EEMEA Strategy Viewpoint

The CNB cuts – receive Czech rates

12 February 2024

EEMEA Strategy
EEMEA

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See Team Page for List of Analysts

For a list of open trade recommendations and trade recommendations closed in the last 12 months, see Global Emerging Markets Weekly: Carry Conundrum: Risk, Reflation & China 09 February 2024

Abbreviations
CNB is Czech National Bank
DOLS is Dynamic Ordinary Least Squares
FRA is forward rate agreement

PRIBOR is Prague Interbank Offered Rate

Czechia: continue receiving 1y1y or long-end FRAs

The key conclusion of our analysis is that we should receive the 1y1y swap or long-end FRAs. We recently closed our 1y1y receiver in Czechia vs 1y1y payer in Poland as the trade reached the target (EM Alpha: Close 1y1y receiver in CZK vs 1y1y payer in PLN as target is hit (again) 08 February 2024). We will be looking to re-enter a Czech front-end receiver trade after the market settles following a larger-than expected cut by the CNB.

The market consistently underprices Czech cutting cycles

The market consistently underprices cutting cycles and investors can benefit from this phenomenon by receiving front-end swaps as well as by taking long positions in FRAs. We believe that these are the highest Sharp ratio trades for macro investors.

The terminal rate should be repriced lower

It is reasonable to expect the current cycle to be long, resembling the August 2008-May 2010 cycle, given it is taking place after a long and aggressive hiking cycle. We also expect the terminal rate to be repriced lower, as in previous cutting cycles.

Key historical lesson for swaps: receive until the last cut

The key lesson of the previous four cutting cycles for front-end swaps is to receive until the last cut by the CNB. This rule holds for 1y, 1y1y and 2y swaps for all the four cutting cycles in Czechia since 2004 and is likely to hold in the current one. At the beginning of the cycle, 1y1y tends to outperform 1y and 2y swaps.

The longer the FRA maturity, the stronger the mispricing

The key historical lesson for long positions in FRAs during a cutting cycle is that longer maturity FRAs are more mispriced than short-end FRAs, especially at the beginning.

The curve should steepen in a cutting cycle

In a cutting cycle, we would expect the curve in Czechia to steepen unless the rally in core rates becomes extraordinarily strong. Another factor that impacts 5y and 10y swaps in Czechia is core rates, which can be proxied by US or euro swaps as well as by the average of the two. Steepeners are preferred to outright receivers if investors: 1) want to reduce the volatility of the trade (at the expense of potential return); or 2) have a strong view that core rates will increase.

Bonds: yields should follow the swaps down

Czech 2y, 5y and 10y bond yields are strongly correlated with swaps, implying that they should decrease together with swaps. We have confidence that the 2y bond yield will fall significantly during the current cycle. 5y and 10y bonds should also rally unless there is a big increase in core rates. The bond curve should also steepen.

Czechia: CNB cuts – receive front end

Key historical lesson: receive 1y1y in Czech rates

Keep receiving up until the last cut is the key lesson of previous Czech cutting cycles. The market prices in more easing as the CNB eases. That is why we should receive Czech rates, especially in the front end, on spikes and when the front end looks attractive from a valuation point of view. The best instrument at the beginning of the cycle seems to be 1y1y swaps based on the 2008-10 cutting cycle, which is likely to be the one that the current one resembles the most. We have just closed our 1y1y receiver in Czechia vs 1y1y payer in Poland as the trade has reached the target (EM Alpha: Close 1y1y receiver in CZK vs 1y1y payer in PLN as target is hit (again)). We will be looking to re-enter a Czech front-end receiver trade after the market settles following a larger-than expected cut by the CNB. We also received Czech front-end this and last year:

BofA Global Research Reports

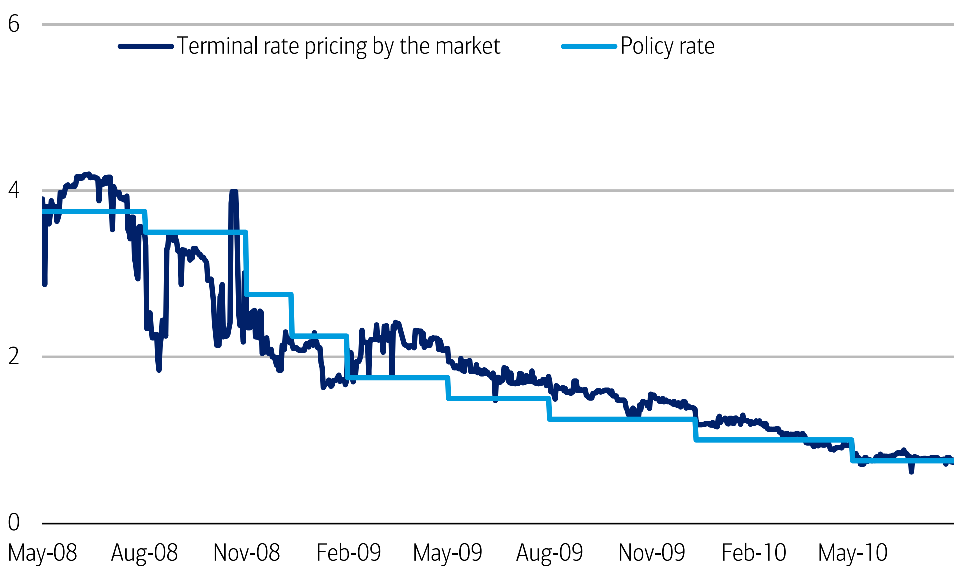
Title: Subtitle	Primary Author	Date Published
EM Alpha: Close Czech 1y1y receiver	Mikhail Liluashvili	11 January 2024
EM Alpha: Valuations look more attractive now: receive 1y1y in Czechia	Mikhail Liluashvili	08 January 2024
EM Alpha: Target hit – close 1y1y receive in Czechia vs 1y1y payer in Poland	Mikhail Liluashvili	02 January 2024
EM Alpha: Receive Czech vs pay Polish 1y1y + close Czech FRA flattener which is near target	Mikhail Liluashvili	08 December 2023

Next shoe to drop: terminal rate to be repriced lower

Despite a larger-than-priced cut at the February meeting, the market is still pricing in the terminal rate at around 3% or only slightly below. The market is aware of the CNB's willingness to cut only to the neutral rate for now, which is estimated to be around 3%. If history is a guide, then we would expect the terminal rate to be ultimately priced well below 3% as the market prices the terminal rate lower as the cycle progresses. For example, in the 2008-10 cycle, which is most likely the best playbook for the current one, the terminal rate was gradually repriced lower as the cycle progressed (Exhibit 1).

Exhibit 1: Terminal gets repriced as the CNB cuts

2008-10 cycle is likely to be the best playbook for the current one



Source: Bloomberg, BofA Global Research

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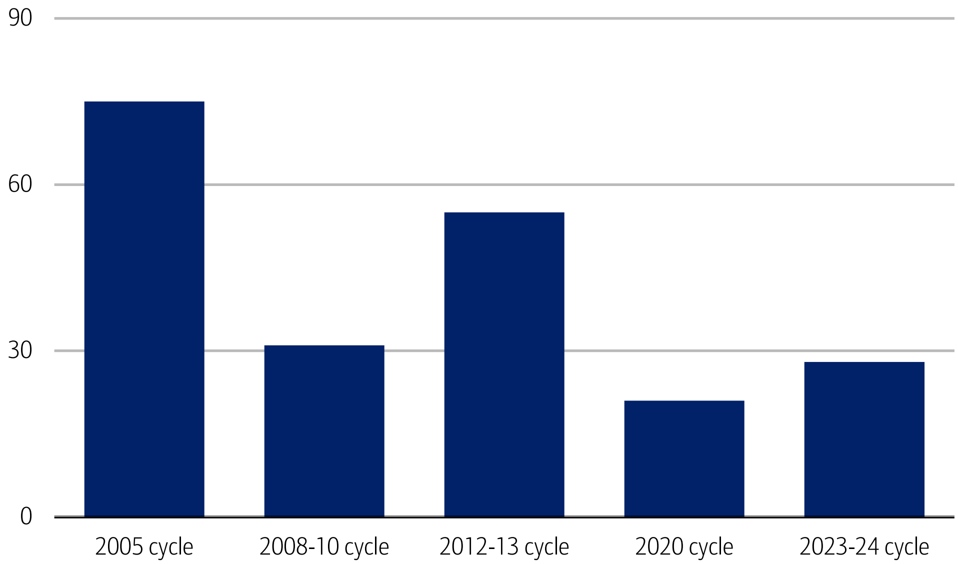
Data or CNB communication needed to reprice terminal lower

We expect repricing of the neutral rate lower to come from either: 1) downside inflation surprises (more likely); or 2) clear acknowledgement from the CNB that it wants to go below the neutral rate.

The receiver trades start 1-2 months before the first cut

The receiver trades usually start to perform 1-2 months before the first cut. The 2005 cycle was an exception at 75 days before. Even in the current cycle the real receiver trade started only in late November or even in late December/early January if we look at 1y swap net of carry and roll. This highlights the importance of correctly calling the start of the easing cycle.

Exhibit 2: Number of days between the start of the receiver trade and the first cut
The receiver trades usually start 1-2 months before the first cut (we look at 1y swap net of carry and roll)



Source: Bloomberg, BofA Global Research

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The market consistently underprices easing cycles in Czechia…

Our analysis shows that the market consistently underprices cutting cycles in Czechia. Investors can benefit from this phenomenon by receiving front-end swaps as well as FRAs. We believe that these are the highest Sharpe ratio trades for macro investors.

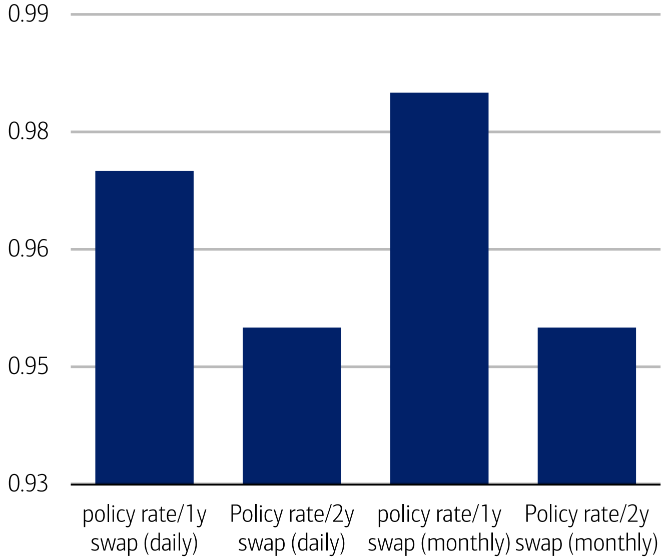
…for three main reasons

We see three main reasons why the market consistently underprices easing cycles: 1) forecasting ability is quickly eroded with longer time horizons (this is consistent with pricing being more accurate in front-end FRAs than long-end FRAs); 2) the market requires a risk premium in case it is wrong and hence it does not fully price in cutting cycles; and 3) carry and roll of receiver positions becomes very negative if a lot of cuts are priced in, but the central bank has not yet cut the policy rate.

Strong correlation between front-end swaps and the policy rate

There is a very strong correlation (more than 93%) between 1y/2y swaps and the policy rate in Czechia (Exhibit 3). This is consistent with the market underpricing cutting cycles and pricing in more and more cuts as the CNB eases monetary policy.

Exhibit 3: Strong correlation between 1y/2y and the policy rate
The correlation coefficients are calculated for the period Jan 2004- Jan 2024



Source: Bloomberg, BofA Global Research
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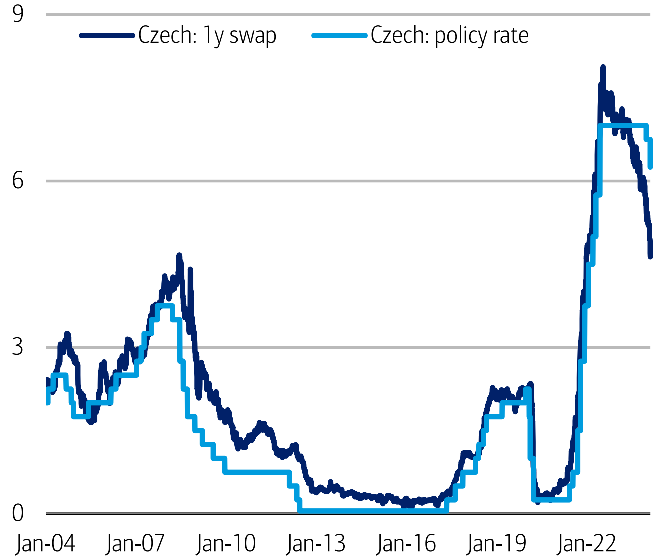
Exhibit 4: 1y swap follows the policy rate
The market prices in more and more cuts as the CNB cuts



Source: Bloomberg, BofA Global Research
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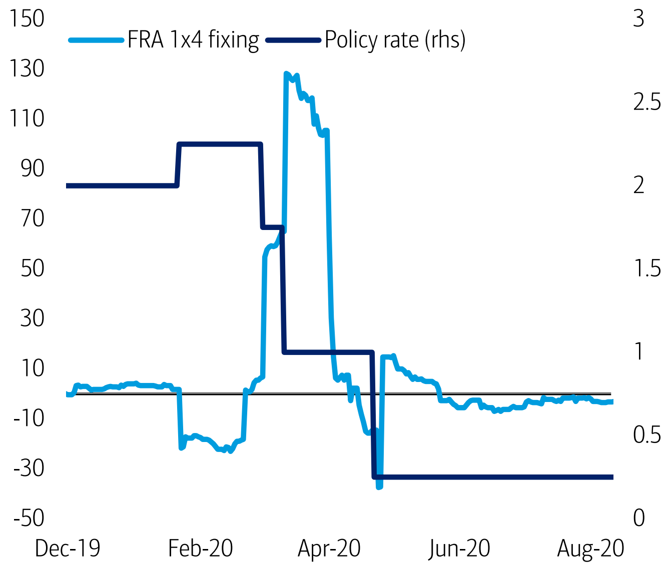
FRAs also consistently underestimate the cutting cycle…

In general, FRAs fail to correctly anticipate the start or the end of cutting cycles. Moreover, the longer the maturity of FRAs, the more the market underestimates the size of cuts during the cycle, especially if it is a long one. This is consistent with the fact that the market's ability to forecast the central bank's policy rate (and interbank rates) declines as the horizon lengthens.

Exhibit 5: 2020 cycle was unexpected by the market
Even FRA 1x4 failed to predict it correctly



Source: Bloomberg, BofA Global Research
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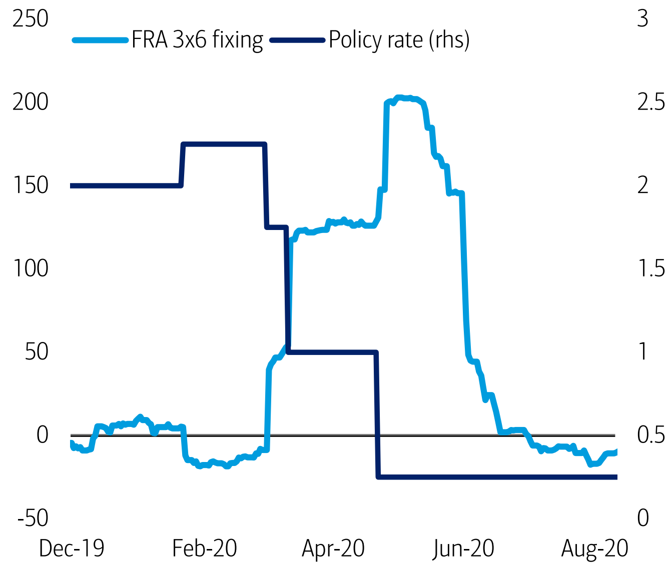
Exhibit 6: FRA3x6 also failed to predict the cutting cycle
It fixed higher than FRA 1x4



Source: Bloomberg, BofA Global Research
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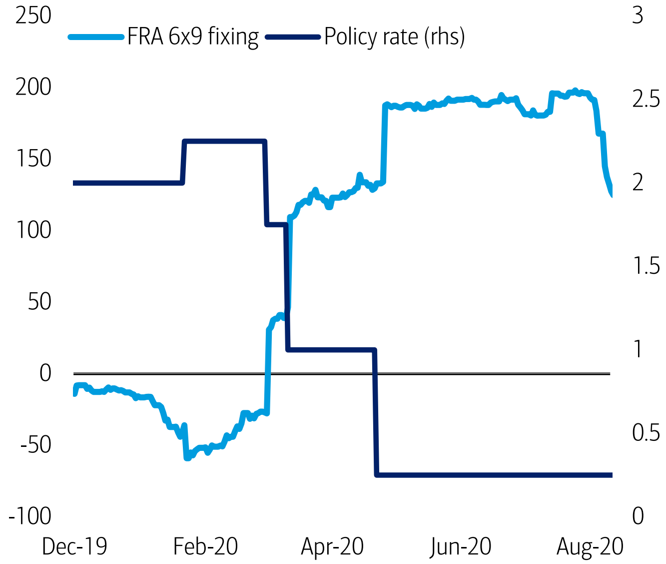
Exhibit 7: 2020 cycle: FRA 6x9 6 months ago minus 3m PRIBOR
Even more underpricing of the cutting cycle



Source: Bloomberg, BofA Global Research

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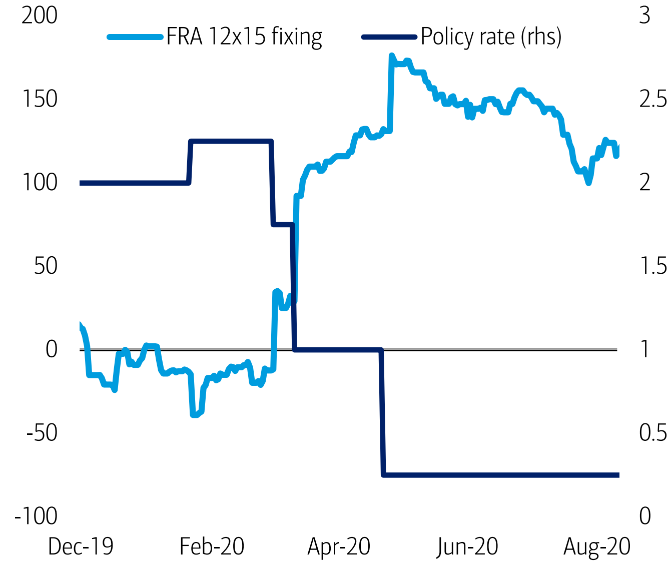
Exhibit 8: 2020 cycle: FRA 12x15 fixing
FRA 12x15 significantly udnerprice the cutting cycle



Source: Bloomberg, BofA Global Research

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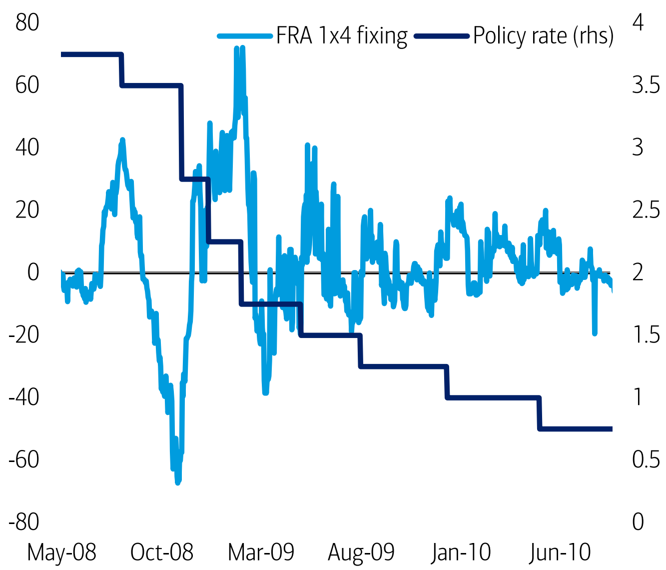
...with some small exceptions

Even though FRAs 1x4 do a bad job predicting the start of easing cycles (including the current one) in Czechia, they do a decent job predicting their end. In two out of four cutting cycles (2008-10 and 2020) FRA 1x4 fixed around 3-month PRIBOR when the CNB made its last cut. Also, at times in the cycle, FRA 12x15 predicted the start better than shorter-end FRAs (for example, in 2008-10). We think this is because the market was trying to price in a cutting cycle a year before the actual start, which led to correct pricing of the cycle by FRA 12x15, but not by shorter FRAs. To put it simply, it was just coincidence, in our view.

Exhibit 9: 2008-10 cycle: FRA 1x4 1 month ago minus 3m PRIBOR
FRA 1x4 does a decent job predicting the end of the cutting cycle



Source: Bloomberg, BofA Global Research

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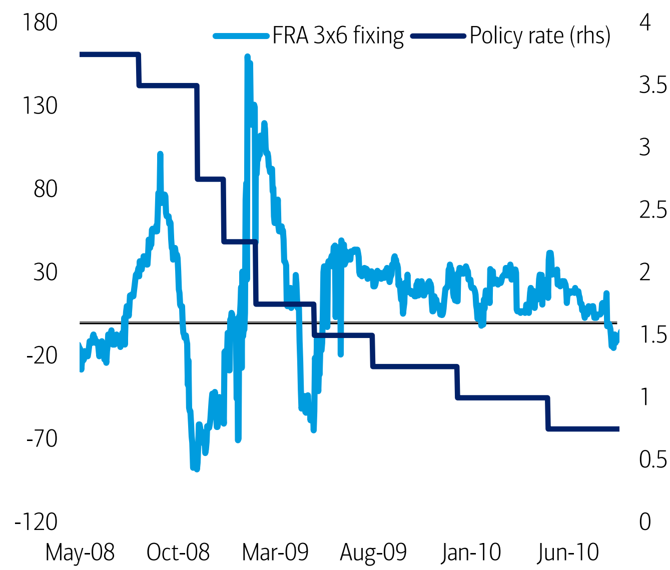
Exhibit 10: 2008-10 cycle: FRA 3x6 6 months ago minus 3m PRIBOR
FRA 3x6 does not seem to predict the end of the cycle well



Source: Bloomberg, BofA Global Research

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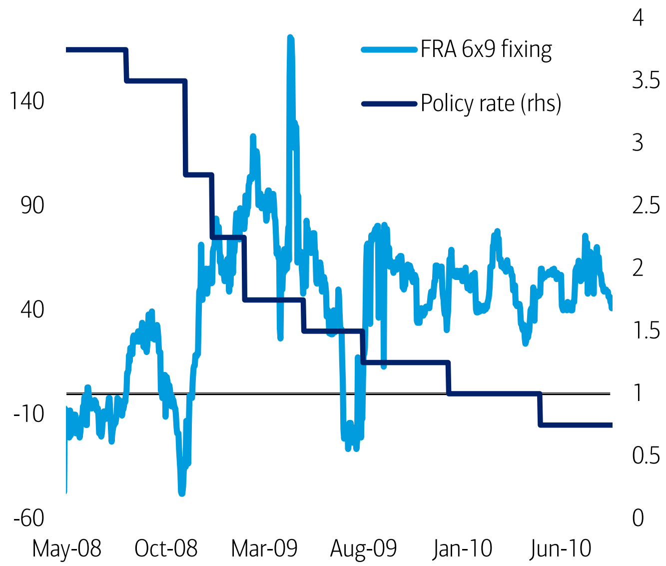
Exhibit 11: 2008-10 cycle: FRA 6x9 6 months ago minus 3m PRIBOR
FRA 6x9 prices in too high a terminal rate in a cutting cycle



Source: Bloomberg, BofA Global Research

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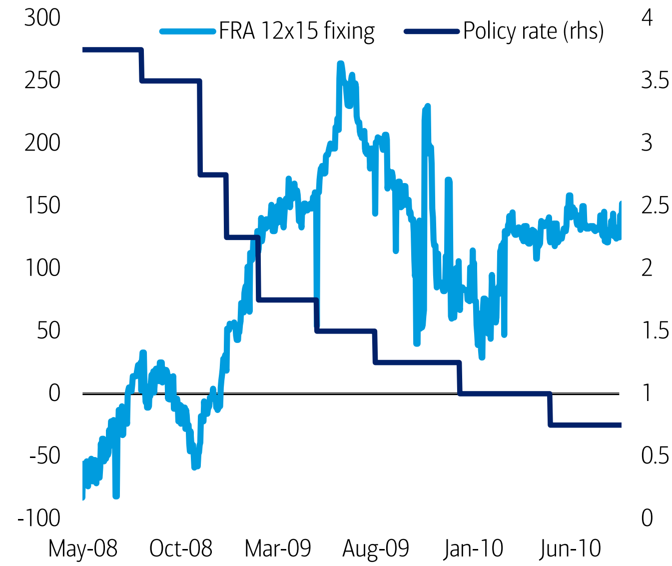
Exhibit 12: 2008-10 cycle: FRA 12x15 1 year ago minus 3m PRIBOR
FRA 12x15 prices in too high a terminal rate in a cutting cycle[



Source: Bloomberg, BofA Global Research

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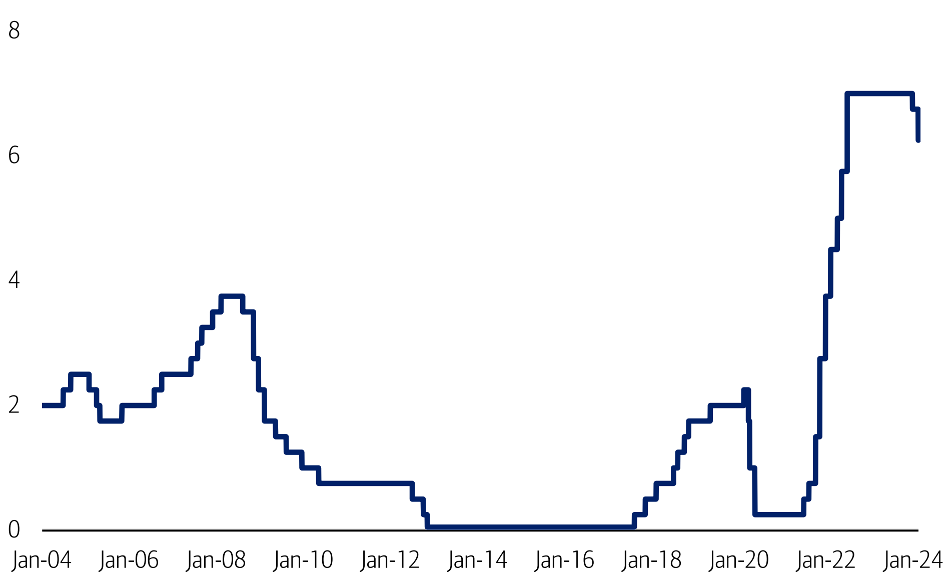
The current cycle is the fifth in recent Czech history

There have been four cutting cycles in Czechia (excluding the current one) since 2004: 1) January 2005-April 2005; 2) August 2008-May 2010; 3) June 2012-November 2013; and 4) March 2020-May 2020. Note that the easing cycle that started in June 2012 was preceded by another easing cycle rather than a hiking cycle, which is usually the way monetary cycles work. We treat them as two separate cycles as there was a two-year gap in between. Moreover, the June-2012-November 2013 cycle ended with the CNB announcing a floor for EURCZK, which should have had an impact on the rates market even though the policy rate was not changed. That is why we assume that this cycle ended in November 2013 rather than at the time of the last cut.

Exhibit 13: A long cutting cycle is usually preceded by a long and aggressive hiking cycle
The current cycle is likely to be long (the chart shows CNB's policy rate)



Source: Haver, BofA Global Research

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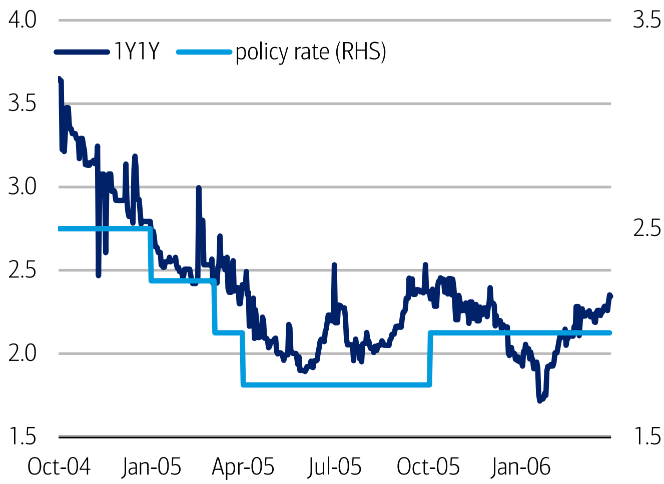
The longer the hiking cycle, the longer the cutting cycle after it (usually)
Given historical patterns, it is reasonable to expect the current cycle to be long, resembling August 2008-May 2010, given that it follows a long and aggressive hiking cycle. A long cutting cycle usually follows a long and significant (in terms of total tightening) hiking cycle, and vice versa. The COVID easing cycle was an exception, but this was driven by a unique event that is unlikely to be repeated, in our view.

Key historical lesson for swaps: receive until the last cut

The key lesson of the last four cutting cycles for front-end swaps is to receive until the last cut by the CNB. This rule holds for 1y, 1y1y and 2y swaps for all the previous four cutting cycles in Czechia. Below we produce the charts of 1y, 1y1y and 2y swaps (net of carry and roll) for some of the cycles. Moreover, a receiver trade often continues to work even after the last cut as the market most likely continues to believe that more cuts are possible. Even during the 2020 cutting cycle, front-end swaps reached the bottom a few days after the last cut, even though the policy rate was cut almost to zero.

Exhibit 14: 2004-05 cycle: 1y1y bottomed after the last cut
Receiving front-end until the last cut usually makes money



Source: Bloomberg, BofA Global Research

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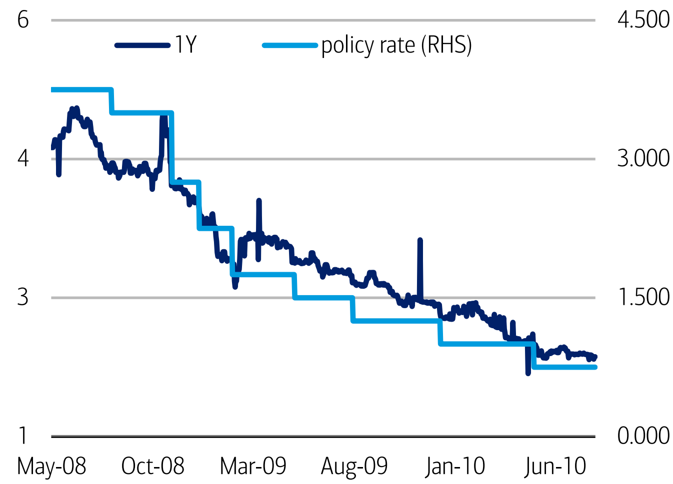
Exhibit 15: 2008-10 cycle: 1y swap bottomed around the last cut
One more confirmation for our rule of thumb



Source: Bloomberg, BofA Global Research

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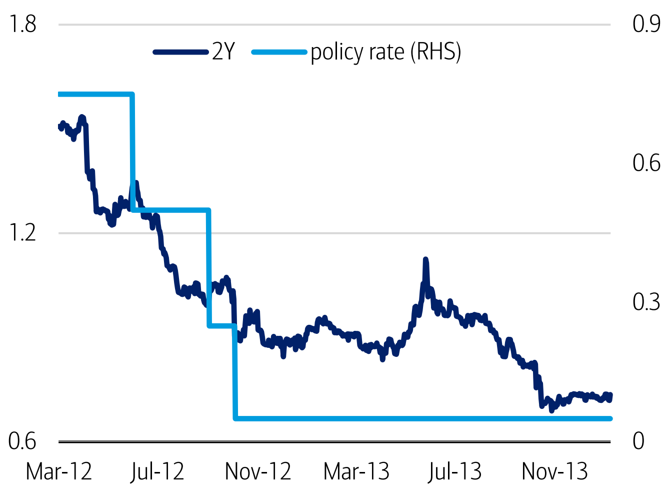
Exhibit 16: 2012-13 cycle: one more confirmation of the rule
2y swap bottoms in Nov 2013 when the floor for EURCZK is announced



Source: Bloomberg, BofA Global Research

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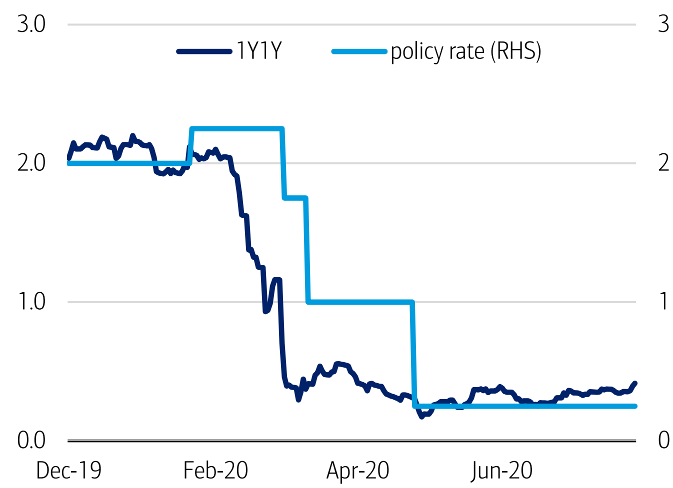
Exhibit 17: COVID shock: last cut = 1y1y bottom
This confirms that we need to receive until the last cut



Source: Bloomberg, BofA Global Research

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2012-13 cycle: swaps reached the bottom when EURCZK floor was announced

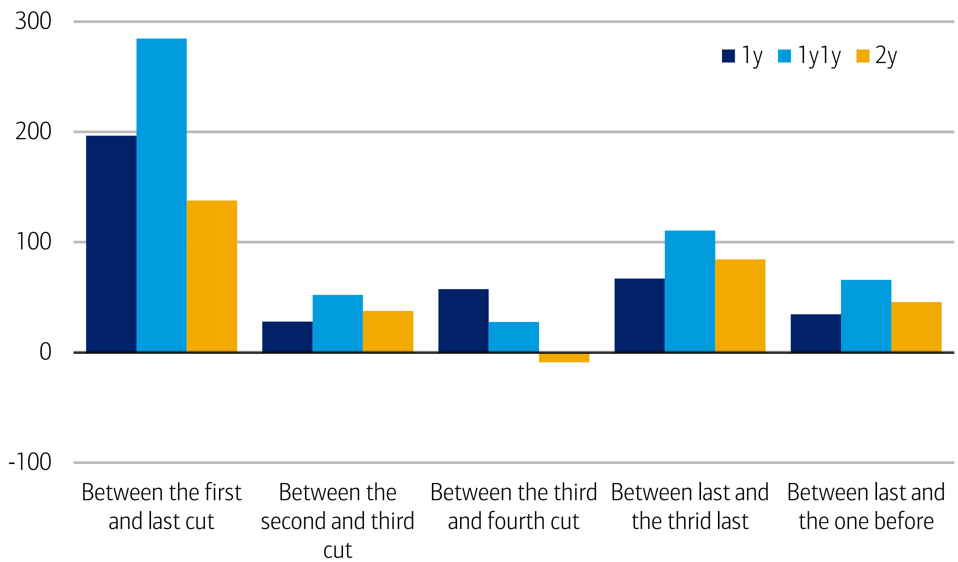
Even in the 2012-13 cycle, front-end swaps reached the bottom only when the floor for EURCZK was announced at the beginning of November 2013. This means that easing through the exchange rate also impacts front-end swaps, most likely through expectations of easy monetary policy in future.

2008-10 cycle: 1y1y usually outperforms 1y and 2y

The key takeaway from the 2008-10 cycle for the current one is that 1y1y swaps tend to outperform 1y and 2y swaps at the beginning and towards the end of an easing cycle. This might not be true in the middle of the cycle. The current Czech cycle is likely to resemble the 2008-10 one in terms of length and the amount of easing more than any other previous cycles. The market expects the current cycle to last around 15 months from now (slightly more than 16 months in total), with total easing of more than 400bps. In 2008-10, the CNB cut the policy rate by 300bps in 56 months.

Exhibit 18: 1y1y is a sweet spot to receive in a long and aggressive cutting cycle

Especially at the beginning and towards the end of the cycle (left axis is basis points). Data for 2008-10 cycle



Source: Bloomberg, BofA Global Research

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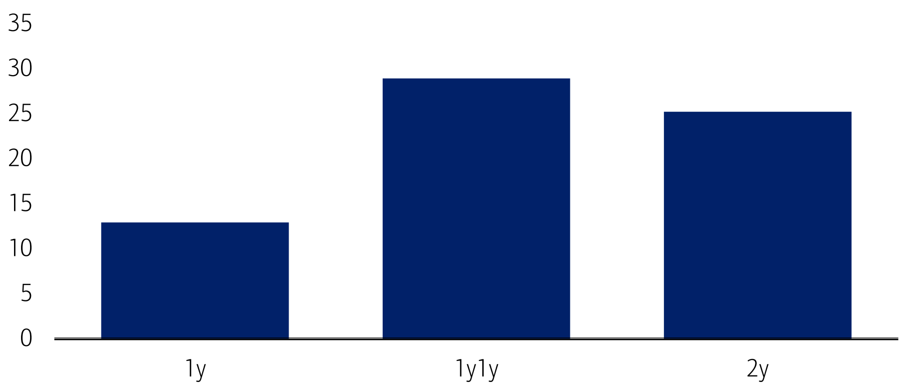
Exhibit 19: Current cutting cycle: 1y1y outperforms 1y and 2y, in line with 2008-10 cycle

All swaps are net of carry and roll for the period 22 December 2023 – now



Source: Bloomberg, BofA Global Research

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1y1y swaps have been outperforming both 1y and 2y swaps net of carry and roll since the start of the cutting cycle (see Exhibit above). This one of the reasons we have been receiving 1y1y swaps (rather than 1y or 2y) recently in Czechia. Another reason is that the negative roll on 1y1y receivers in Czechia is lower than carry and roll on other front-end swaps.

Another lesson: spikes on global events are an opportunity to add to receivers
Another lesson from previous cycles is that a spike in the front end driven by global factors, especially related to the US economy, is an opportunity to add to receivers. The 2008-10 cutting cycle in Czechia is an extreme example of this view. The global bankruptcy event in October 2008 caused Czech front-end swaps to spike due to concerns about global banking health and because of koruna weakness. Looking back, it was clearly an opportunity to receive as swaps dropped massively after that.

Recent example: Jan 2024 spike in Czech 1y1y was an opportunity to receive it
Czech front-end rates (as well as euro and US rates) spiked at the beginning of January, driven by global factors. This was a great opportunity to add to Czech front-end receivers, which we did using 1y1y swaps. Our target was hit within three trading days:

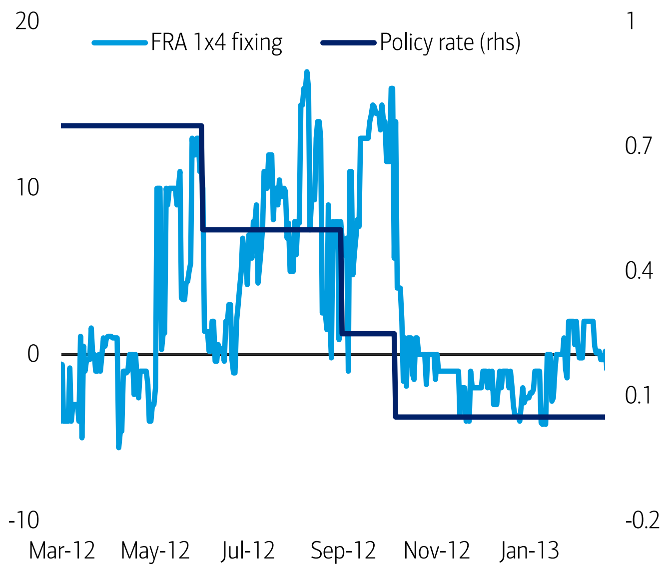
BofA Global Research Reports

Title: Subtitle	Primary Author	Date Published
EM Alpha: Valuations look more attractive now: receive 1y1y in Czechia	Mikhail Liluashvili	08 January 2024
EM Alpha: Close Czech 1y1y receiver	Mikhail Liluashvili	11 January 2024

The long the FRA maturity, the stronger the mispricing

The key historical lesson for long positions in FRAs during a cutting cycle is that longer maturity FRAs misprice the cutting cycle more than short-end FRAs, especially at the beginning. This suggests that the market misprices the policy rate more over longer horizons. Exhibit 20-Exhibit 25 show the policy rate and FRA fixings. These charts show the fixing of the FRA positions in future entered at each date (assuming that FRAs are held until maturity).

Exhibit 20: FRA 1x4 does not significantly misprice the cycle
But it still usually fixes below the PRIBOR during the cutting cycle



Source: Bloomberg, BofA Global Research

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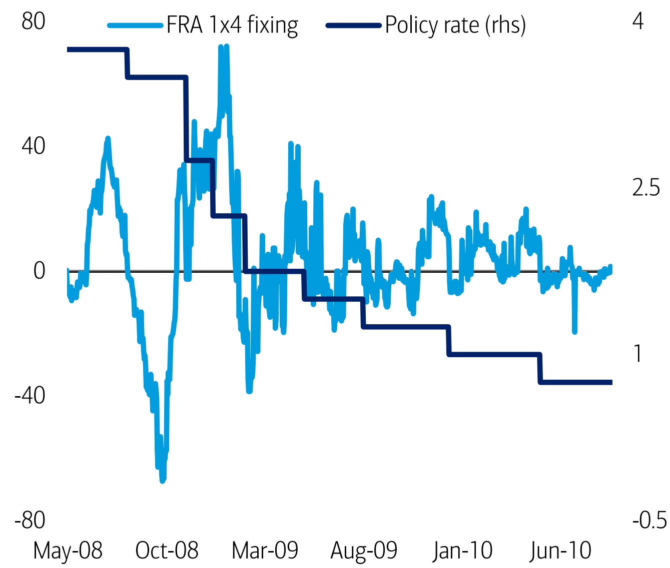
Exhibit 21: FRA 1x4 mispriced the pace of cuts at the beginning
The chart shows 2008-10 cutting cycle



Source: Bloomberg, BofA Global Research

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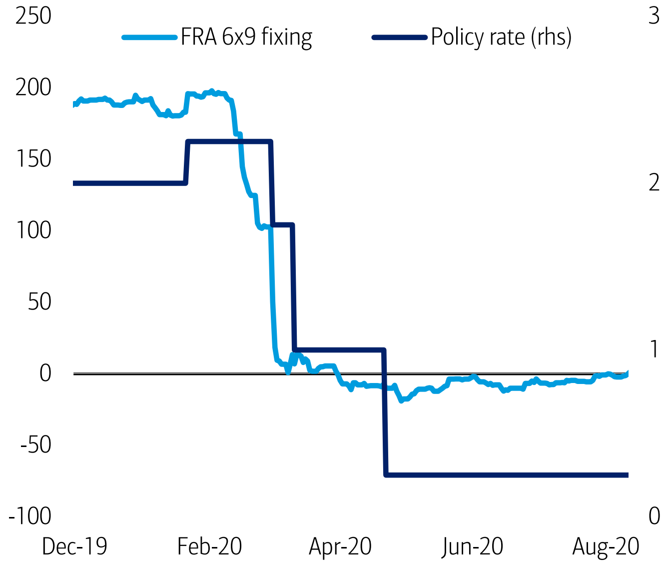
FRA 1x4 receivers also make money, but not all the time
Even though long-end FRAs misprice the cutting cycle more than short-end FRAs, FRA 1x4 also often misprices 3-month PRIBOR during the cycle, especially at the beginning.

Exhibit 22: 2019-20: best time to receive FA 6x9 was the first cut
The chart shows FRA 6x9 fixings



Source: Bloomberg, BofA Global Research

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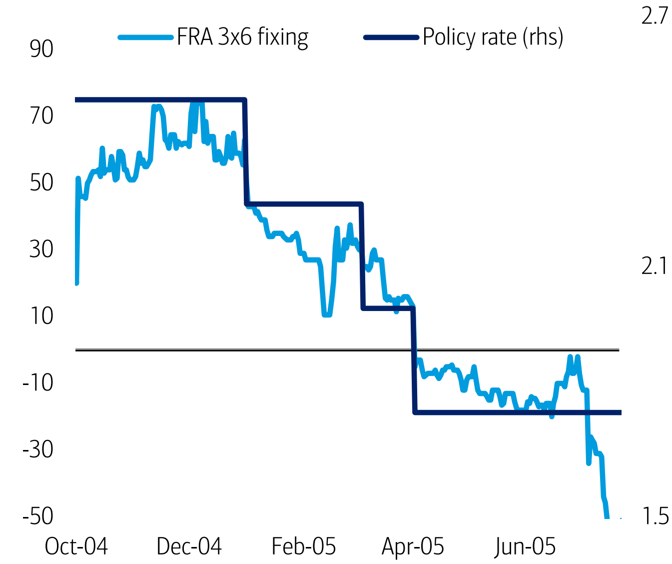
Exhibit 23: FRA 3x6 receivers stopped working just before the last cut
This is similar to our rule of thumb for swaps (2004-05 cutting cycle)



Source: Bloomberg, BofA Global Research

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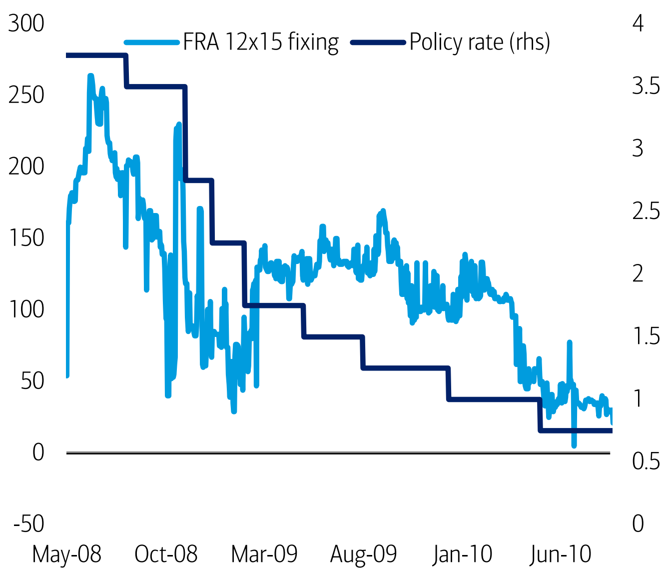
FRA receivers usually stop working just before the last cut, sometimes earlier

In most cases, FRA receivers stop working close to the last cut (excluding FRA 1x4). That said, there were periods when they stopped working a bit earlier and cycles when they continued to work even after the last cut.

Exhibit 24: FRA 12x15 receivers work during the cutting cycle
The longer FRAs misprice the cycle more (2008-10 cycle in the chart)



Source: Bloomberg, BofA Global Research

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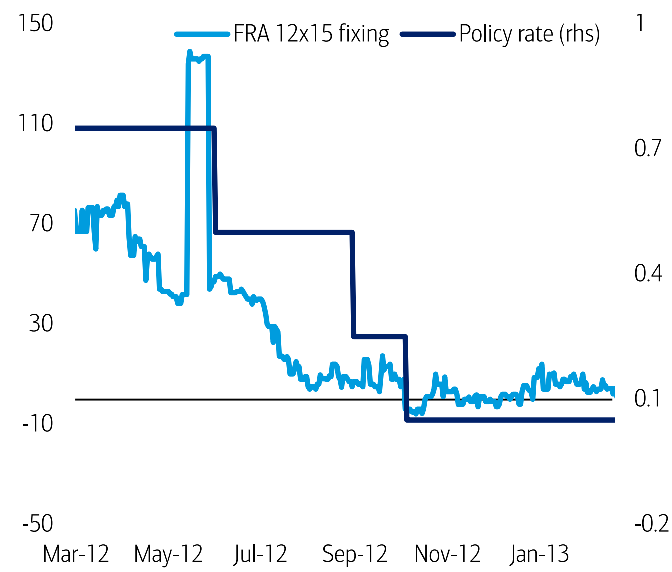
Exhibit 25: FRA 12x15 receivers worked until the last cut
The best performance was at the beginning (2012-13 cycle)



Source: Bloomberg, BofA Global Research

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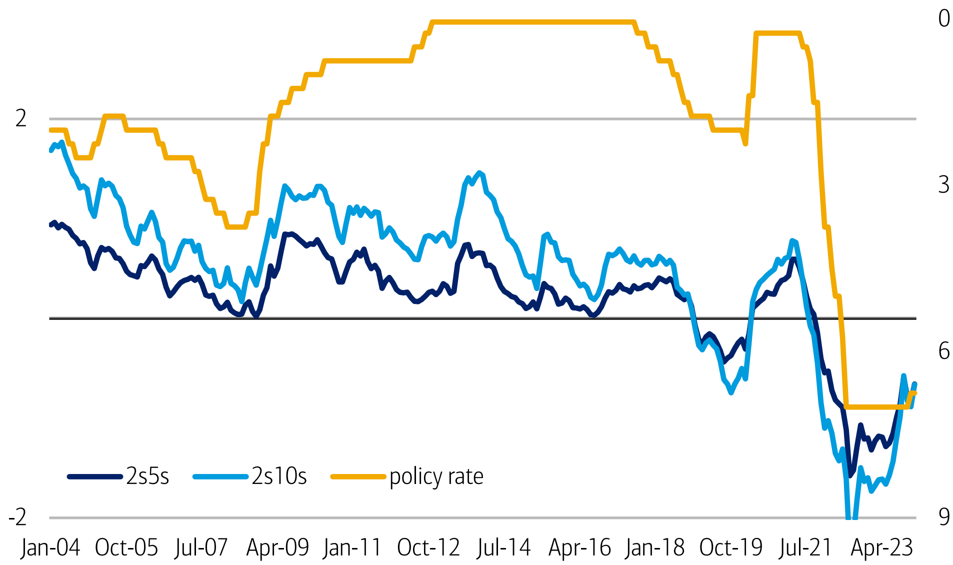
The curve should steepen in a cutting cycle

In a cutting cycle, we would expect the curve in Czechia to steepen unless the rally in core rates becomes extraordinarily strong. There is a correlation between the shape of the swap curve in Czechia and the policy rate, especially recently (Exhibit 26). As the CNB cuts rates, the curve steepens (we focus on the shape of the curve between 2y and

5y/10y swaps). Another factor that impacts 5y and 10y swaps in Czechia is core rates, which can be proxied by US or euro swaps as well as by the average of the two.

Exhibit 26: Some correlation between the policy rate and 2s5s/2s10s (monthly average data)
But it is not perfect as core rates also play an important role



Source: Bloomberg, BofA Global Research

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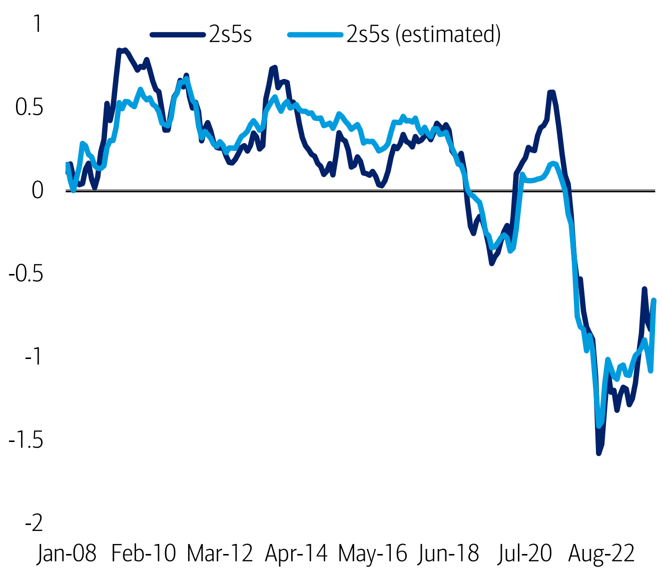
Exhibit 27: Core rates + policy rates = 2s5s in Czechia
R-squared in above 90%



Source: Bloomberg, Eviews, BofA Global Research

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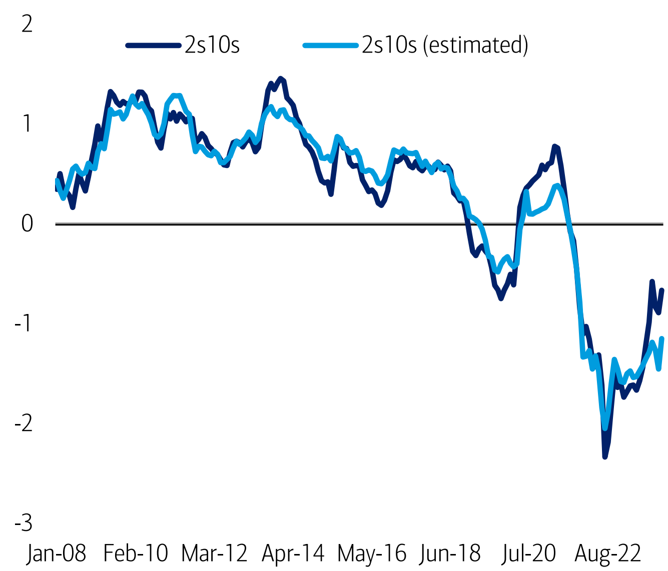
Exhibit 28: Core rates + policy rates = 2s10s in Czechia
R-squared in above 95%



Source: Bloomberg, Eviews, BofA Global Research

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When CNB cuts and core rates sell off – put on steepeners

The first reason to put on a steepener in the current cycle is to capture not only the move in the front end, but also a potential increase in core rates. Since 2008, the shape of the Czech curve can be almost fully explained by two factors (on monthly average frequency): 1) the policy rate; and 2) the average of US and euro rates. Exhibit 27-Exhibit 28 show the 2s5s and 2s10s slopes of the Czech curve and our estimates using a Dynamic Ordinary Least Squares (DOLS) approach with one lad and one lag. We use

DOLS because there is cointegration between 2s5s/2s10s and our explanatory variables. The independent variables are CNB's policy rate, as well as the average of the US and euro rates (5y for 2s5s estimates and 10y for 2s10s estimates).

Another reason to put on a steepener –less volatility

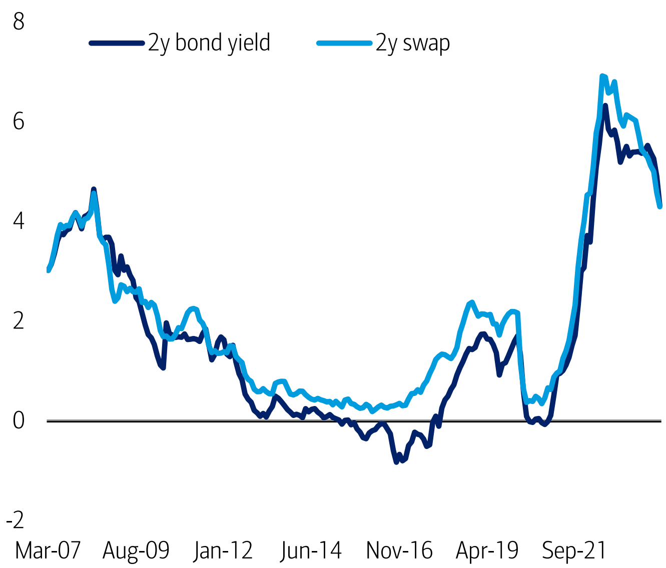
Another reason to put on a steepener is the lower volatility of steepener positions compared with outright receivers (at the expense of potential returns). Given that an increase/drop in 1y/2y swaps is reflected in 5y/10y tenors, steepeners should be less volatile than outright receivers unless there is significant core rates volatility.

Bond yields should follow the swaps

Czech 2y, 5y and 10y bond yields have an extraordinarily strong correlation with swaps, which means that the yield on bonds should follow swaps in the current cutting cycle. We are confident that the 2y bond yield will fall significantly during the current cycle. The performance of 5y and 10y bonds will also depend on core rates. However, unless core rates rise dramatically, we would expect both 5y and 10y bond yields to drop during the cutting cycle. Moreover, the bond curve should steepen in this cycle similarly to a swap curve. 10y swaps and bonds in Czechia are the most sensitive to core rates followed by 5y bond/swap and 2y bond/swap.

Exhibit 29: 2y bond yields should fall in this cycle

Because there is strong correlation between 2y bond and 2y swaps



Source: Bloomberg, BofA Global Research

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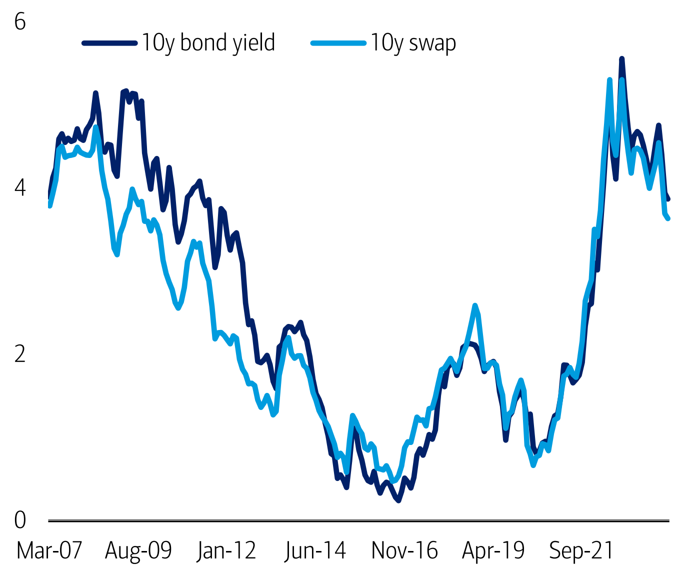
Exhibit 30: 10y bond yields should also fall unless core rates spike

We also expect 10y bond yields to fall



Source: Bloomberg, BofA Global Research

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Technical note on swaps net of carry and roll

We calculate 1y, 1y1y and 2y swaps net of carry and roll using Bloomberg curves. For 1y1y and 2y swaps, we calculate the price of a swap with a start date three months before the first cut. We track the price of this swap for 365 days for the 1y1y and 180 days for the 2y, after which we close the position and enter a fresh 1y1y or 2y swap. We use the same approach for 1y swaps but the switch period is equal to 90 days. We use 1y and 1y1y swaps against 3-month PRIBOR and 2y swaps against 6-month PRIBOR.

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