

FOREIGN EXCHANGE

OUTLOOK FOR THIRD QUARTER 2022



*Global Economy:
Cart Half Full or
Half Empty?*

FOREIGN EXCHANGE

On September 7, 2021 State Street Corporation and BBH announced that they have entered into an agreement for State Street to acquire BBH's Investor Services business, including its custody, accounting, fund administration, global markets and technology services. Following the transaction, BBH&Co. will remain a licensed Private Bank regulated by the New York Department of Financial Services (DFS), offering Private Banking and Investment Management services. We believe that regulatory reviews should be complete in the coming months.

All statistical data sourced from Bloomberg, August 2022.

Brown Brothers Harriman & Co. ("BBH") may be used as a generic term to reference the company as a whole and/or its various subsidiaries generally. This material and any products or services may be issued or provided in multiple jurisdictions by duly authorized and regulated subsidiaries. This material is for general information and reference purposes only and does not constitute legal, tax or investment advice and is not intended as an offer to sell, or a solicitation to buy securities, services or investment products. All information has been obtained from sources believed to be reliable, but accuracy is not guaranteed, and reliance should not be placed on the information presented. This material may not be reproduced, copied or transmitted, or any of the content disclosed to third parties, without the permission of BBH. Pursuant to information regarding the provision of applicable services or products by BBH, please note the following: Brown Brothers Harriman Fund Administration Services (Ireland) Limited and Brown Brothers Harriman Trustee Services (Ireland) Limited are regulated by the Central Bank of Ireland, Brown Brothers Harriman Investor Services Limited is authorised and regulated by the Financial Conduct Authority, Brown Brothers Harriman (Luxembourg) S.C.A is regulated by the Commission de Surveillance du Secteur Financier. All trademarks and service marks included are the property of BBH or their respective owners. © Brown Brothers Harriman & Co. 2022. All rights reserved.

IS-08346-2022-08-23

20220719

CONTENTS

1 MAJOR MARKETS GLOBAL OVERVIEW
From Inflation to Recession: New Risks Abound



7 EMERGING MARKETS GLOBAL OVERVIEW
Feeling the Weight of the World



11 CURRENCY FORECASTS



FROM INFLATION TO RECESSION: NEW RISKS ABOUND

High food and energy prices continue to squeeze households globally, while aggressive monetary policy responses and shrinking real incomes have increased global recession risks.





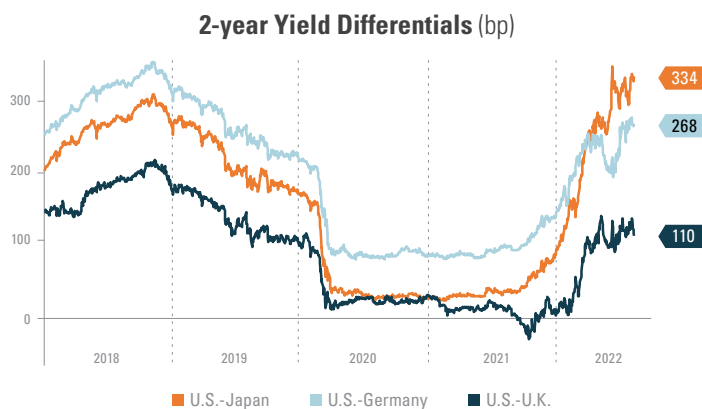
Major markets in Europe face a rocky outlook. German and Italian composite composite Purchasing Managers Index (PMI) readings fell below 50, while the Bank of England forecasts a U.K. recession by Q4. China is facing recession risk after GDP grew only 0.4% y/y in Q2, while COVID Zero lockdowns and drought are adding to the headwinds on the mainland.

In the U.S., the signs are mixed; GDP has fallen q/q for two straight quarters, yet nearly a million jobs were added in the past two months and consumption remains strong. While we believe the U.S. will outperform the rest of the world in H2, there is no denying that recession risks here are tangible.

Key Investment Calls

We stress that there is currently a lot of noise even as markets remained thin during the summer months. We are likely to continue seeing violent moves in the markets in the coming weeks as markets continue to struggle to find a reliable and sustainable macro outlook to trade on. Recession? Soft landing? Tightening? Eventual easing? These questions remain unanswered, not just for the U.S. but globally. We will not know the truth for months, if not quarters.

In this current environment, the dollar should continue to outperform vs. EUR, GBP, and JPY due to rising 2-year interest rate differentials. The uncertain equity outlook remains due to global recession risks. Global bond markets are likely to continue rallying as inflation peaks and growth slows; curve flattening in the U.S. is likely to continue.

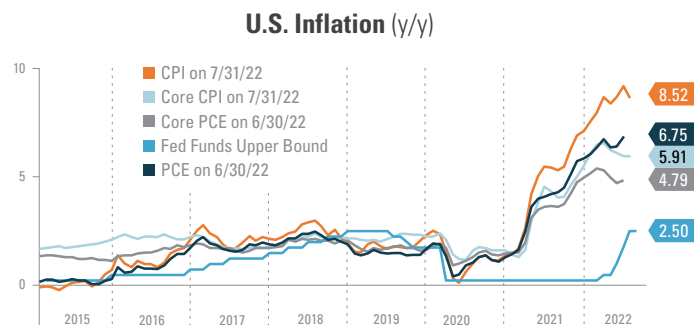


What We've Got Here is a Failure to Communicate

What we have seen since the July 26-27 FOMC is a master class in central bank communication. The Fed hiked 75 bp, as expected, but the market interpreted Jerome Powell's press conference as signaling a dovish pivot. We disagreed with that interpretation and were happy to see that the Fed did too. The bank was clearly unhappy with the market's dovish take and has gone all out in a unified and credible manner to convey this. Fed officials have made it clear that there is a long way to go in terms of getting inflation down and that interest rates will be higher for longer. We expect this communication effort to continue for the foreseeable future.

There are too many official comments to list here, but the most noteworthy is the evolution of uber-dove Neel Kashkari into uber-hawk. He recently noted that the July CPI data did not change his expected rate path, though he was happy to see inflation surprise to the downside. Kashkari said he wants the Fed Funds rate at 3.9% by year-end and 4.4% by end-2023. He stressed that the Fed is far from declaring victory over inflation and stressed that recession "will not deter me" from getting to the 2% target. It's amazing how far Kashkari has swung from uber-dove to uber-hawk. The Fed's communication strategy remains intact. The only question is when will the markets start listening?

We expected no surprises at the August 25-27 Jackson Hole Symposium. In the past, this event has been used to unveil new measures or set the table for such moves. With nearly a month to go before the September 20-21 meeting and the economic outlook still rapidly evolving, we did not expect the Fed to pre-commit to any policy measures at Jackson Hole. Rather, the current hawkish Fed messaging was maintained.



Trouble With the Curve

Markets are paying close attention to the shape of the U.S. yield curve. The 2- to 10-year curve inverted back in early July and currently stands at -39 bp. It has not been this inverted since 2000. However, several San Francisco Fed studies suggest that the 3-month to 10-year curve is the best at predicting U.S. recessions. At 28 bp, it is the flattest since March 2020; the speed of the flattening has been astounding, as it peaked near 231 bp in May and was still as high as 185 bp in June and 120 bp in early July before plunging to current levels. Inversion of the 3-month to 10-year would signal recession is likely over the following 12 months.

Of note, when this curve peaked at 231 bp, the 2- to 10-year curve was already trading near 40 bp before inverting two months later. That unprecedented divergence between the 3-month and 10-year curve and the 2- to 10-year curve has narrowed significantly and as a result, the risks of recession are clearly rising. The New York Fed estimates that the risk of a recession within 12 months at around 18% in July, up from only 4% in May and 6% in June and the highest since October 2021. With the curve getting even flatter in August, the odds will rise further. Stay tuned.

U.S. Yield Curve (% points)

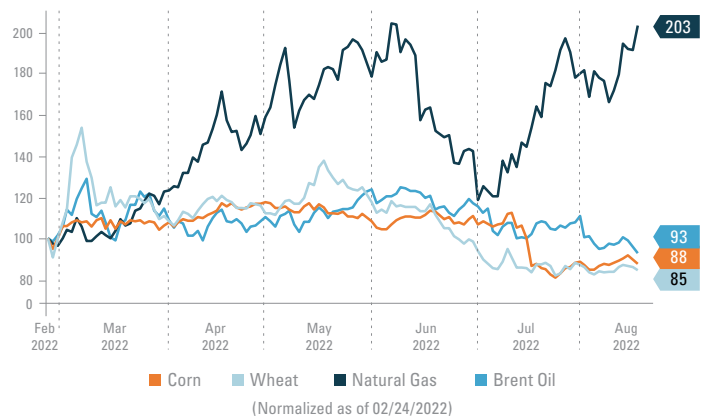


Stalemate in Ukraine?

One of the biggest surprises of the Ukraine crisis is how effectively it has stood up to the invading forces. What was initially thought to be a cakewalk has turned into a stalemate, as Russia has been unable to extend its control beyond the eastern Donbas region. Another round of sanctions on Russia was recently announced.

On the other hand, Europe is facing natural gas shortages in the coming months as Russia pipeline flows are running at only 20% of normal. This is preventing Europe from building winter stockpiles. It is worth noting that other commodity prices are at or below pre-invasion levels, which bodes well for headline inflation readings in H2. Notably, grain shipments from Ukraine have resumed. Lastly, Finland and Sweden have formally applied for NATO membership; nearly half its 30 members have already approved entry, including the U.S. Russia's invasion has done exactly what it wanted to prevent, provoking greater unity in the West in opposition.

Commodity Prices (start date = 100)

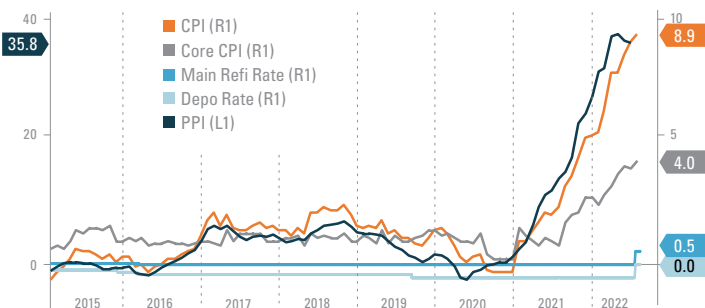


ECB Hawks Win...For Now

The ECB started the tightening cycle with a 50 bp hike July 21.

This was its first hike since 2011 and the largest since 2000. Madame Lagarde and the doves had been penciling in a 25 bp move but the deteriorating inflation outlook meant that the hawks prevailed. In mid-June, the swaps market was pricing in a peak deposit rate near 2.5%, which amounted to 300 bp of tightening from -0.5%. The hawkish narrative was prevailing and so markets were preparing for an aggressive EB tightening cycle.

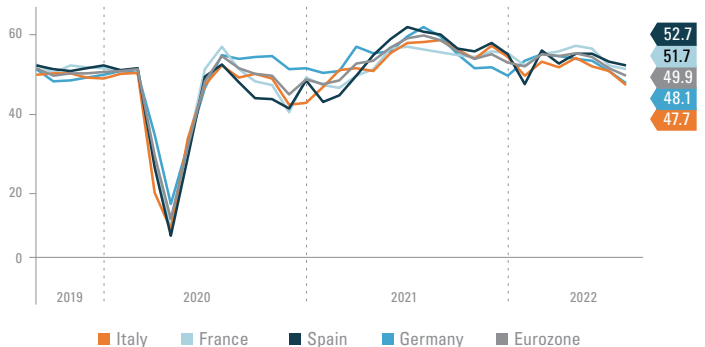
Eurozone Inflation (y/y)



Since the tightening cycle began, eurozone growth has slowed sharply.

Composite PMI readings suggest Germany and Italy are already tipping into recession, with Spain and France likely to follow them. The looming energy shortages and ECB tightening will only make things worse in terms of growth. As a result, the swaps market is now pricing in a terminal deposit rate between 1.25-1.50%. Fragmentation risks have not been clearly addressed by the new Transmission Protection Instrument (TPI) that was unveiled (sort of) at the July meeting.

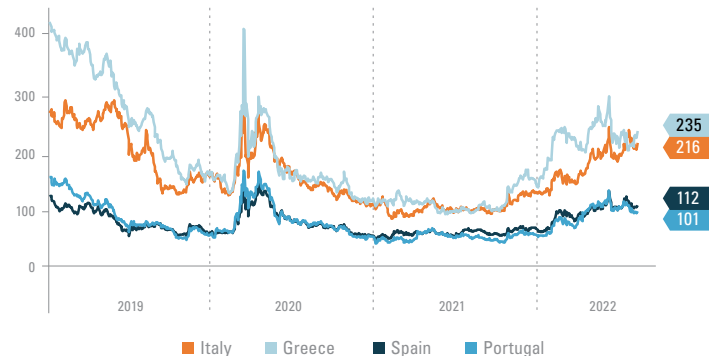
Eurozone Composite PMIs



Rather, the data suggest that the ECB is relying on its first line of defense against fragmentation.

Recall that the ECB said it would first use reinvestment flows to help limit fragmentation and recent data seem to bear this out. ECB statistics on its bond holdings show that net holdings of German, French, and Dutch bonds dropped by EUR18.9 billion through July while net purchases of Italian, Spanish, Portuguese, and Greek bonds totaled EUR17.3 billion. Without these flows, we suspect the 10-year Italian spread would be north of 250 bp by now. That said, the market has yet to mount a credible test of the ECB's will to limit spreads but will have ample opportunity ahead of the September elections in Italy.

10-year Spread to Germany (bp)

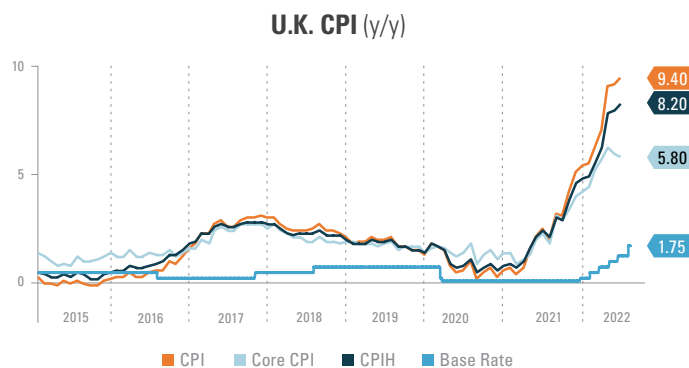


Italian political uncertainty should persist ahead of the September 25 elections.

Of note, two parties recently broke away from a short-lived center-left coalition to form a centrist alliance ahead of the vote. Italia Viva, a breakaway party from the Democratic Party formed by former Prime Minister Matteo Renzi, and Carlo Calenda's Azione together have pledged to continue the foreign policy and domestic reform agenda of outgoing Prime Minister Draghi's government. Renzi called the alliance a "third pillar" to stand against the left- and right-wing coalitions. The right is led by Giorgia Meloni's Brothers of Italy, Matteo Salvini's Lega, and Silvio Berlusconi's Forza Italia, while the left is led by the Democrats. Recent polls suggest the right-wing alliance will handily win in September. As leader of the likely largest party in parliament, Meloni is tipped to be the next Prime Minister. She has taken pains recently to reassure markets that market-friendly policies and good relations with Brussels will be maintained. However, much-needed structural reforms may be delayed or derailed.

Damn the Recession – Full Speed Ahead!

The BOE hiked rates 50 bp to 1.75% August 4 and signaled further tightening to come. This was the first 50 bp hike since 1995 but the bank said that future policy is not on a pre-set path. Governor Bailey also emphasized that all options are on the table for future meetings and policy is not on a pre-set path, adding that a 50 bp hike now lowers the risk of a more extended tightening cycle later. WIRP suggests a 50 bp hike September 15 is fully priced in, with nearly 35% odds of a larger 75 bp hike. Looking ahead, the swaps market is pricing in 225 bp of tightening over the next 12 months that would see the policy rate peak near 4.0%.



The BOE finally laid out its plans for Quantitative Tightening (QT) at the last meeting. The bank sees active sales of its holdings starting after a vote at the September meeting. The bank estimated that sales will be around GBP10 billion per quarter and that including redemptions, its gilt holding will decline by around GBP80 billion in the first year of QT. Bank officials said there would be a “high bar” to altering the plan, which means that monetary conditions are set to get even tighter.

The bank is in an unenviable position as inflation continues to surge even as the economy tips into recession. The bank’s updated macro forecasts see the economy entering recession in Q4 and the downturn lasting five quarters. It also sees inflation peaking at 13.3% this October. Obviously, the risks are that these forecasts are too optimistic. It’s worth noting that the next potential Prime Minister Liz Truss has been very critical of the BOE’s performance and has promised a review of its mandate. While Truss has promised to maintain the bank’s independence, it is impossible not to view such a move as political meddling in the sphere of monetary policy. The recent Fed and ECB framework reviews were decided on internally, not by an outside body. Any hint of political interference would be very negative for sterling and gilts.

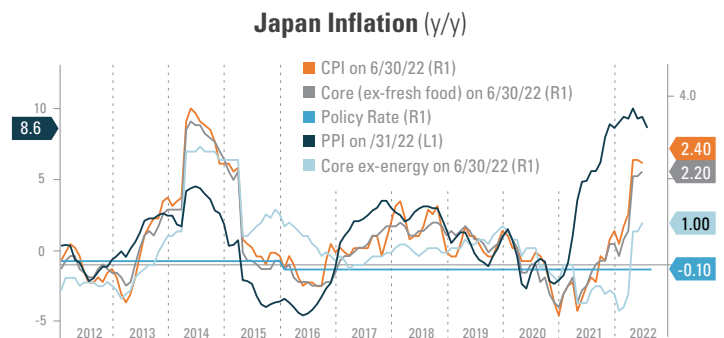
BOJ Forecasts from August (May)

	FY22	FY23	FY24
GDP Growth	3.5% (3.75%)	-1.5% (-0.25%)	-0.25% (0.25%)
CPI Inflation	13.0% (10.25%)	5.5% (3.5%)	1.5% (1.5%)
Unemployment	3.75% (3.55%)	4.75% (4.25%)	5.75% (5.0%)

U.K. politics are in flux after Prime Minister Boris Johnson resigned. Foreign Secretary Truss is leading former Chancellor Rishi Sunak in the Tory leadership race. The policy divide between Sunak and Truss is mostly along the lines of tax cuts. For now, it appears both are more focused on difficult domestic conditions as Brexit is moved to the back burner. Former Chancellor Sunak is sticking to his long-held stance of fiscal responsibility, while Truss is pledging immediate tax cuts to boost the economy. Of course, a big injection of fiscal stimulus may not be the best idea when headline inflation is running close to 10% as it could require an even greater monetary policy response from the BOE than what would ordinarily be needed. At some point, Brexit is likely to move back to the front burner as Truss has pledged to unilaterally rewrite portions of the deal. If so, the EU has pledged retaliatory measures.

Steady as She Goes

The July 20-21 Bank of Japan meeting ended with a dovish hold. As we expected, the macro forecasts were tweaked but do not signal a shift anytime soon from its current ultra-dovish stance. Governor Haruhiko Kuroda emphasized then that “we have no intention at all of raising rates under the yield curve control framework. We also have zero intention of expanding the 0.25% range on either side of the yield target. Right now, we need to continue to tenaciously pursue monetary easing.” A policymaker can’t get any more explicit than that and we maintain our view that current policy settings will be maintained through the end of Kuroda’s term in early April.





The BOJ remains the major outlier in a world of rising rates. We expect the market to eventually test the bank’s resolve to maintaining YCC, something that hasn’t happened since mid-June. That said, we believe the BOJ has unlimited firepower here and is unlikely to blink. Despite recent yen strength, we believe the USD/JPY rally remains intact given ongoing monetary policy divergences between the hawkish Fed and the ultra-dovish BOJ. Kuroda also touched on the exchange rate, noting that “If you were serious about stopping the weaker yen just with rate increases, you would need significant hikes and they would be very damaging to the economy.” Official concern about the exchange rate was likely focused on the pace rather than any particular levels. As such, we believe FX intervention is very unlikely for now.

The latest macro forecasts suggest no need to tighten. Yes, core (ex-fresh food) inflation is currently running slightly above the 2% target but the forecasts show that it is expected to fall back below in the next two fiscal years. Much of the rise in core measures is stemming from energy costs. Stripping out both fresh food and energy, inflation is only running around 1%.

BOJ Forecasts from July (April)

	FY22	FY23	FY24
GDP Growth	2.4% (2.9%)	2.05% (1.9%)	1.3% (1.1%)
CPI Inflation	2.3% (1.9%)	1.4% (1.1%)	1.3% (1.1%)

Kuroda’s replacement has not been named yet but the choice will be key in determining the timing of BOJ policy normalization.

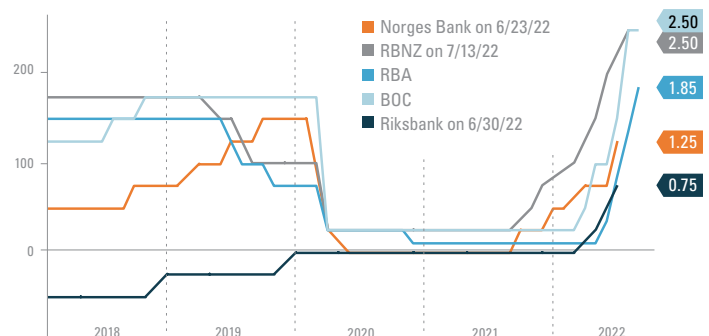
The two Deputy Governors Masayoshi Amamiya and Masazumi Wakatabe are seen as potential successors to Governor Kuroda. Many at the BOJ believe that besides hitting the 2% inflation target, higher wages are also needed to justify liftoff. Amamiya recently expressed concern about rising wages next fiscal year, while Wakatabe has sounded less concerned. Of note, both of their terms end in late March but are widely expected to be appointed to a second 5-year term. Another potential candidate is former Deputy Governor Hiroshi Nakaso, who served during Kuroda’s first term and currently heads up a private sector research institute. We expect to see some hints of progress on the succession process this autumn.

Dollar Bloc and Scandies

Made up mostly of commodity currencies, the dollar bloc and Scandies are most at risk from slowing global growth. Yet the central banks continue to tighten in order to help limit inflation. The RBNZ is expected to hike its policy rate to 4.0% over the next 6 months. Although it was the first of the majors to hike and one of the most aggressive, it has not helped NZD very much as it is the worst performing YTD within the dollar bloc. Elsewhere, in Australia, the RBA is expected to hike its policy rate to 4.2% over the next 12 months. The economy is heavily dependent on exports to China. With the mainland economy slowing sharply, it is only a matter of time before Australia also feels the chill. CAD has been the best performing major currency YTD, due in large part to its status as an oil exporter as well as its strong ties to the U.S. With the U.S. economy remaining resilient, this should help Canada weather the storm as well. The BOC is expected to hike its policy rate to 3.75% over the next 6 months.

Norway is also a major oil exporter, which has helped NOK outperform within the Scandies. Norges Bank is expected to hike its policy rate to 3.25% over the next 12 months. Of note, new Governor Bache began tightening at her first meeting in March. On the other hand, Sweden is heavily dependent on trade with the eurozone, which is slipping into recession even as the ECB tightens and energy shortages loom. No wonder SEK is the second worst performing major currency YTD, ahead of only JPY. Yet the Riksbank is expected to hike policy rate to 3.0% over the next 12 months. Erik Thedeen will become Governor after Ingves’ term is over at the end of 2022 and he is expected to continue the tightening cycle.

Policy Rates (%)



One basis point or bp is 1/100th of a percent (0.01% or 0.0001).
Past performance does not guarantee future results.



***FEELING THE
WEIGHT
OF THE
WORLD***

Against a challenging global backdrop, emerging markets are likely to remain under pressure.

The outlook for emerging markets (EMs) remains negative.

The only EM currencies up year to date are BRL, PEN, and MXN. We don't count RUB because the exchange rate is meaningless until foreign investors are allowed to sell their holdings and repatriate the proceeds. COP, ZAR, and CLP have all seen their earlier YTD gains erased. For much of the first half of this year, high interest rates and rising commodity prices helped these currencies outperform their emerging market peers. However, broad-based dollar strength has slowly but surely eaten away at those EM FX gains and this is likely to continue as the Fed remains on its aggressive tightening path.

Global liquidity is tightening at an unprecedented pace.

The ECB recently joined the ranks of the Development Market central banks that are tightening monetary policy. That leaves the Bank of Japan as the only DM central bank to remain on hold. Meanwhile, EM central banks have also been hiking rates aggressively.

Weaker credits will likely struggle to finance twin deficits.

As it is, Frontier Markets such as Sri Lanka and Pakistan are already in crisis. Kenya and Nigeria are experiencing some dollar shortages, making it difficult for some foreign investors to repatriate their earnings. This is only going to get worse. That said, we are not calling for any sort of contagion effect. Rather, every country is facing the same problems as every other country. Those countries with strong fundamentals will weather the storm, while those with weak fundamentals will suffer the most.

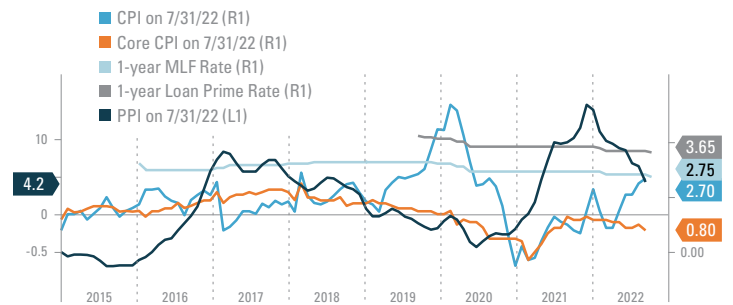
Global recessions risks are rising.

China poses a big risk to global growth. As we will go into detail in this section, the world's second largest economy is slowing much more than markets anticipated. Emerging Asia will be most vulnerable due to trade and investment ties with the mainland. In Europe, it appears that Germany and Italy are already tipping into recession, and it's only a matter of time before the rest of the eurozone follows. The U.K. is likely to enter recession in Q4. Here, Central and Eastern Europe is most vulnerable as the bulk of their exports go to Western Europe. The U.S. economy remains relatively strong but cannot fully offset slowdown in eurozone and China.

People's Bank of China Pivots. Or does it?

The central bank has been sending mixed messages. It recently said that it would safeguard the economy against high inflation and pledged not to rely on excessive monetary stimulus to boost growth. In its quarterly monetary policy report, the PBOC noted that "Structural inflation pressure may increase in the short term, and the pressure of imported inflation remains. We can't lower our guards easily." The bank added that inflation will likely exceed the 3% target in some months in H2 but said it will likely achieve the target for the full year due to measures taken to ensure grain and energy supplies as well as its prudent monetary policy. Yet days later, the bank unexpectedly cut its key 1-year MLF 10 bp to 2.75% after a run of weaker than expected data.

China Inflation (y/y)



Further PBOC easing now seems likely. With the economy growing only 0.4% y/y in Q2 and the full year growth target of "around 5.5%" clearly in danger, we expect further stimulus in H2. This means that monetary policy divergence with the Fed will still continue, albeit all from the U.S. side. Spreads are moving further in the dollar's favor; this should weaken the yuan further and weigh on fixed income returns.

China-U.S. Spreads (bp)



The Year of Living Dangerously

President Xi Jinping faces many challenges as he gears up to win an unprecedented third term at the 20th National Congress of the Chinese Communist Party this November.

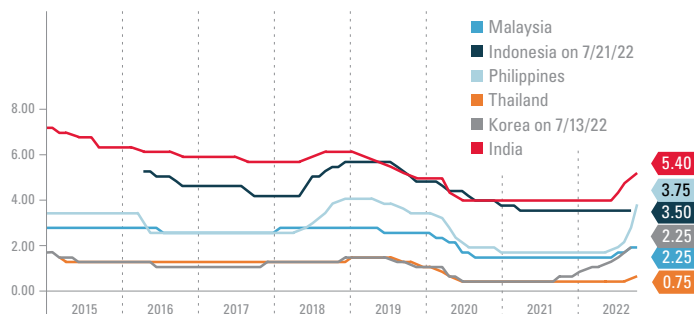
It's clear that the economic slowdown will be deeper and more prolonged than expected as policymakers stick with the COVID Zero policy. Social unrest may creep higher as recent protests by depositors demanding frozen funds from rural banks are quashed; property sector remains troubled. Crackdown on tech sector and tensions with the U.S. over Taiwan are likely to keep inbound foreign investment subdued.

Asia Will Suffer From China's Slowdown

Most Asian central banks have started tightening cycles.

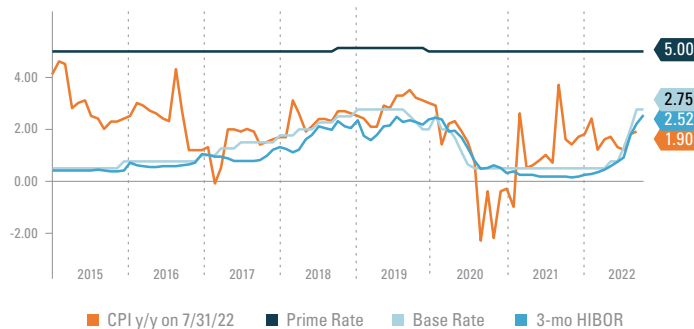
However, the pervasiveness of administered prices in this region has limited inflation and allowed these central banks to hike quite gradually compared to the other EM regions. At 5.4%, India's policy rate is the highest in the region. Thailand just started its tightening cycle, leaving Indonesia as the last to hike. Korea stands out for its aggressive tightening cycle. The swaps market sees the BOK policy rate peaking at 3% over the next 12 months.

Asia Policy Rates



Two other central banks deserve a mention. Singapore has tightened four times this past year by adjusting its S\$NEER. With inflation still climbing, the Monetary Authority of Singapore is likely to tighten again at its October policy meeting. Elsewhere, Hong Kong has been forced to tighten because of the HKD peg. We believe the HKMA will successfully defend the peg but at a cost to growth.

Hong Kong Rates

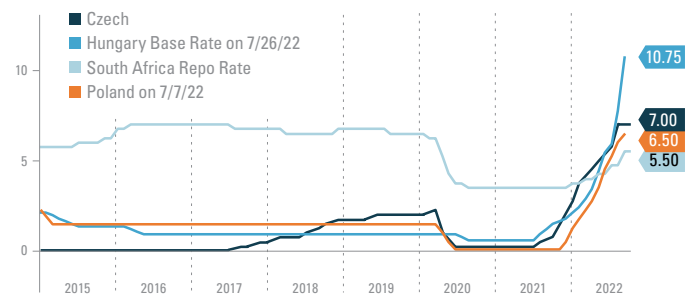


CEE Remains Very Vulnerable

The region's central banks are starting to pivot. This is due in large part to the fact that CEE is most vulnerable to negative impulses from the Ukraine crisis and eurozone recession, as most of the region's exports go to Western Europe. All are net energy importers too, putting further stresses on their economies. The

recent decision by Czech Republic to end tightening cycle is risky when inflation is running at 17.5% and rising. Poland too is signaling that it is nearing an end to its tightening cycle despite inflation running above 15%. Surprisingly, Hungary has been the most aggressive in hiking rates and so far shows no hint of stopping anytime soon. Indeed, the swaps market is pricing in another 125 bp of tightening over the next 6 months that would see the policy rate peak near 12%. Contrast this to Hungary and Poland, where markets have priced in the end of their tightening cycles.

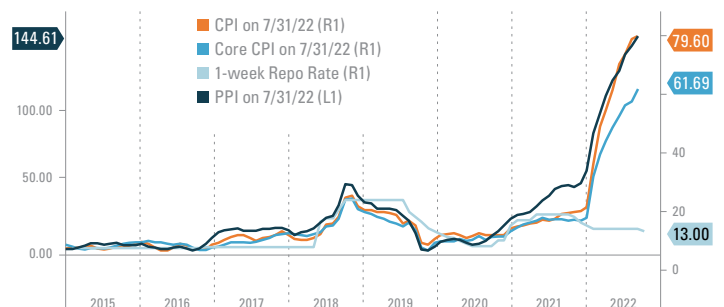
EMEA Policy Rates (%)



Turkey gave markets a big reminder of why it remains un-investable.

With inflation running near 80% (and rising), the central bank unexpectedly cut interest rates 100 bp to 13%. And so President Recep Tayyip Erdo an long-standing experiment with unorthodox policies continues. The exchange rate remains heavily managed. Otherwise, we suspect it would be well north of 20 by now given the poor fundamental outlook. In particular, the twin deficits have been widening significantly and they cannot be financed domestically. Foreign investment is desperately needed and yet interest rates are not being allowed to rise to levels that would draw in foreign inflows. We believe Turkey is moving steadily towards a balance of payments crisis that could quickly turn into a severe economic downturn.

Turkey Inflation (y/y)

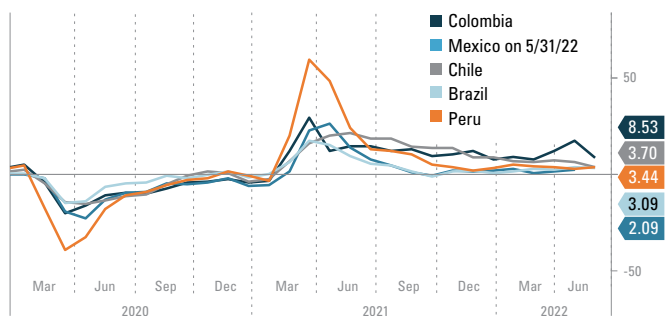


Latin America Lurches Left

Lower commodity prices and higher interest rates are likely to weigh on regional growth.

With China slowing sharply, regional exports of copper and iron ore are likely to slow. Mexico, with its greater ties to the U.S., is likely to outperform in the region in terms of economic growth. Brazil has been the most aggressive in terms of monetary tightening but the economy is starting to pick up as fiscal stimulus hits ahead of the October elections.

Latam Monthly GDP (y/y)



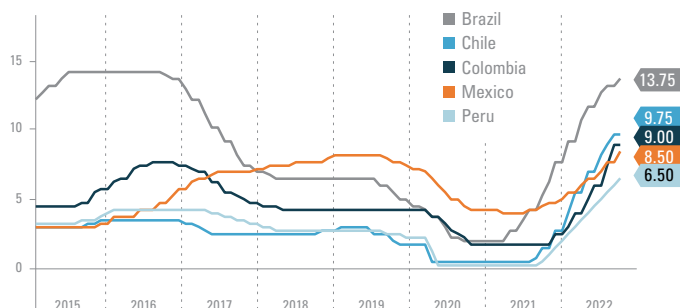
Political risk is high as the region lurches left. President Gustavo Petro just took power in Colombia this month, President Gabriel Boric took power in Chile this March, and President Pedro Castillo took power in Peru last July. They join President Nicolas Maduro in Venezuela, President Andres Manuel Lopez Obrador in Mexico, President Alberto Fernandez in Argentina, and President Luis Arce in Bolivia. If Lula wins in Brazil this fall, virtually every major economy in the region will be leftist. Investors will be watching for signs of tangible policy shifts, as many past leftist governments in the region have eventually been pulled to the center.

In that regard, Chile may provide a reassuring signal. It seems that the new Chilean Constitution that was written by the left-leaning Constitutional Assembly does not yet have enough popular support to pass the September 4 referendum. The new constitution came about after the widespread demonstrations in 2019 and 2020 protesting income inequality. However, reports suggest that the government and its allies may propose changes to some of the more controversial areas in order to get more support in next month's vote. Supporters believe the proposed constitution will strengthen social rights and protect the environment, while detractors believe it will deter investment and hurt growth.

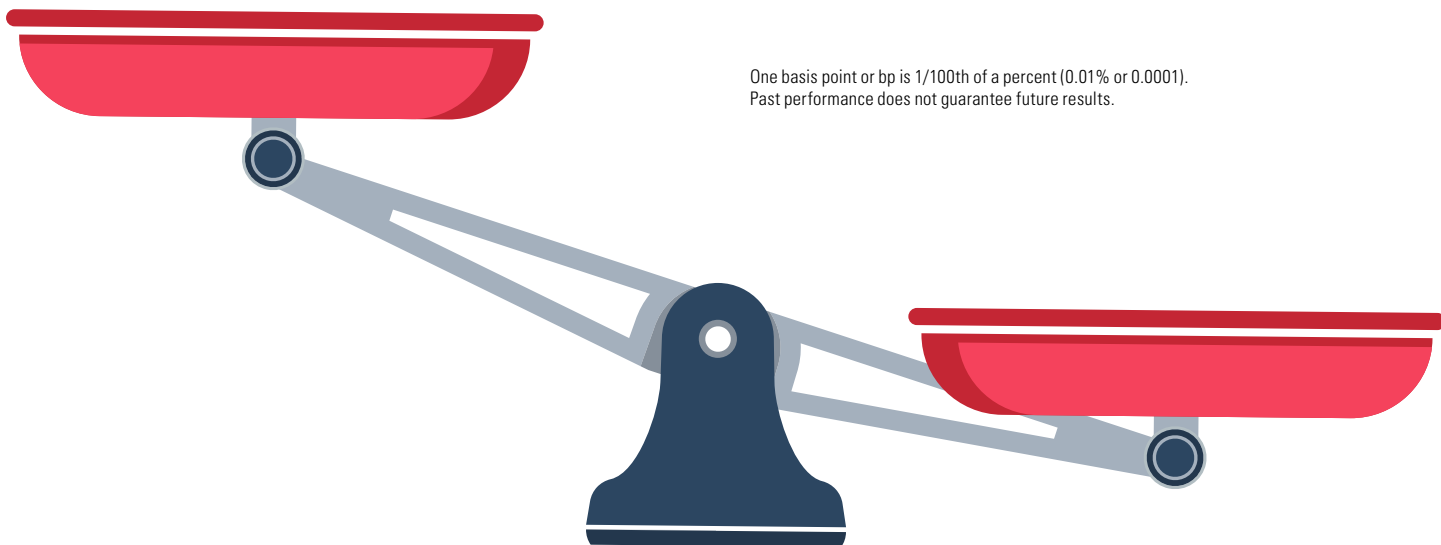
In Brazil, most polls show former President Lula beating current President Bolsonaro in the run-off.

Indeed, some even show that Lula has a chance at winning in the first round. Even after Bolsonaro's big pre-election spending spree, the incumbent continues to trail Lula in all polls. The first round will be held on October 2 and if no candidate wins a majority, the top two vote-getters will go to the second round runoff on October 30. Lula is a known quantity and so his likely victory has not had the negative market reactions that we saw in the run-up to his first victory back in 2002. Lula has already signaled that he will remain on the orthodox path with the choice of Geraldo Alckmin of the Brazilian Social Democratic Party (PSDB) as his running mate.

Latam Policy Rates (%)



One basis point or bp is 1/100th of a percent (0.01% or 0.0001). Past performance does not guarantee future results.



Currency Forecasts*

Major Markets

In US Dollar Terms	Current	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Euro	1.00	0.96	0.90	0.92	0.94
Yen	137	142	146	150	150
Sterling	1.18	1.14	1.05	1.07	1.10
Canadian \$	1.29	1.33	1.37	1.35	1.33
Australian \$	0.70	0.65	0.60	0.63	0.66
New Zealand \$	0.62	0.57	0.50	0.54	0.58
Swedish Krona	10.13	10.83	12.22	11.68	11.17
Norwegian Krone	9.69	10.42	12.22	11.41	10.64
Swiss	0.96	0.97	1.00	0.99	0.99

In Euro Terms	Current	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Yen	136	136	131	138	141
Sterling	0.84	0.84	0.86	0.86	0.85
Swiss Franc	0.96	0.93	0.90	0.91	0.93
Swedish Krona	10.10	10.40	11.00	10.75	10.50
Norwegian Krone	9.66	10.00	11.00	10.50	10.00

Emerging Markets

In US Dollar Terms	Current	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Chinese Yuan	6.85	7.50	8.00	7.75	7.50
Hong Kong \$	7.85	7.85	7.85	7.85	7.85
Indian Rupee	79.88	84.00	88.00	87.00	86.00
Korean Won	1335	1275	1300	1300	1400
Indonesian Rupiah	14825	15500	16500	16250	16000
Singapore Dollar	1.39	1.39	1.40	1.42	1.45
New Taiwan \$	30.21	29.50	30.00	30.50	32.00
Thai Baht	35.87	38.00	40.00	39.00	38.50
Brazilian Real	5.12	5.25	5.50	5.40	5.30
Mexican Peso	19.94	21.00	22.00	21.50	20.50
Czech Koruna	24.75	27.08	30.56	28.80	27.13
Hungarian Forint	413	438	478	462	447
Polish Zloty	4.76	5.05	5.56	5.38	5.21
Russian Ruble	60.35	65.00	70.00	68.00	67.00
S. African Rand	16.79	17.50	18.50	18.25	18.00
Turkish Lira	18.17	20.00	22.00	24.00	25.00

In Euro Terms	Current	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Czech Koruna	24.66	26.00	27.50	26.50	25.50
Hungarian Forint	412	420	430	425	420
Polish Zloty	4.75	4.85	5.00	4.95	4.90

*There is no assurance that future forecasts will be attained.

DISCLOSURES

This material is provided solely for informational purposes by Brown Brothers Harriman & Co. and its subsidiaries (“BBH”) to recipients who are classified as institutional or sophisticated investors, or as Professional Clients or Eligible Counterparties if in the European Economic Area (“EEA”). BBH is an independent FX research provider and this communication should not be construed as a recommendation to invest or not to invest in any country or to undertake any specific position or transaction in any currency, security, other asset class or any particular investment strategy. This material does not constitute legal, tax or investment advice. Any reference to tax matters is not intended to be used, and may not be used, for purposes of avoiding penalties under the U.S. Internal Revenue Code or for promotion, marketing or recommendation to third parties. This information has been obtained from sources believed to be reliable that are available upon request. This material does not comprise an offer of services. Any opinions expressed are subject to change without notice. Unauthorized use or distribution without the prior written permission of BBH is prohibited. This publication is approved for distribution in member states of the EEA by Brown Brothers Harriman Investor Services Limited, authorized and regulated by the Financial Conduct Authority (FCA). Please be advised that any analysis of individual countries, currencies, securities or other asset classes contained herein, including, but not limited to, rankings contained in BBH Country Risk Ratings, FX Risk Rankings and Equity Risk Rankings, should not be considered sufficient information upon which to base an investment decision. Such analysis is intended to serve as a preliminary screening tool, which should be supplemented by additional research.

This material contains “forward-looking statements” which include information relating to future events, projected future performance, statements regarding intentions, strategies, investments, expectations, the competitive and regulatory environments, predictions, and financial forecasts concerning future foreign exchange activities and results of operations and other future events or conditions based on the views and opinions of BBH. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved. Forward-looking statements are based on information available at the time the statements are made and/or BBH’s good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in, or suggested by, the forward-looking statements. Actual results of activities or actual events or conditions could differ materially from those estimated or forecasted in forward-looking statements due to a variety of factors.

There are risks associated with foreign currency investing, including but not limited to the use of leverage which may accelerate the velocity of potential losses. Foreign currencies are subject to rapid price fluctuations due to adverse political, social and economic developments. These risks are greater for currencies in emerging markets than for those in more developed countries. Foreign currency transactions may not be suitable for all investors depending on their financial sophistication and investment objectives. The services of an appropriate professional should be sought in connection with such matters.

BBH, its partners and employees may own currencies discussed in this communication and/or may make purchases or sales while this communication is in circulation.

Information has been obtained from sources believed to be reliable and in good faith. Sources are available upon request. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Any opinions expressed are subject to change without notice. This material has been prepared for use by the intended recipient(s) only. Unauthorized use or distribution without the prior written permission of BBH is prohibited. Please contact your BBH representative for additional information.

BBH is a service mark of Brown Brothers Harriman & Co., registered in the United States and other countries. © Brown Brothers Harriman & Co. 2022. All rights reserved.

FOREIGN EXCHANGE

BROWN 
BROTHERS
HARRIMAN

NEW YORK BEIJING BOSTON CHARLOTTE CHICAGO DUBLIN GRAND CAYMAN HONG KONG JERSEY CITY
KRAKÓW LONDON LUXEMBOURG NASHVILLE PHILADELPHIA TOKYO WILMINGTON ZÜRICH WWW.BBH.COM