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EM frontier markets distress levels are rising

Macro focus: Higher US yields, slower growth and a stronger USD are taking their toll on smaller, more vulnerable EM frontier markets. We recently catalogued that these speculative-grade economies are disproportionately at risk of bond defaults (see [here](#)). The daunting global macro backdrop and the Fed's twin tightening – higher cost of funding and withdrawal of liquidity – has only reinforced our narrative. Full-fledged balance of payment crises in some jurisdictions have created adverse feedback loops between the sovereign debt distress, unanchored exchange rate expectations and – in some cases – the emergence of parallel FX markets. With ~50% of the smaller frontier market space trading at distressed levels, an external anchor via the IMF is paramount for stabilisation.

FX views: Emerging market currencies have been hit more broadly by the Fed's hawkish policy update last week. Alongside hiking rates by 75bps for the third consecutive FOMC meeting, the Fed also signalled that they plan to keep raising rates at a faster pace through the remainder of this year. This reinforces the USD's strength.

Week in review: The UAE raised its emissions reduction target from 23.5% to 31%. Saudi Arabia's August inflation rate hit a 15 month high of 3.0% y/y. Russia cut rates by a further 50bp to 7.50%. Both Israeli and Czech inflation for August surprised to the downside on lower energy prices.

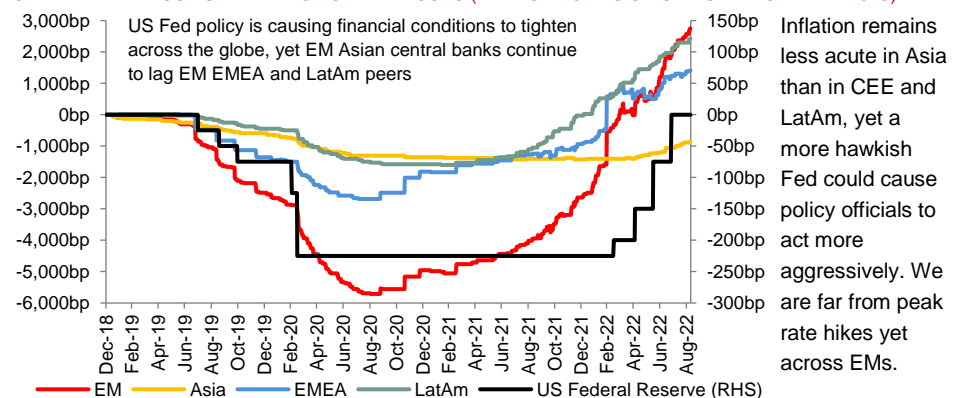
Week ahead and calendar: It'll be a relatively quiet week in terms of EM-relevant data releases, with the key releases being rate decisions in Hungary (MUFG and consensus: +100bp to 12.75%) and Czech Republic (MUFG and consensus: on hold at 7.00%). Beyond EM, US data prints such as PCE, jobless claims, housing market indicators and Q3 2022 GDP will remain closely watched.

Forecasts at a glance: Headwinds facing EMs are getting stronger as persistently high inflation prompts more hawkish monetary policy responses leading to further tightening of financial conditions and more sacrifices from growth.

Core indicators: EMs have witnessed their fourth consecutive week of fund outflows (USD-0.6bn) following a rude awakening Fed hike and still hawkish stance.

CHART OF THE WEEK: EM CENTRAL BANKS COULD GET A RUDE AWAKENING

CENTRAL BANK CUMULATIVE POLICY RATE CUTS (REBASED 0 BASIS POINTS = DECEMBER 2018)



Source: Bloomberg, MUFG Research

Macro focus

EM frontier markets distress levels are rising

Higher US yields, slower growth and a stronger USD are exacerbating the concerns across EM higher yielding (HY) frontier markets

Higher US yields, slower growth and a stronger USD are taking their toll on smaller, more vulnerable EM frontier markets. We recently catalogued that these speculative-grade economies are disproportionately at risk of bond defaults (see [here](#)). The daunting global macro backdrop and the Fed's twin tightening – higher cost of funding and withdrawal of liquidity – has only reinforced our narrative. Full-fledged balance of payment crises in some jurisdictions have created adverse feedback loops between the sovereign debt distress, unanchored exchange rate expectations and – in some cases – the emergence of parallel FX markets. With ~50% of the frontier market space trading at distressed levels, an external anchor via the IMF is key for stabilisation.

Two implications for EMs from the current set of global macro challenges

The current global macro and financial market backdrop has two implications for EMs:

1. Slower global growth and tighter global financial conditions have meant loss of external market access for most lower-rated higher yielding (HY) frontier markets, with full-fledged balance of payment crises having already crystallised in several jurisdictions. This is reflected in a number of currency devaluations and a historically high share of sovereign USD paper trading at distressed levels – yields of +1,000bp above that of US Treasuries.
2. The growing competition from elevated USD cash interest rates creates a longer-term challenge for the portfolio role of investment grade (IG) EM sovereign credits, with current spread levels now offering a less significant yield-to-vol pick-up than in the recent past.

Key question for EM frontier markets is when and whether fixed income securities can become more attractive again

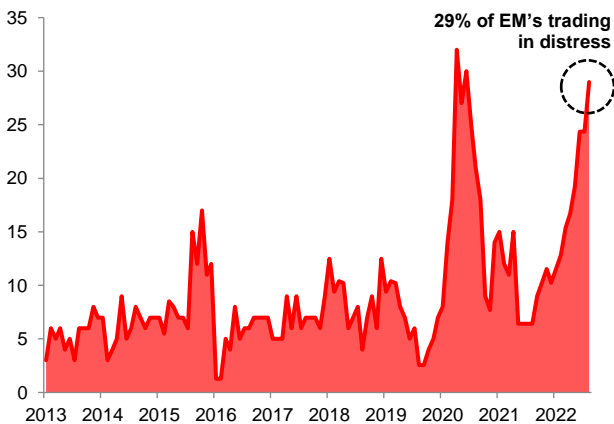
For EM frontier markets, where pricing is already distressed, the key question is when and whether fixed income securities can become more attractive again, since at the moment this market segment is considered less appealing for investors that do not want to own distressed credit or debt at risk of capital controls. For EM investment grade sovereigns, the question is how much sovereign spreads might have to widen further to attract inflows, to reflect the change in the global fixed income environment and amid already expensive valuations.

Market access has become strained across EM frontier markets

While spreads have tightened since July, rising US Treasury yields have meant that market access remains impaired. Our previous examination signals that beyond Russia and Sri Lanka, Ghana, Egypt, Pakistan and El Salvador remain the most vulnerable (see [here](#)). While HY spreads have proved relatively resilient recently (albeit

DEBT VULNERABILITIES ARE MOUNTING WITH EM BONDS FACING USD380BN CASCADE OF DEFAULTS

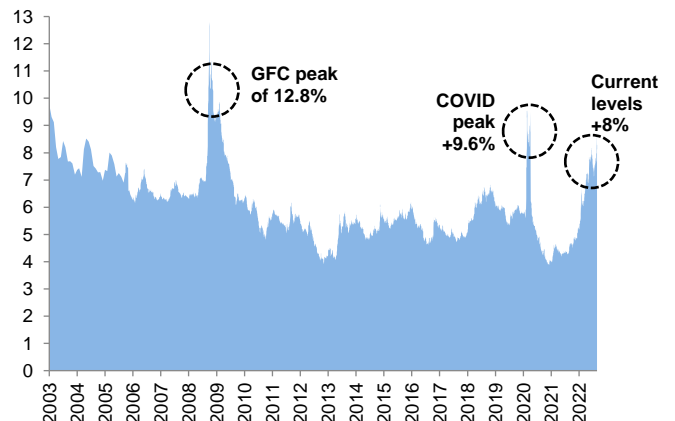
% SHARE OF EM SOVEREIGN USD BONDS WITH SPREADS ABOVE 10%



Source: Bloomberg, MUFG Research

EM SOVEREIGN DEBT LEVELS ARE PRECIPITOUSLY RISING BACK TO TROUBLED TERRITORY

EM SOVEREIGN USD DEBT YIELD (%)



Source: Bloomberg, MUFG Research

at a still high level), the continued move higher in US Treasury yields has meant that for the B-rated segment, yields are still in the double digits, such that external market access remains impaired. This makes it challenging for these sovereigns to repay their upcoming debt maturities without draining reserves. With US yields likely to remain higher for longer, we see this slow burning deterioration in reserve buffers as the key risk from higher core rates to this segment of the asset class. Our analysis finds that of the countries with relatively wide spreads, Ghana, Egypt, Pakistan and El Salvador screen as the most vulnerable to their lack of market access, with upcoming USD bond repayments accounting for over 10% of available reserves, whereas Nigeria, Tunisia and Ethiopia have led demanding repayment schedules.

Strains are spilling over into currency markets

Amidst highly indebted sovereigns, insufficient reserve levels and not-deep-enough domestic markets, the loss of external market access has spilled over to FX markets in several jurisdictions this year. Among the frontiers with historically liquid local currency markets, loss of external market access has been associated with the sharpest worsening in FX pricing year-to-date, with the endogenous nature of debt sustainability and FX stability often requiring external multilateral financing to stop the feedback loop between FX and sovereign credit deterioration.

The IMF is set to act as the core external anchor through the current challenging environment

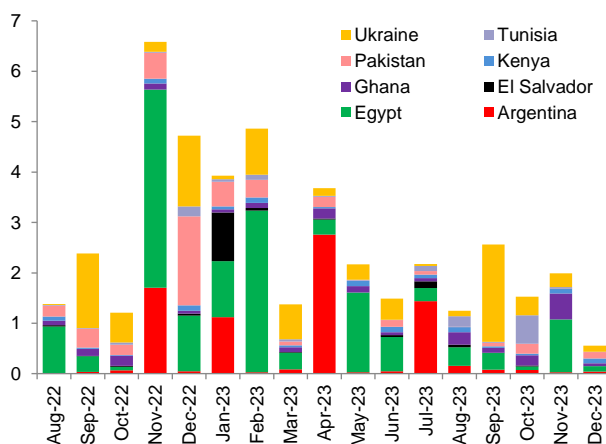
While an IMF programme is not on the cards in the case of El Salvador, Egypt, Ghana and Tunisia are currently in discussions with the IMF and Pakistan recently got its latest reviews approved. In the case of Egypt, where a deal is expected to be announced soon, our expectation is that this announcement could lead to further spread tightening, but the size of the deal matters to markets (we estimate a magnitude of USD10-15bn is required), such that there is a risk that a smaller-than-expected programme could adversely impact credit spreads. For Ghana, while an external debt restructuring cannot be ruled out as discussions with the IMF progress, we think that bond prices in the 40-50 range already reflect this risk to a large extent. For Tunisia, while an announcement of an IMF agreement could lead to some spread tightening, we view elevated external funding pressures will keep spreads at distressed levels. Similarly, for Pakistan, while the announcement that the latest IMF reviews were completed allowed for spreads to compress, we consider the market will continue to require a high premium here given the rising risks emerging from continued reserve deterioration.

For IG EMs, vulnerabilities stem from the lack of a significant spread cushion relative to rising US yields

The steady rise in US yields also has significant implications for the higher-rated segment of EM fixed income which features a relatively minor spread cushion. Indeed, with the EMBI IG spread only ~30bp wider year-to-date, yields for most EM IG sovereigns are only a few basis points higher than US treasury yields. While in some places this could be explained by strong fundamentals (i.e. twin surpluses in the GCC countries), we view IG spreads will have to widen further to offer a more significant yield-to-vol pick-up as the level of US rates moves higher.

LARGE CONTRACTUAL OBLIGATIONS DUE FOR DEBT PAYMENTS AHEAD FOR SMALLER EM'S

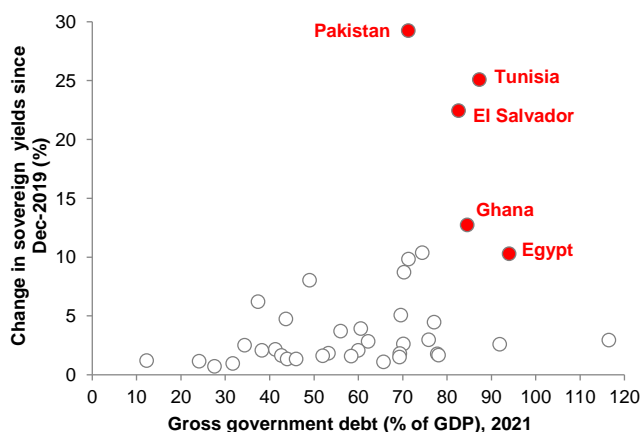
EXTERNAL DEBT DUE IN THE MOST VULNERABLE EM HY (USD BN)



Source: Bloomberg, MUFG Research

COMBINATION OF HIGH DEBT AND RISING YIELDS ACROSS MORE VULNERABLE EM'S IS EXPLOSIVE

CHANGE IN YIELDS SINCE DEC-2019 (BP) VS PUBLIC DEBT (% OF GDP)



Source: Bloomberg, MUFG Research

FX views

EM FX falls to fresh year to date lows following hawkish Fed update

Fresh year to date lows for EM FX. Central & Eastern European currencies display the most weakness over the past week

Emerging market currencies have fallen to fresh year to date lows against the USD over the past week. Weakness has been broad-based with only the RUB strengthening against the USD (+6.0%). In contrast, the worst performing EM currencies have been the HUF (-5.6% vs. USD), PLN (-4.8%), CLP (-4.8%), CZK (-4.2%), and RON (-3.9%). It has resulted in the CZK, HUF, PLN and RON all falling to fresh year to date lows against the USD. The Central and Eastern European currencies have been undermined over the past week by President Putin's plans to step-up military intervention in Ukraine to protect territorial gains in the East and South of the country. The latest developments have dampened recent optimism over a quicker end to the conflict following advances made by Ukraine forces.

Fed's plans for further large rate hikes reinforces the USD's strength

Emerging market currencies have been hit more broadly by the Fed's hawkish policy update last week. Alongside hiking rates by 75bps for the third consecutive FOMC meeting, the Fed also signalled that they plan to keep raising rates at a faster pace through the remainder of this year. It has prompted the US rate market to almost fully price in another 75bps hike from the Fed at the November FOMC meeting which is then expected to be followed by a further 50bps hike in December. Market expectations for the terminal rate have risen further as well up towards a peak of close to 4.75% next year. The sharp ongoing rise in US yields is encouraging stronger USD directly and indirectly by heightening fears over a hard landing for the US and global economy and fuelling haven demand for the USD as well. MSCI's ACWI global equity index has already fallen to fresh year to date lows extending its decline to almost 25%.

CNB & HUF to continue providing support for domestic currencies through intervention & rate hikes. In contrast, CBRT rate cuts leaves TRY vulnerable to further sharp sell-off

The policy meetings from the CNB and NBH will be in focus in the week ahead. The CNB is expected to refrain from raising rates further under Governor Michl, and continue to focus their efforts at dampening upside inflation risks through intervention to support the CZK. In contrast, the NBH is expected to continue fighting upside inflation risks and supporting the HUF through delivering a larger 100bp hike. The different approaches have both failed to prevent further currency weakness against the USD. In contrast, the CBRT has continued to pursue its unorthodox strategy of lowering rates by a further 100bps over the past week to combat elevated inflation. After the recent period of relative stability against the USD at around the 18.000-level, we expect TRY weakness to re-accelerate.

FRESH YEAR TO DATE LOWS FOR EM FX



MUFG EM FX Index (Equally-weighted basket of ARS, BRL, CLP, CNY, COP, CZK, HUF, IDR, INR, KRW, MXN, MYR, PEN, PHP, PLN, RON, RUB, TRY, TWD & ZAR against USD)

Source: Bloomberg, Macrobond & MUFG Research

HIGHER US YIELDS ARE WEIGHING HEAVILY ON EM



(Inverted) US Generic Govt 2 Yr
MSCI Emerging Markets Index(Left)

Source: Bloomberg, Macrobond & MUFG GMR

Week in review

EM capital flows: 52 week rolling cumulative flows into EM funds turn negative

Hawkish Fed stance signals further downside risks across EMs

Last week brought another rude awakening from expectations of a pivot by the Fed, as the FOMC not only hiked its policy rate by 75bp, to a 3.00-3.25% range, but also revised its median projections for federal fund rates significantly upwards, citing the ongoing risks on the inflation front. The new dot plots show Federal funds rate at 4.375% at end-2022, implying a cumulative of 125bp rate hikes in the remainder of the year. Moreover, the median projections for 2023 rose to 4.625% (from 3.75% in the June projections), while estimates for 2024 inched up to 3.875% (from 3.375%). Meanwhile, the Fed also revised its growth projections down significantly and now sees economic activity growing only 0.2% (down from 1.7%) in 2022, and 1.2% (down from 1.7%) in 2023, implying that the Bank now takes into account a sharper slowdown in economic activity. The market reaction to the more aggressive path of tightening has been negative, as there was a sharp surge in US bond yields, along with higher bond market volatility and further deterioration in liquidity conditions. As for EMs, the more aggressive tightening path from the Fed, along with the ongoing deterioration in the global liquidity backdrop, should mean tighter financial conditions. Thus, we anticipate further downside risks to growth, amidst a stickier inflation outlook. As a result, we do not see any reason to change our cautious stance on EM for now (see [here](#)).

EMs have witnessed their fourth consecutive week of fund outflows

According to IIF data, EMs witnessed their fourth consecutive week of fund outflows (USDUSD-0.6bn – week ending 9 September), driven by outflows in equity outflows (USD-1.7bn) which more than offset debt inflows (USD1.1bn). The upward repricing of Fed policy has led to an upward adjustment in expectations for EM policy rates, with investors on edge surrounding the Fed pivot, the speed at which global supply-disruptions improve and the Chinese economy rebounds. As we catalogued, while the pace of outflows has slowed in August, we have still seen important outflows in China debt (USD-7.7bn) and only marginal gains for equities (USD1.0bn) (see [here](#)). For the coming months, the timing of inflation peaking and the outlook for the Chinese economy will be central to determining EM capital flow dynamics.

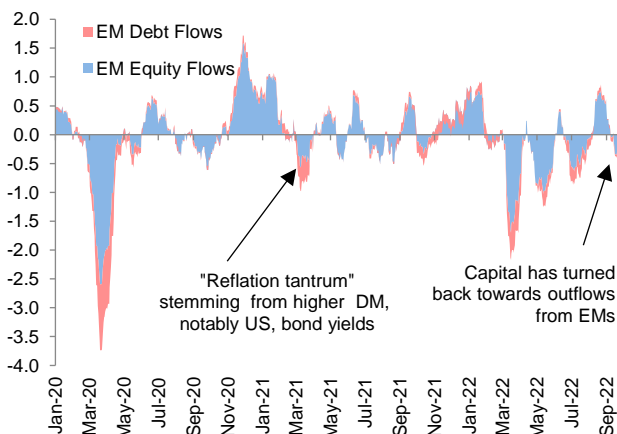
Turkey: CBRT surprises markets with another 100bp cut to 12.00%

Turkey commits to its easing cycle

The Central Bank of Turkey (CBRT) cut its policy rate by 100bp to 12.00% against our

CAPITAL HAS RETURNED BACK TO INFLOWS INTO EM'S ON A 28 DAY ROLLING BASIS GIVEN THE RISK-ON MOOD

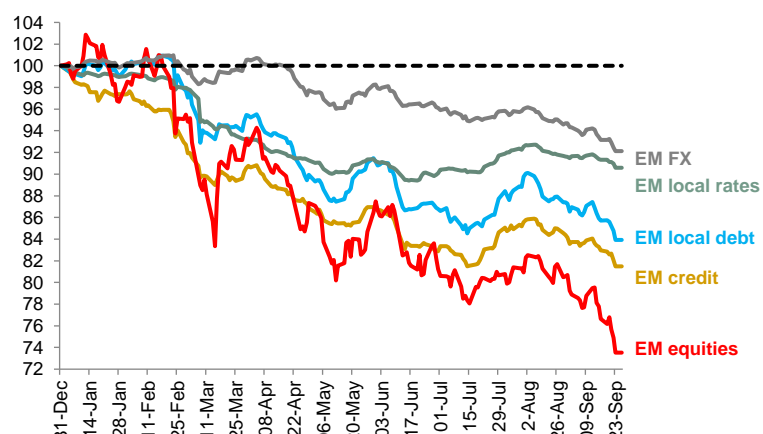
EM EQUITY AND DEBT FLOWS (USD BN), 28 DAY ROLLING AVERAGE



Source: IIF, MUFG Research

SELL-OFF ACROSS MAJOR EM ASSET CLASSES CONTINUES ON RISING GLOBAL RECESSION RISKS

EM EQUITIES, FX, RATES, CREDIT AND DEBT (1 JANUARY 2022 = 100)



Source: Bloomberg, MUFG Research

(and consensus) expectations of maintain rates on hold. Akin to previous policy statement, the CBRT cited the importance of supportive financial conditions to preserve growth momentum amid slower activity in Q3 2022. This is the CBRT's second successive 100bp cut after it kept rates on hold at 14.00% since the end of 2021. The currently relatively stable Turkish Lira (TRY) funding ahead of elections in 2023 is placing pressure on the authorities to loosen policy now rather than later, in our view. As such, we view this easing in rates acting more as a signalling tool rather than having a direct impact on financial conditions. Indeed, the cut on its own will not alleviate the CBRT's limited appetite to incur more interest rate risk and hence we view that an acceleration of loan growth will have to rely on a change to macroprudential policies. Looking ahead, we expect policy rates to remain on hold at 12.00% with risk to the downside. However, we remain focused mostly on the path of funding being made available by the CBRT as well as macroprudential measures that will translate into higher loan growth. We view further easing at a time when DM and EM central banks are raising rates, and the TRY is at alarmingly weak levels, as unsustainable.

South Africa: SARB hikes by 75bp in line with expectations to 6.25%

South Africa hikes by 75bp in line with expectations with two additional 75bp expected to a terminal rate of 7.75%

The South African Reserve Bank (SARB) increased the policy rate by 75bp to 6.25% at its September MPC meeting, in line with our (and consensus) expectations. The hike was primarily in response to Monetary Policy Committee (MPC) concerns over upside risks to the CPI outlook, and a further deterioration in inflation expectations. The decision came despite some downward revisions to the SARB's inflation projections, with the headline CPI forecast unchanged at 6.5% in 2022 before moderating to 5.3% in 2023 (5.7% previously), and 4.6% in 2024 (4.7%). The core forecast was also unchanged in 2022 at 4.3% y/y, but lowered by 20bp to 5.4% in 2023 and by 10bp to 4.8% in 2024. The MPC statement reiterated that the SARB reaction function will remain data dependent, sensitive to the balance of risks, and focused on potential second-round effects and the risk that inflation expectations de-anchor. Looking ahead, we consider that elevated inflation alongside currency pressure, will likely entail a larger and more front-loaded hiking cycle from the SARB and expect another 75bp in November (to 7.0%) and a further 75bp hike in Q1 2023 (to 7.75%).

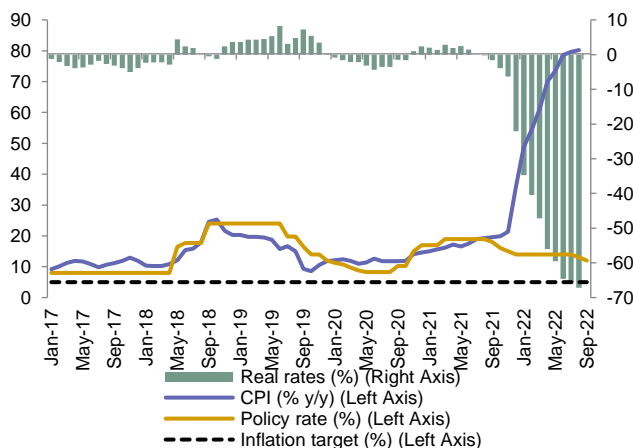
Egypt: CBE keeps all its policy rates on hold on easing inflation

Egypt keeps rates on hold

The Central Bank of Egypt (CBE) kept all its policy rates on hold, in line with our

TURKEY LOWERS RATES BY ANOTHER 100BP BUT WITH REAL RATES AT -67%, SITUATION IS UNSUSTAINABLE

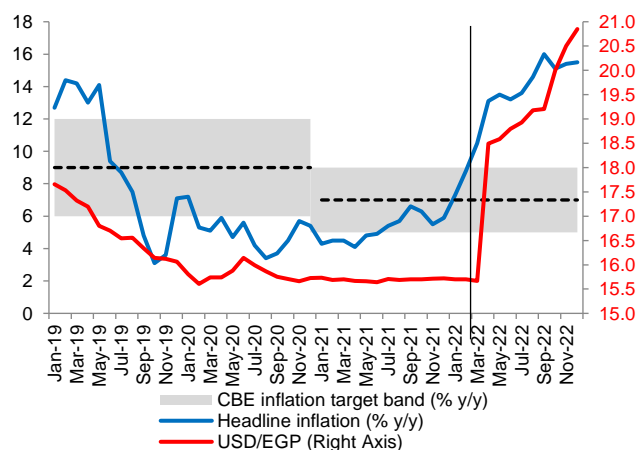
TURKEY INFLATION (% Y/Y), NOMINAL AND REAL RATES (%)



Source: Bloomberg, CBRT, MUFG Research

EGYPT KEEPS RATES ON HOLD BUT PRESSURE IS BUILDING FOR THE AUTHORITIES TO DEVALUE

EGYPT INFLATION AND TARGET (% Y/Y) AS WELL AS USD/EGP



Source: Bloomberg, CBE, MUFG Research

expectations. Meanwhile, the CBE increased the reserve requirement for banks from 14% to 18%. Keeping monetary policy on hold is in line with our view that rates are unlikely to rise sharply in the medium term despite external pressures. In the press release, the CBE cited a number of factors that drove the decision to hold, including (i) that sequential CPI prints in July and August point to a moderation in inflationary pressures, compared with earlier in the year, (ii) the delivery of 300bp since March 2022, which is still channelling through the economy, and (iii) the easing in commodity price pressures on the domestic inflationary outlook. Looking ahead, we reiterate our call for one additional 50bp rate hike before year-end to take the overnight deposit rate to 11.75%.

Navigating easing inflation with external pressure in Egypt

In last month's MPC, rates were kept on hold with the view that supply-side pressures would ebb, allowing inflation to return to target. There are indeed some signs that inflation is beginning to peak, as there has been a sustained moderation in food and transportation costs over the summer months. Whilst external financing conditions have been tight since the war in Ukraine began, the strain on Egypt's external accounts likely means new governor Hassan Abdalla's policy options are as limited as those facing his predecessor. As such, we continue to expect the CBE to press ahead with FX liberalisation as part of a GCC-backed IMF programme that would facilitate rebalancing. We anticipate that the adjustment will be complex and sensitive, and likely come at a cost of higher near-term inflation, slower growth and rising rates. Whilst this may offer governor Abdalla pause, the magnitude of the external account challenges leaves only limited time to act if a more disorderly and costly adjustment cycle is to be circumvented.

GCC: central banks follow the Fed and hike rates to preserve their currency pegs

GCC hikes rates in line with the Fed

Despite the leeway given by the strong external picture related to hydrocarbon prices dynamics, GCC central banks followed in full this week the Fed's 75bp hike. The only exception, as it has constantly happened since the start of the US tightening cycle, was Kuwait with the Central bank of Kuwait (CBK) hiking just by 25bp. The CBK has hiked by 25bp after every Fed meeting and it decided to hike a further 25bp in August despite no Fed MPC. Due to the gradual and lower moves, the differential between the Fed funds target rate versus the CBK discount rate is now in negative territory for the first time since 1990. More broadly, given the openness of capital accounts and pegged USD exchange rates, GCC monetary policy should not substantially deviate from the Fed, in order to maintain the relative attractiveness of the peg to the USD, and stem any capital arbitrage positioning. See [here](#) for the implications of higher US rates on the GCC region.

Week ahead

Hungary: MNB to hike by 100bps to 12.75% with hawkish communication to remain

Hungary to hike rates by a further 100bp as elevated inflation remains front and centre

The National Bank of Hungary (MNB) will meet on 27 September and we (and consensus) expect the Monetary Policy Committee (MPC) to raise rates once again by 100bp to 12.75%. On the one hand, the MNB has already delivered significant amount of tightening, both in terms of rate hikes, but also by introducing a number of liquidity draining measures. The challenge for the MNB, however, is that as much as it may want to guide towards nearing the end to its tightening cycle, hawkish economic pressures remain present in Hungary. On inflation, headline surprised to the downside in August (an increase from +13.7% y/y to +15.6% y/y versus consensus forecast of +15.9% y/y), but we view that the surprise reflected more the uncertainty surrounding the timing of the partial removal of household energy price freeze, which should instead show up in the September inflation reading. By contrast, core inflation continued to increase at a fast pace, rising from 2.3pp to +19.0% y/y.

Czech Republic: CNB to keep rates on hold at 7.00% with inflation moderating

Czech rates to remain on hold with inflation beginning to show signs of moderation





The Czech National Bank (CNB) is scheduled to meet on 29 September and we (as well as consensus) expect rates to hold at 7.00%. Macroeconomic developments since the last Board meeting in August have been broadly dovish. Headline inflation in August fell for the first time since mid-2021 (from 17.5% y/y to 17.2% y/y), surprising to the downside for the second time in a row. The recent inflation prints also mark particularly large downside surprises to the CNB's forecast of 19.3% y/y for August, which provides some near-term validation for the more dovish stance the CNB has recently taken. Set against this backdrop, we expect the Board to leave policy rates unchanged at 7.00%, in line with consensus.

Poland: inflation to increase in September on a broadening in core prices

Inflation in Poland is set to increase further in September

Poland will release its preliminary September inflation reading on 30 September wherein we expect CPI to rise by 0.5ppt to 16.6% y/y (consensus 16.4% y/y). We anticipate higher core inflation as well as elevated volatile energy and food prices to keep CPI elevated this month. The National Bank of Poland (NBP) doubled down on its more dovish guidance following the September MPC meeting, indicating that the hiking cycle may have terminated already (at 6.75%) or that there might be one more 25bp hike. Yet a combination of stronger wage pressures, large fiscal easing expected in 2023, and weaker external buffers to protect against pressures on FX, suggests that rate hikes remain on the table. As such, we expect rates to rise north of 7.00% before year-end.

Weekly calendar

| | Country | Day | GMT | Indicator/Event | Period | MUFG Forecast | Consensus | Previous | Market Moving |
|---|------------|------------|-------|--------------------------------|--------|---------------|-----------|----------|---------------|
|  | Hungary | 27/09/2022 | 13:00 | Interest rate announcement (%) | Sep | 12.75% | 12.75% | 11.75% | !!! |
|  | Czech Rep. | 29/09/2022 | 13:30 | Interest rate announcement (%) | Sep | 7.00% | 7.00% | 7.00% | !!! |
|  | Kenya | 30/09/2022 | --- | CPI (% y/y) | Sep | --- | --- | 8.5% | !! |
|  | Poland | 30/09/2022 | --- | CPI (% y/y) | Sep | 16.6% | 16.4% | 16.1% | !!! |

Source: Bloomberg, MUFG Research

Forecasts at a glance

| EM EMEA economic growth, fiscal balance and current account balance | | | | | | | | | |
|---|------------------|--------|--------|---------------------------|--------|-------|----------------------------|-------|-------|
| | Real GDP (% y/y) | | | Fiscal balance (% of GDP) | | | Current account (% of GDP) | | |
| | Latest | 2021 | 2022 | Latest | 2021 | 2022 | Latest | 2021 | 2022 |
| Bahrain | 2.87 | 6.00 | 3.50 | -10.61 | -8.00 | -8.02 | -2.06 | -2.90 | -2.87 |
| Czech Rep. | 3.70 | 2.90 | 3.00 | 0.27 | -8.03 | -5.47 | 5.01 | 1.57 | 0.82 |
| Egypt | 0.91 | 3.30 | 5.50 | -7.41 | -7.33 | -6.33 | -4.17 | -3.88 | -3.66 |
| Greece | 16.80 | 6.50 | 4.30 | 0.57 | -10.25 | -4.29 | -2.70 | -7.41 | -5.14 |
| Hungary | 6.50 | 7.30 | 4.30 | -2.05 | -6.60 | -5.94 | -4.16 | 0.60 | 0.88 |
| Iraq | 4.43 | 3.60 | 6.70 | 0.86 | -1.55 | -2.53 | 1.12 | 6.16 | 4.00 |
| Israel | 4.80 | 7.00 | 5.00 | -3.91 | -6.81 | -4.33 | 5.54 | 4.46 | 3.82 |
| Jordan | 1.96 | 2.00 | 2.20 | -5.98 | -7.69 | -5.94 | -7.16 | -8.93 | -4.45 |
| Kenya | 5.37 | 5.50 | 5.60 | -7.73 | -8.01 | -6.67 | -5.82 | -5.04 | -5.10 |
| Kuwait | 0.43 | 4.50 | 6.40 | 5.38 | -1.47 | 0.99 | 3.06 | 15.51 | 13.27 |
| Lebanon | -6.90 | -5.20 | 2.00 | -10.50 | --- | --- | -27.45 | --- | --- |
| Libya | 9.89 | 123.20 | 5.30 | 2.19 | 6.77 | 12.46 | -0.30 | 19.23 | 15.39 |
| Morocco | 0.30 | 5.70 | 3.10 | -4.13 | -6.49 | -5.91 | -3.95 | -3.07 | -3.25 |
| Nigeria | 3.54 | 2.50 | 5.60 | -4.76 | -6.11 | -5.96 | 4.65 | -3.22 | -2.25 |
| Oman | -0.83 | 2.70 | 0.90 | -7.06 | -2.57 | 1.11 | -4.38 | -5.75 | -0.94 |
| Poland | 5.50 | 5.00 | 4.50 | -0.74 | -4.25 | -1.90 | 1.07 | 2.26 | 1.56 |
| Romania | 5.27 | 7.60 | 3.00 | -4.56 | -6.70 | -5.59 | -10.00 | -5.71 | -5.53 |
| Qatar | 2.50 | 2.90 | 6.00 | 4.93 | 2.78 | 5.68 | -27.67 | 8.20 | 11.56 |
| Russia | -2.29 | 4.40 | -7.00 | 1.92 | -0.56 | 0.02 | 1.05 | 5.74 | 4.41 |
| Saudi Arabia | 12.20 | 4.50 | 11.20 | -4.45 | -3.05 | 2.79 | -0.64 | 3.87 | 3.79 |
| South Africa | 0.20 | 5.10 | 1.60 | -2.27 | -8.44 | -6.99 | 1.23 | 2.88 | -0.86 |
| Turkey | 7.58 | 9.80 | 1.60 | -5.65 | -4.92 | -5.58 | 0.00 | -2.42 | -1.61 |
| Ukraine | -37.20 | 4.00 | -28.00 | -2.04 | -4.50 | -3.50 | 1.35 | -0.69 | -2.44 |
| UAE | 5.30 | 5.00 | 5.00 | -0.76 | -0.54 | -0.22 | 2.44 | 9.67 | 9.37 |

| EM EMEA inflation, interest rates and FX | | | | | | | | | |
|--|----------------------------|--------|-------|---------------------------|----------|----------|------------------|----------|----------|
| | Inflation (% y/y, average) | | | Policy interest rates (%) | | | FX (against USD) | | |
| | Latest | 2020 | 2021 | Latest | End-2021 | End-2022 | Latest | End-2021 | End-2022 |
| Bahrain | 4.00 | 3.90 | 1.90 | 5.25 | 5.25 | 3.00 | 0.377 | 0.377 | 0.377 |
| Czech Rep. | 17.20 | 3.90 | 11.30 | 7.00 | 3.75 | 5.50 | 24.629 | 24.886 | 21.380 |
| Egypt | 14.60 | 5.40 | 7.90 | 11.25 | 7.75 | 11.50 | 19.493 | 15.723 | 15.420 |
| Greece | 11.40 | -0.10 | 0.40 | 1.25 | 1.25 | 0.40 | 0.969 | 1.137 | 1.132 |
| Hungary | 15.60 | 4.90 | 7.80 | 11.75 | 2.40 | 5.50 | 420.0 | 324.5 | 314.70 |
| Iraq | 5.40 | 6.40 | 5.00 | 4.00 | 4.00 | 5.00 | 1460 | 1460 | 1460.000 |
| Israel | 4.60 | 1.50 | 2.80 | 2.00 | 2.00 | 0.50 | 3.519 | 3.103 | 3.100 |
| Jordan | 5.36 | 1.60 | 2.00 | 6.00 | 6.00 | 2.00 | 0.710 | 0.709 | 0.709 |
| Kenya | 8.50 | 6.00 | 5.90 | 7.50 | 7.50 | 9.50 | 120.620 | 113.140 | 113.040 |
| Kuwait | 4.24 | 2.90 | 3.40 | 3.00 | 3.00 | 3.00 | 0.309 | 0.303 | 0.303 |
| Lebanon | 161.89 | 124.10 | 85.00 | 2.75 | 2.75 | 7.75 | 1516.500 | 1512.330 | 1512.330 |
| Libya | 4.56 | 21.10 | 8.00 | 3.00 | 3.00 | 3.00 | 5.014 | 4.597 | 4.597 |
| Morocco | 8.00 | 1.40 | 1.20 | 1.50 | 1.50 | 1.50 | 10.821 | 9.252 | 9.250 |
| Nigeria | 20.50 | 17.30 | 12.00 | 14.00 | 14.00 | 14.00 | 435.630 | 424.830 | 440.500 |
| Oman | 2.41 | 1.30 | 2.00 | 1.95 | 1.95 | 14.00 | 0.385 | 0.385 | 0.385 |
| Poland | 16.10 | 4.90 | 10.00 | 6.75 | 1.75 | 5.50 | 4.911 | 4.035 | 3.948 |
| Romania | 15.32 | 5.30 | 11.90 | 5.50 | 5.50 | 5.50 | 5.101 | 4.353 | 4.388 |
| Qatar | 4.80 | 1.60 | 4.00 | 4.00 | 4.00 | 2.50 | 3.641 | 3.642 | 3.642 |
| Russia | 14.30 | 6.60 | 16.60 | 7.50 | 5.75 | 15.00 | 118.690 | 74.679 | 71.130 |
| Saudi Arabia | 3.00 | 3.10 | 2.20 | 3.25 | 3.25 | 2.50 | 3.759 | 3.755 | 3.755 |
| South Africa | 7.60 | 4.50 | 6.20 | 6.25 | 3.50 | 4.75 | 18.038 | 15.937 | 15.800 |
| Turkey | 80.21 | 17.90 | 62.00 | 12.00 | 14.00 | 20.00 | 18.450 | 13.317 | 14.250 |
| Ukraine | 23.80 | 9.40 | 15.30 | 25.00 | 25.00 | 14.00 | 36.932 | 27.285 | 29.800 |
| UAE | 2.50 | 0.10 | 1.20 | 0.65 | 0.65 | 2.00 | 3.673 | 3.673 | 3.673 |

Core indicators

| EM EMEA sovereign bond yields (%) | | | | | | | | | |
|-----------------------------------|----------|--------|--------|--------|--------|--------|--------------------------------|---------|----------|
| | Maturity | 26-Aug | 02-Sep | 09-Sep | 16-Sep | 23-Sep | Change in yield (basis points) | | |
| | | | | | | | Week | MTD | YTD |
| Bahrain | 10 years | 4.75 | 4.79 | 4.76 | 4.73 | 5.09 | 35.96 | 28.14 | 255.85 |
| Czech Rep. | 10 years | 4.97 | 4.95 | 4.95 | 4.78 | 5.17 | 39.58 | 19.81 | 208.96 |
| Egypt | 9 years | 11.85 | 12.76 | 11.97 | 12.43 | 13.99 | 155.47 | 151.65 | 682.57 |
| Greece | 8 years | 3.57 | 3.81 | 3.82 | 3.81 | 4.24 | 42.38 | 55.05 | 313.07 |
| Hungary | 8 years | 9.35 | 9.70 | 10.22 | 10.06 | 10.08 | 2.28 | 58.75 | 561.58 |
| Israel | 8 years | 2.39 | 2.64 | 2.78 | 2.91 | 3.38 | 47.07 | 83.49 | 316.93 |
| Jordan | 5 years | 6.96 | 7.08 | 6.98 | 6.90 | 7.43 | 52.85 | 35.65 | 316.12 |
| Kenya | 7 years | 12.62 | 13.09 | 12.12 | 12.29 | 13.21 | 92.36 | 7.61 | 750.15 |
| Kuwait | 6 years | 3.38 | 3.52 | 3.56 | 3.83 | 4.30 | 47.17 | 86.95 | 260.30 |
| Lebanon | 9 years | 71.97 | 75.30 | 79.90 | 80.60 | 82.83 | 222.97 | 1069.84 | 1882.63 |
| Morocco | 11 years | 5.11 | 5.40 | 5.53 | 5.60 | 6.14 | 54.46 | 85.04 | 374.60 |
| Nigeria | 9 years | 12.09 | 12.69 | 12.31 | 12.84 | 13.85 | 101.22 | 115.50 | 646.11 |
| Oman | 9 years | 5.81 | 6.09 | 6.22 | 6.34 | 6.90 | 56.22 | 86.03 | 214.89 |
| Poland | 8 years | 2.64 | 2.87 | 2.93 | 3.01 | 3.61 | 60.00 | 78.00 | 344.00 |
| Romania | 7 years | 5.59 | 5.75 | 5.64 | 5.69 | 7.00 | 131.89 | 125.04 | 545.33 |
| Qatar | 9 years | 3.69 | 3.96 | 3.97 | 4.17 | 4.56 | 38.58 | 77.85 | 230.82 |
| Russia | 5 years | 27.98 | 28.68 | 26.06 | 25.77 | 26.55 | 77.79 | -134.21 | -59.34 |
| Saudi Arabia | 8 years | 3.62 | 3.86 | 3.91 | 4.11 | 4.54 | 42.70 | 84.62 | 239.46 |
| South Africa | 9 years | 6.45 | 6.91 | 6.76 | 7.41 | 7.99 | 57.82 | 109.49 | 377.22 |
| Turkey | 7 years | 9.92 | 10.13 | 9.61 | 10.32 | 10.88 | 56.18 | 59.23 | 366.28 |
| Ukraine | 8 years | 35.89 | 38.97 | 38.90 | 35.95 | 37.57 | 161.31 | -139.91 | 2,808.51 |
| Abu Dhabi | 6 years | 3.31 | 3.57 | 3.58 | 3.89 | 4.38 | 48.57 | 99.87 | 262.77 |
| Dubai | 8 years | 3.93 | 4.04 | 4.03 | 4.06 | 4.27 | 21.32 | 33.49 | 169.04 |

| EM EMEA equity market (index) | | | | | | | | | |
|-------------------------------|---------|----------|---------|---------|---------|---------|------------|--------|--------|
| | 19-Aug | 26-Aug | 02-Sep | 09-Sep | 16-Sep | 23-Sep | Change (%) | | |
| | | | | | | | Week | MTD | YTD |
| Bahrain | 1,900 | 1,901 | 1,918 | 1,925 | 1,938 | 1,884 | -2.82 | -1.80 | 4.80 |
| Czech Rep. | 113,708 | 113,532 | 110,405 | 109,916 | 110,547 | 111,716 | 1.06 | 2.00 | 6.58 |
| Egypt | 10,138 | 10,138 | 10,132 | 10,330 | 10,194 | 9,890 | -2.98 | -1.09 | -17.24 |
| Greece | 894 | 892 | 856 | 823 | 837 | 793 | -5.16 | -7.34 | -11.18 |
| Hungary | 43,099 | 43,098 | 41,877 | 41,292 | 41,178 | 38,488 | -6.53 | -8.09 | -24.12 |
| Israel | 2,034 | 2,067 | 2,015 | 1,970 | 1,961 | 1,923 | -1.95 | -4.55 | -2.79 |
| Jordan | 2,564 | 2,562 | 2,547 | 2,480 | 2,495 | 2,470 | -1.00 | -3.01 | 16.60 |
| Kenya | 147 | 142 | 137 | 144 | 138 | 135 | -2.44 | -1.89 | -18.98 |
| Kuwait | 7,699 | 7,808 | 7,574 | 7,574 | 7,606 | 7,188 | -5.50 | -6.76 | 2.05 |
| Lebanon | 658 | 658 | 658 | 658 | 658 | 658 | 0.00 | 3.61 | 30.75 |
| Morocco | 12,174 | 12,187 | 12,129 | 12,155 | 12,138 | 12,215 | 0.63 | 0.71 | -8.56 |
| Nigeria | 49,691 | 48,675 | 49,837 | 49,636 | 49,540 | 49,027 | -1.04 | -1.63 | 14.77 |
| Oman | 4,648 | 4,552 | 4,585 | 4,522 | 4,479 | 4,429 | -1.11 | -3.41 | 7.25 |
| Poland | 1,683 | 1,621 | 1,528 | 1,469 | 1,528 | 1,430 | -6.42 | -6.41 | -36.91 |
| Romania | 12,583 | 12,307 | 12,058 | 11,929 | 11,836 | 10,888 | -8.01 | -9.71 | -16.64 |
| Qatar | 13,989 | 13,650 | 13,426 | 12,955 | 13,244 | 12,399 | -6.38 | -7.65 | 6.65 |
| Russia | 2,189 | 2,248 | 2,400 | 2,402 | 2,436 | 1,935 | -20.57 | -19.39 | -48.91 |
| Saudi Arabia | 12,647 | 12,444 | 12,283 | 11,864 | 11,830 | 11,121 | -5.99 | -9.46 | -1.42 |
| South Africa | 64,167 | 63,080 | 60,736 | 60,174 | 60,991 | 57,006 | -6.53 | -6.14 | -14.98 |
| Turkey | 2,980 | 3,060 | 3,171 | 3,403 | 3,447 | 3,244 | -5.88 | 2.31 | 74.65 |
| Ukraine | 519 | #N/A N/A | 519 | 519 | 519 | 519 | 0.00 | 0.00 | -0.68 |
| Abu Dhabi | 10,252 | 10,002 | 9,875 | 9,717 | 10,019 | 9,894 | -1.25 | 0.19 | 16.56 |
| Dubai | 3,458 | 3,422 | 3,443 | 3,382 | 3,463 | 3,367 | -2.75 | -2.20 | 5.37 |

EM EMEA FX against USD*

| | | 19-Aug | 26-Aug | 02-Sep | 09-Sep | 16-Sep | 23-Sep | Change (%) | | |
|--|----------------|----------|----------|----------|----------|----------|----------|------------|-------|--------|
| | | | | | | | | Week | MTD | YTD |
| | USD Index | 107.484 | 108.470 | 109.691 | 109.707 | 109.764 | 113.210 | 3.14 | 4.15 | 18.33 |
| | Bahrain** | 0.379 | 0.379 | 0.379 | 0.379 | 0.379 | 0.379 | 0.03 | 0.00 | 0.18 |
| | Czech Rep. | 24.549 | 24.704 | 24.639 | 24.482 | 24.486 | 25.418 | 3.81 | -4.10 | -13.92 |
| | Egypt | 19.157 | 19.194 | 19.231 | 19.305 | 19.417 | 19.493 | 0.39 | 1.36 | 23.98 |
| | Greece*** | 1.004 | 0.997 | 0.995 | 1.004 | 1.002 | 0.969 | -3.26 | -3.63 | -14.78 |
| | Hungary | 402.510 | 412.940 | 403.960 | 395.560 | 404.350 | 420.000 | 3.87 | -5.13 | -22.75 |
| | Israel | 3.267 | 3.270 | 3.385 | 3.409 | 3.427 | 3.512 | 2.49 | -5.17 | -11.64 |
| | Jordan** | 0.710 | 0.710 | 0.710 | 0.710 | 0.710 | 0.714 | 0.58 | -0.52 | -0.70 |
| | Kenya | 119.048 | 120.482 | 0.008 | 0.008 | 0.008 | 0.008 | 0.00 | 0.00 | 6.02 |
| | Kuwait | 0.309 | 0.309 | 0.309 | 0.309 | 0.309 | 0.309 | 0.00 | -0.23 | -1.94 |
| | Lebanon | 1,516.03 | 1,512.56 | 1,511.87 | 1,516.50 | 1,516.50 | 1,516.50 | 0.00 | -0.27 | -0.28 |
| | Morocco | 10.405 | 10.584 | 10.590 | 10.755 | 10.765 | 10.821 | 0.53 | -2.47 | -14.50 |
| | Nigeria | 428.200 | 425.000 | 429.150 | 435.420 | 435.510 | 435.630 | 0.03 | -1.53 | -2.48 |
| | Oman** | 0.386 | 0.386 | 0.385 | 0.385 | 0.385 | 0.385 | -0.08 | 0.10 | 0.36 |
| | Poland | 3.756 | 3.757 | 3.757 | 3.757 | 3.756 | 3.761 | 0.12 | -0.11 | -0.18 |
| | Romania | 4.861 | 4.882 | 4.845 | 4.880 | 4.914 | 5.101 | 3.80 | -5.56 | -14.67 |
| | Qatar** | 3.662 | 3.666 | 3.671 | 3.665 | 3.668 | 3.666 | -0.05 | 0.07 | 0.22 |
| | Russia | 59.397 | 60.564 | 61.000 | 61.021 | 60.424 | 58.139 | -3.78 | 4.90 | 29.29 |
| | Saudi Arabia** | 3.756 | 3.757 | 3.757 | 3.757 | 3.756 | 3.761 | 0.12 | -0.11 | -0.18 |
| | South Africa | 17.003 | 16.885 | 17.305 | 17.306 | 17.610 | 18.038 | -2.37 | -5.09 | -11.64 |
| | Turkey | 18.101 | 18.164 | 18.193 | 18.223 | 18.259 | 18.451 | -1.04 | -1.39 | -27.89 |
| | Ukraine | 36.623 | 36.752 | 36.734 | 36.717 | 36.792 | 36.932 | 0.38 | -0.31 | -26.12 |
| | UAE** | 3.673 | 3.673 | 3.673 | 3.672 | 3.672 | 3.672 | 0.01 | 0.01 | 0.04 |

Note: * Exchange rate quoted as amount of USD per currency in line with market convention, other exchange rates are amount per USD; ** 12 month forward given pegged against USD; *** EUR per USD

EM EMEA 5 year CDS spreads (basis points)

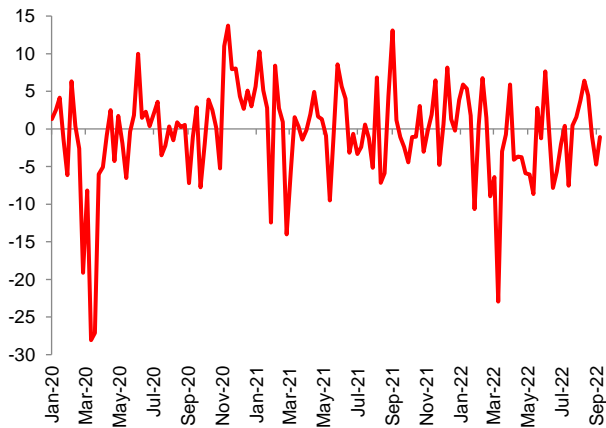
| | | 19-Aug | 26-Aug | 02-Sep | 09-Sep | 16-Sep | 23-Sep | Change in yield (basis points) | | |
|--|--------------|----------|----------|----------|-----------|----------|----------|--------------------------------|--------|---------|
| | | | | | | | | Week | MTD | YTD |
| | Bahrain | 317.20 | 314.82 | 314.82 | 290.73 | 300.17 | 306.71 | 6.53 | 6.53 | 12.88 |
| | Czech Rep. | 39.69 | 38.10 | 38.10 | 46.07 | 44.23 | 44.19 | -0.04 | -0.04 | 8.57 |
| | Egypt | 751.43 | 778.14 | 924.42 | 984.04 | 1,015.29 | 942.20 | -73.09 | -73.09 | 444.17 |
| | Greece | 165.17 | 174.12 | 174.12 | 165.92 | 171.22 | 170.67 | -0.55 | -0.55 | 58.68 |
| | Hungary | 128.20 | 129.97 | 129.97 | 173.39 | 177.44 | 195.57 | 18.13 | 18.13 | 150.85 |
| | Israel | 46.09 | 46.45 | 46.45 | 41.47 | 40.50 | 40.51 | 0.02 | 0.02 | 0.30 |
| | Kenya | 695.06 | 813.38 | 1,013.97 | 1,118.74 | 973.15 | 944.11 | -29.04 | -29.04 | 537.22 |
| | Kuwait | 69.76 | 69.37 | 67.89 | 70.93 | 63.86 | 59.85 | -4.01 | -4.01 | 15.14 |
| | Morocco | 205.95 | 207.84 | 231.57 | 280.56 | 268.51 | 256.04 | -12.48 | -12.48 | 160.65 |
| | Nigeria | 811.44 | 700.65 | 894.66 | 828.70 | 817.48 | 823.45 | 5.97 | 5.97 | 368.38 |
| | Oman | 259.93 | 261.75 | 259.95 | 263.31 | 260.17 | 291.56 | 31.39 | 31.39 | 35.75 |
| | Poland | 100.00 | 104.53 | 107.60 | 122.63 | 137.44 | 149.91 | 12.47 | 12.47 | 110.33 |
| | Romania | 240.93 | 219.95 | 263.30 | 294.47 | 297.69 | 329.88 | 32.19 | 32.19 | 255.06 |
| | Qatar | 60.36 | 62.04 | 62.54 | 49.42 | 50.54 | 48.19 | -2.36 | -2.36 | 4.43 |
| | Russia | --- | --- | --- | --- | --- | --- | -- | --- | --- |
| | Saudi Arabia | 61.36 | 66.35 | 66.35 | 50.85 | 52.21 | 48.69 | -3.52 | -3.52 | -0.69 |
| | South Africa | 233.66 | 242.93 | 242.93 | 233.68 | 288.12 | 266.59 | -21.53 | -21.53 | 63.57 |
| | Turkey | 711.43 | 715.33 | 715.33 | 655.94 | 794.71 | 746.55 | -48.16 | -48.16 | 183.79 |
| | Ukraine | 3,615.89 | 5,108.84 | 7,710.87 | 10,047.64 | 9,588.00 | 9,588.00 | 0.00 | 0.00 | 8977.11 |
| | Abu Dhabi | 59.42 | 60.71 | 61.09 | 48.42 | 49.56 | 120.89 | 71.33 | 71.33 | 77.99 |
| | Dubai | 119.46 | 118.18 | 122.26 | 123.26 | 120.24 | 120.89 | 0.65 | 0.65 | 26.83 |

Source: Bloomberg, MUFG Research

EM capital flows

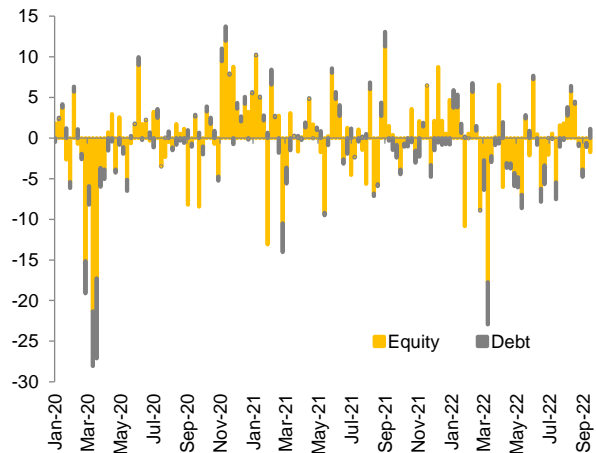
WEEKLY TOTAL EM OUTFLOWS OF USDD-0.6BN – 16 SEPTEMBER

TOTAL WEEKLY PORTFOLIO FLOWS (DEBT AND EQUITY) (USD BN)



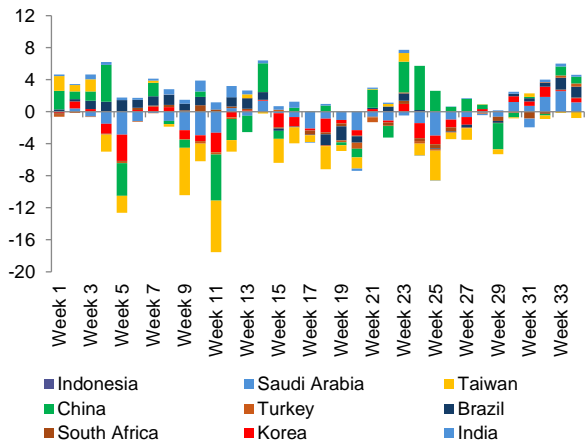
WEEKLY EM OUTFLOWS FROM EQUITY (USD-1.7BN) AND DEBT INFLOWS (USD1.1BN) – 16 SEPTEMBER

WEEKLY DEBT AND EQUITY FLOWS (USD BN)



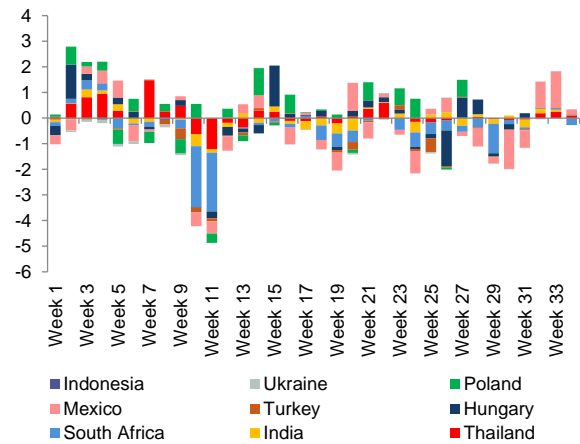
CHINA (USD-0.9BN) LED WEEKLY EM EQUITY OUTFLOWS – 16 SEPTEMBER

WEEKLY PORTFOLIO FLOWS BY COUNTRY, WEEK 1 = JANUARY 2022 (EQUITY) (USD BN)



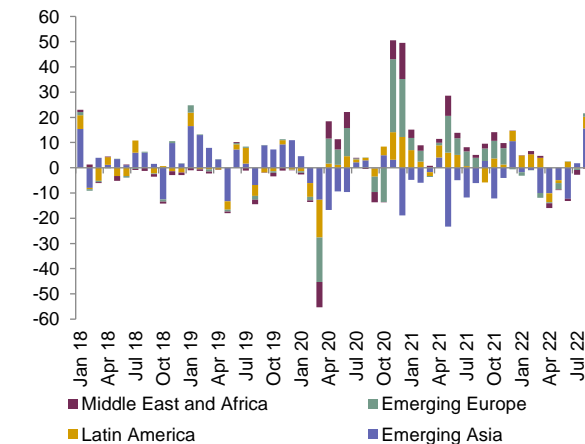
INDIA (USD0.9BN) LED EM DEBT INFLOWS LAST WEEK – 16 SEPTEMBER

WEEKLY PORTFOLIO FLOWS BY COUNTRY, WEEK 1 = JANUARY 2021 (DEBT) (USD BN)



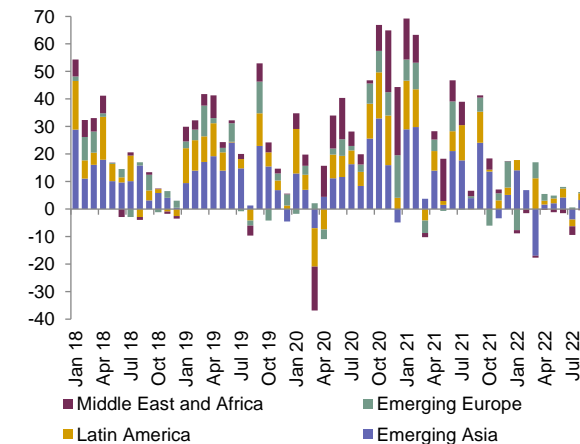
EM EQUITY INFLOWS TOTALLED USD21.2BN IN AUGUST, LED BY EM ASIA (USD15.7BN)

MONTHLY PORTFOLIO FLOWS BY COUNTRY (EQUITY) (USD BN)



EM DEBT INFLOWS TOTALLED USD5.7BN IN AUGUST, LED BY EM ASIA (USD3.3BN)

MONTHLY PORTFOLIO FLOWS BY COUNTRY (DEBT) (USD BN)



Source: Bloomberg, IIF, MUFG Research

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