | 10 000 | 7 | 7 |
| 4 | EADB | BBB-/Stab | Baa3/Stab | - | EABRK111023 | 11.10.2018 | 5,0 | 9,50% | 9,50% | 20 000 | 20 000 | 5 | 4 |
| 5 | EADB | BBB-/Stab | Baa3/Stab | - | EABRK061122 | 06.11.2018 | 4,0 | 9,70% | 9,70% | 20 000 | 20 000 | 4 | 4 |
| 6 | EADB | BBB-/Stab | Baa3/Stab | - | EABRK220222 | 22.02.2019 | 3,0 | 9,70% | 9,70% | 20 000 | 20 000 | 8 | 7 |
| 7 | EADB | BBB-/Stab | Baa3/Stab | - | EABRK050619 | 05.03.2019 | 0,3 | 9,20% | 9,20% | 10 000 | 10 000 | 8 | 4 |



- The placements of the EADB generally follow the domestic yield curve
- Smaller interest from broker-dealer companies, higher interest from banks and other institutional investors (including the NBK). Low demand of broker-dealer companies indicates that this type of investors is extremely sensitive to yield.



The highlighted area is a reflection of the sharp decline in the base rate.



The highlighted gap is a reflection of the absence of a compromise between investors and issuers, on the back of a sharp decline in the base rate.

KZ Eurobond market



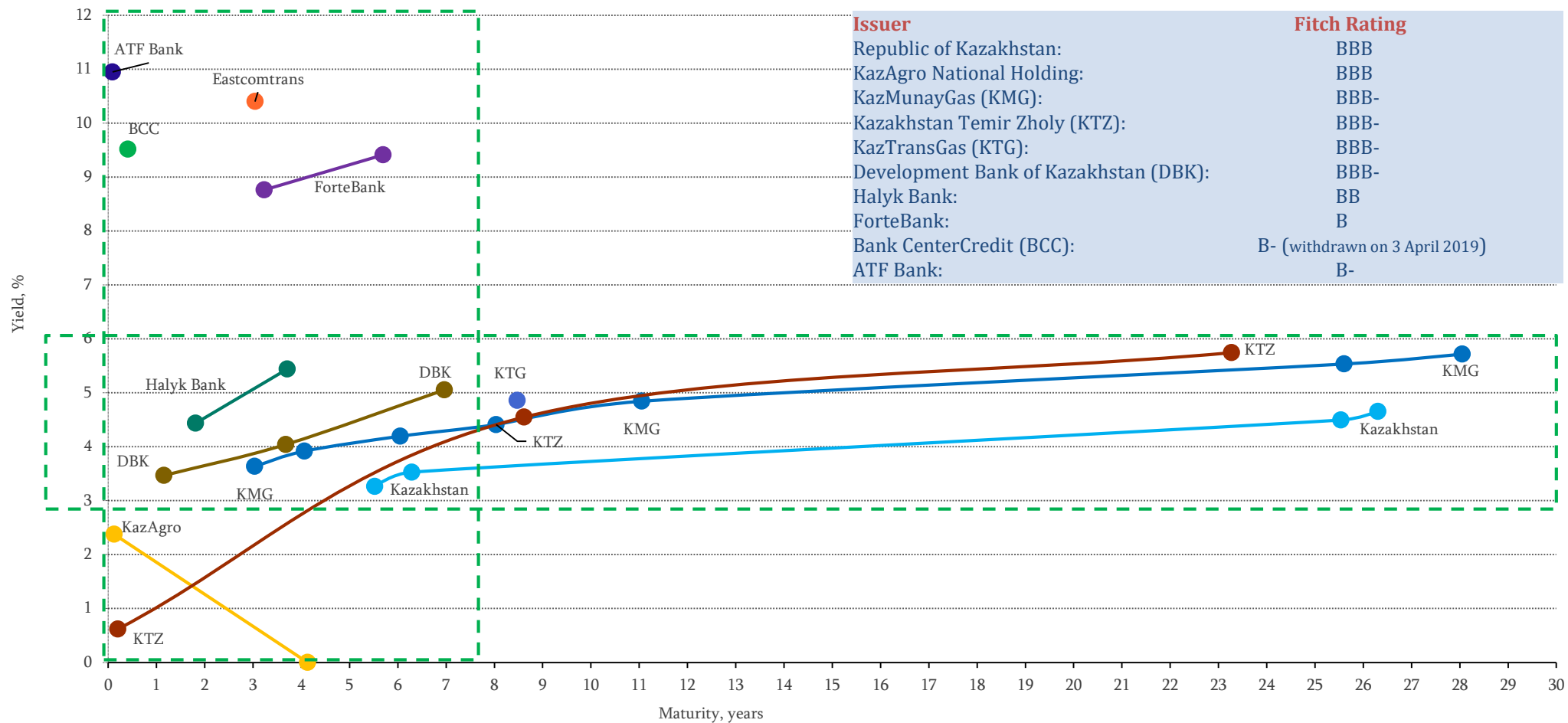
5YR US swap rate dynamics



Source: Bloomberg, Halyk Finance

KZ Eurobond market

- Most of USD Eurobonds by Kazakhstan issuers are traded at 3-6%
- Eurobonds with maturity less than 7 years were mostly placed before 2015
- KZ Eurobond issues are largely represented by the government, quasi-sovereign sovereign issuers and banks



Source: Bloomberg, Halyk Finance



- Astana International Financial Center established in 2015
- English common law
- Favorable tax regime
- AIX launched in 2018
- All KZ brokers + 2 foreign investment banks registered as AIX members (incl. China International Capital Corporation Hong Kong Securities Limited)
- The major domestic platform for the ongoing privatization program (IPO/SPO) and sovereign/quasi-sovereign Eurobond issues