September 2023

Commentary

Global Macro Policy Quarterly

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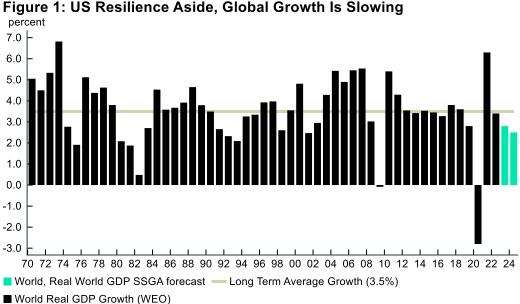
Global Macro Highlights

Regaining Balance Or Overlooking Risks?

Three months ago, we commented on the quick containment of the US and European banking turmoil by saying that—impressive as that was—it would be surprising if no other similarly disruptive risk event transpires during the second half. The year hasn't ended yet, but we do declare ourselves surprised by the global economy's ability to weather the ongoing monetary policy tightening without delivering more "victims", so to speak.

To be sure, not every region has surprised to the upside. Our forecasts for both the UK and the eurozone remain essentially unchanged from three months ago, while our growth expectations for China have been reduced ever so slightly for both this year and next. The big upside surprise has undeniably been the United States, but we've also revised growth higher in Japan and Australia. In Japan, a big upside surprise in Q2 GDP forced a upgrade to 2023, though 2024 estimates are unchanged. In Australia, the fundamental story remains one of deceleration yet the timing is pushed out: while 2023 growth looks better, 2024 is a bit softer. As a result of all these permutations, global growth (PPP-weighted) is lifted by two tents and 2024 by one tenth.

Perhaps the best news since our last report is that the disinflation trend, already very evident in the US, has taken better hold in the eurozone and appears to have finally deepened in the UK as well. Disinflation without a recession is indeed something to celebrate. The pace of monetary tightening has naturally slowed given interest rates have already been pushed to deeply restrictive levels. While some modest additional tightening cannot be entirely discounted, we believe the Fed and the ECB are both done. Attention is increasingly focused on the BoJ, whose careful exit from extraordinary policy accommodation is expected to involve an exist from negative interest rates in 2024. At the other end of the spectrum, China is the most important economy where monetary policy has turned more accommodative this year as headwinds on both domestic and external fronts persist.



Sources: SSGA Economics, IMF WEO

Summary of World Output¹ and Inflation²

(Annual percent change)

	Weight			History			Fore	cast
	(2021)	2018	2019	2020	2021	2022	2023	2024
World Growth	100.0	3.6	2.8	-2.8	6.3	3.4	2.8	2.5
Advanced Economies	41.2	2.3	1.7	-4.4	5.2	2.7	1.5	1.1
US	15.2	2.9	2.3	-2.8	5.9	2.1	2.0	1.1
Euro area	11.8	1.8	1.6	-6.3	5.3	3.5	0.7	1.1
Germany	3.2	1.0	1.1	-4.1	2.6	1.8	-0.1	1.2
France	2.2	1.8	1.9	-7.7	6.4	2.5	0.6	1.0
Italy	1.8	0.8	0.5	-9.0	7.0	3.8	1.2	1.1
Japan	3.7	0.6	-0.4	-4.3	2.2	1.0	1.9	1.1
UK	2.3	1.7	1.6	-11.0	7.6	4.1	0.4	1.1
Canada	1.4	2.8	1.9	-5.1	5.0	3.4	0.9	0.6
Australia	1.0	2.8	1.9	-1.8	5.2	3.7	1.8	1.4
Developing Economies	58.8	4.6	3.6	-1.8	6.9	4.0	3.7	3.4
China	18.9	6.7	6.0	2.2	8.4	3.0	4.8	4.4
Advanced Economy Inflation	41.2	2.0	1.4	0.7	3.1	7.3	5.1	2.6
US	15.2	2.4	1.8	1.3	4.7	8.0	4.1	2.3
Euro area	11.8	1.8	1.2	0.3	2.6	8.4	5.8	2.4
Germany	3.2	1.8	1.4	0.5	3.1	6.9	6.0	2.4
France	2.2	1.9	1.1	0.5	1.7	5.2	5.0	2.5
Italy	1.8	1.2	0.6	-0.1	1.9	8.2	6.3	2.3
Japan	3.7	1.0	0.5	0.0	-0.3	2.5	3.0	2.1
UK	2.3	2.5	1.8	0.9	2.6	9.1	7.2	2.9
Canada	1.4	2.2	2.0	0.7	3.4	6.8	4.2	2.5
Australia	1.0	1.9	1.6	0.9	2.9	6.6	5.2	3.7
Developing Economies	58.8	5.0	5.1	5.1	5.9	9.8	6.3	3.7
China	18.9	2.1	2.9	2.4	0.9	2.0	0.4	1.7
Value of World Output (\$ t	rl)							
At Market Exchange Rates		86.0	87.3	84.9	96.3	100.2	109.0	115.5
At Purchasing Power Pariti	es	129.8	135.7	133.4	147.9	163.5	177.8	188.5

¹ Real GDP; ² Consumer Price Inflation

Weight is the share of world GDP on a purchasing power parity basis (IMF World Economic Outlook) Historical data sources: Oxford Economics, IMF. Forecast: SSGA Global Macro and Policy Research

Politics and Geopolitics

China: Property Sector Troubled, Clouding Recovery

Excess leverage in China's housing sector poses potential systemic risk, but the nature of China's financial architecture makes a broader crisis unlikely. Chinese policymakers, for instance, have a wide array of tools to distribute financial pain across balance sheets. In addition, the government is rolling out policies to support housing demand and affordability. However, these measures may not mitigate the loss of housing as a major growth engine for China.

In August 2020, the Chinese government released regulatory guidelines, colloquially referred to as the 'Three Red Lines,' for housing developers. These set out three different limits on developers' leverage and aimed to curtail systemic risk. The regulations have been highly successful, but that success came at the cost of throttling the housing sector and kindling a potential financial crisis. After the principles were introduced, several highly indebted developers (notably Evergrande) began to struggle to service debt and the sector slowed sharply.

In most economies, the risk would be that developers would default on loans, with non-performing assets rising rapidly on bank balance sheets, possibly collapsing over-concentrated loan portfolios and the contagion spreading via other creditors in the system.

This is less of a concern in China, where the government has extensive direct and indirect control over lenders as well as lenders' creditors. Policymakers can therefore step in and impose debt restructuring terms through several different channels and manage to distribute losses without sparking systemic contagion. This applies to developers, banks, as well as local governments and their financing vehicles—the net effect resulting in containment of any escalation in financial crisis.

Economic Effects Could Still be Severe

The same cannot be said of the economic effects though, where the loss of housing as a growth motor will continue to weigh on the Chinese economy. Real estate constitutes roughly a quarter of China's GDP, with about two-thirds of that directly tied to construction activity. Furthermore, Chinese households also hold the majority of their personal wealth in domestic real estate. The combination of the slowdown and lower prices should mean a direct drop in construction activity and a negative wealth effect for Chinese households, which contributed to the weak economic growth figures in 2023, despite the post-pandemic reopening dynamic.

China's real estate index appears to be bottoming out (Figure 2, page). Looking ahead, we expect the property sector to stabilize, with the contraction in residential investment to end over the course of 2024. The government has also lowered borrowing costs for new mortgage holders and eased conditions for property purchases in major cities. While these measures should help revive some of the lost demand, housing may still remain as a zero-growth industry in the foreseeable future.



Figure 2: Persistent Slide In China's Real Estate Sector

Updated as of 9/22/2023

As far as the pace of urbanization is concerned. China has followed its East Asian neighbors closely. The country's urbanization process has yet to peak, so the current supply overhang should probably still service unmet demand in coming years. However, the peak is also not far away, which means the rapid pace of urban construction should settle down at much lower rates; the growth curve should start to flatten a lot at this point.

In Conclusion

China's real estate has the potential to precipitate a financial crisis, but the specific nature of the economy's financial structure should mean a contagion will likely be avoided. However, real estate constitutes a quarter of China's GDP, so the crisis will still have a far-reaching effect on China's economy. Most importantly, the crisis in general highlights the profound challenge of China's overreliance on investment as a GDP driver, which we will examine in our accompanying piece on China.

Demographics

Better GDP Growth Does Not Mean Better Living Standards

While debating which economies have had the better economic performance post covid, a few names have come up. During the period 2020-2022, Australia achieved the average annual real GDP growth rate of 2.4%, much faster than the US (1.7%) while Canada's rate of 1.1% is well above the EU and Japan. However, the crude GDP figures exaggerate the relative economic performance of these countries; when accounting for population growth, a different story is revealed.

GDP growth can be de-composed as the sum of population growth and growth of per capita GDP. As shown in Figure 3 below, thanks to immigration and higher birth rates, population growth in younger countries such as Canada and Australia is increasing at a faster pace relative to other advanced countries, boosting their overall GDP growth rates. In contrast, negative population growth rates in Japan and older European countries such as Italy act as a detractor to their GDP growth. Once population growth is taken into account, Canada's GDP per capita rose at 0.3% in the three years to 2022, less than a third of Italy's 1.0% and slightly lower than the average EU's 0.4%. Put in another way, Canada's economic outlook darkens considerably on a per capita basis. Likewise, Australia's performance looks less impressive when growth is compared on per capita basis. The country's GDP per capita grew only 1.0% p.a. during 2010-2019, same as the eurozone average, and much slower than Japan's 1.4% (whose population is declining).

What does that mean for us?

Broadly speaking, economic growth does not rely solely on population growth, which determines the size of workforce. An economy can still grow despite a constant or declining population provided there is strong productivity growth of that workforce. And while either can contribute to a growing economy, only strong productivity growth can increase per capita GDP and income permanently. In most high income countries, GDP per capita has almost stagnated for years due to slowdown in productivity growth. Perhaps, what these countries need is not simply larger or faster-growing populations and/or higher investment, but also greater labor mobility and flexibility to better fit worker needs.

Figure 3. GDP Growth Contributions

Growth, % p.a.	2010-2019 Population	2010-2019 GDP Per Capita	2010-2019 GDP	2020 - 2022 Population	2020 - 2022 GDP Per Capita	2020 - 2022 GDP
US	0.7	1.6	2.3	0.5	1.3	1.7
Canada	1.1	1.1	2.3	0.8	0.3	1.1
UK	0.7	1.3	2.0	0.5	-0.3	0.2
Euro Area	0.2	1.0	1.3	0.2	0.4	0.6
France	0.5	1.0	1.4	0.4	0.2	0.5
Germany	0.3	1.6	2.0	0.3	0.0	0.2
Italy	0.0	0.2	0.3	-0.4	1.0	0.6
Japan	-0.1	1.4	1.2	-0.4	0.0	-0.4
Australia	1.6	1.0	2.6	0.8	1.5	2.4
China	0.6	7.1	7.7	0.0	4.5	4.5
Brazil	0.9	0.6	1.4	0.6	1.0	1.5
Mexico	1.0	1.6	2.7	0.9	-1.0	-0.1
India	1.2	6.0	7.2	0.8	2.4	3.2

Sources: SSGA Economics, TCB Updated as of 13/09/2023

Country Macro Highlights

Please see country-specific commentary in the sections below.

US: Can The Soft Landing Survive the Fed?

The US economy has shown a surprising degree of resilience in the face of rising interest rates. As a result, 2023 growth forecasts have been universally upgraded, with some of that strength mechanically spilling over into 2024. We have not been immune from this tide: in a mark-to-market exercise not unlike that visible in the Fed's September summary of economic projections, we've raised our 2023 real GDP growth forecast from 1.2% to 2.0% and the 2024 forecast from 0.5% to 1.1%.

However, this is far from an "all clear" signal on the outlook. Although near term recession odds seem negligible, we still see a 30-35% chance of a US recession on an 18-month horizon. Why?

We think the current stance of monetary policy is very restrictive, but its impact on demand has been blunted by a very loose fiscal stance. The lingering fiscal impulse from previously approved packages (Chips Act, Inflation Reduction Act) is probably the number one reason why growth has surprised so much to the upside this year. Additionally, several other factors have further slowed the transmission of monetary policy. Household balance sheets remain strong overall and while new credit is very expensive, debt servicing obligations as a share of disposable income are still historically modest. Many firms have borrowed at very low interest rates in 2020 and 2021 and still have those reserves untapped. It is not until late 2024 and, mostly, 2025, that the US corporate sector faces a meaningful refinancing "wall".

Given this backdrop and the apparent lack of "pain" in the economy at large and labor market in particular, there is a natural tendency to assume that the Fed needs to "do more". But it is precisely at times such as these that it is important to remember both that monetary policy works with long and variable lags, and that the labor market is a lagging indicator.

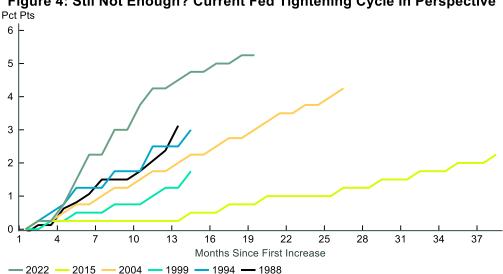


Figure 4: Stil Not Enough? Current Fed Tightening Cycle In Perspective

Sources: Macrobond, SSGA Economics, Fed Updated as of 9/22/2023

With the personal savings rate at just 3.5% in July, the resumption of student loan repayments, and cost of living adjustments to social security benefits considerably less generous in 2024 than in the prior two years, we find it hard to believe that consumer spending can sustain its recent growth rates. Admittedly, consumers have enjoyed a powerful boost from the intense disinflation experienced since the summer of 2022; going from over 9.0% CPI inflation to slightly over 3.0% has been a boon for real incomes. However, that tailwind will fade going forward since the next step in the disinflation journey will be less about magnitude and more about rotation from headline to core. For consumer spending, it is headline disinflation that matters. A slowdown therefore does not seem like an outlandish expectation, even absent meaningful labor market deterioration.

We do not anticipate anything remotely close to dramatic labor market weaking, but the projections embedded in the FOMC September summary of economic projections feel a little "too good to be true". One has to really squint to find any evidence that several years of high interest rates have any dampening effect on labor market conditions. So, rather than barely crossing above the 4.0% mark by the end of 2024, we believe the unemployment rate will exceed 4.5%. And, conditional on the mere 50 bp worth of rate cuts through end-2024 envisioned by the median dot, we'd argue that the risks to that number are to the upside.

For our part, we continue to believe that sustained, broadening progress on inflation, warrants more rate cuts in 2024. However, we acknowledge that the latest dot plot has widened the gap between what the FOMC signals it intends to do and what we believe it "should" do next year. The implicit message in the dot plot is that unless something "breaks" in the economy, the Committee is disinclined to preemptively calibrate rates lower merely on account of better inflation data. We think that would be a mistake. Over-confidence in the soft landing scenario actually endangers the odds of the soft landing remaining soft. As some of the supports to demand discussed above begin to fade, the delayed effects of earlier monetary tightening could precipitate a sharper than necessary downshift.

Incoming inflation data remains as critical as ever, but we believe there is scope for 100-150 bp worth of cuts from the Fed in 2024. For now, the committee remains highly circumspect that the inflation progress seen in the core PCE data in recent months can be trusted. Even so, enough progress had already been achieved to allow the FOMC to—for the first time in a long while—lower short term core PCE inflation forecasts in September. The end-2023 core PCE inflation forecast (Q4/Q4) was reduced two tenths to 3.7%. Our own forecast has been at is 3.5% since June and still looks reasonable. On that note, while growth forecasts have changed meaningfully for both this year and next, inflation forecasts have not.

The economy's resilience in the face of higher rates has fueled ongoing debate not only about how high the Fed should/will go in the short term, but also about whether the "neutral" rate has shifted higher. Interestingly, Chair Powell seemed to make a distinction between the neutral rate and the long-term equilibrium rate at the September press conference. To us, this seems like an odd distinction. It is true that, to the extent that exogenous factors temporarily slow the transmission of monetary policy, the de facto implication is that the Fed needs to do more to achieve the desired dampening of demand. However, is this the same as saying that the "neutral" rate is higher? Insofar as the practical implication is the same, perhaps it matters little whether the problem is framed in terms of a higher neutral

rate or not. However, we believe that acknowledging the exogenous factors as the key variable swaying the outcome is the better approach as it implicitly builds in a faster monetary policy reaction to any changes in those factors. It is this nuance that leads us to favor pre-emptive calibration lower in rates as inflation recedes. Time will tell which approach is best. However, looking at Figure 4 above, we can't help but wonder: have things changed so dramatically that the most aggressive tightening cycle in decades is still insufficient to get the job done?

Canada: Inevitable Slowdown

Last quarter, we have made significant upgrade to Canada's 2023 growth forecast while downgrading 2024 growth projection materially given the bulk effects of tighter monetary policy were yet to be felt. This quarter, we made very little change to growth forecast (only a one tenth downgrade to 0.9%), and inflation forecast (up one tenth to 4.2%).

The economy remains on course to avoid technical recession but real GDP growth is projected to slow in the second half of the year. Following a modest expansion in Q1, real GDP was almost unchanged in Q2. In fact, in annualized terms, the economy shrank by 0.2%, bucking the BoC's expectations of an annualized increase of 1.5%. Performance was curtailed by ongoing contractions in housing investment, inventory accumulation, as well as weaker exports and household spending. Net exports weakened in the quarter as the slight pick-up in exports was overwhelmed by faster import growth. Housing investment continued to decline while household expenditure growth decelerated quickly. As the impact of interest rate hikes continue to work through the economy, consumer spending and business investment should continue to weaken. Weak foreign demand is also expected to slow export growth. We expect that GDP growth will gradually improve starting in the second half of 2024.

Inflationary pressures persist: the headline print moved up to 4.0% y/y in August after inching up 0.5 percentage point (ppt) to 3.3% in July. There's little improvement in core inflation measures. In fact, while the CPI common measure was unchanged at 4.8%, both the weighted median and the trimmed mean measures went up to 4.1% (from 3.9% y/y in July) and 3.9% (from 3.6% y/y in July). Given recent increases in gasoline prices, the inflation rate is likely to accelerate in the near term before softening again.

The labor market bounced back strongly in August. Employment rose by almost 40k, with more than three thirds of the gain in full-time positions. The unemployment rate was unchanged at 5.5% after three consecutive monthly increases. Wages gains continued to accelerate in August, with the average hourly wages up 5.2% y/y, compared with 5.0% in previous month

The Bank of Canada (BoC) left its policy rate unchanged at 5.0% at the September meeting. The bank noted that easing excess demand and lagged effects of interest rate increases were the main reason for the hold decision. However, as inflation increased more than expected in August with core inflation measures rising further and being revised higher, we now see a much higher probability of another rate hike by the BoC at the October meeting.

9 8 7 6 5 3 2 1 Jul Oct Jan Apr Jul Oct Jan Jul Jan Apr Apr 21 22 23 Core CPI - Headline CPI

Figure 5: Canadian Core Inflation Proving Sticky

Sources: SSGA Economics, StatCan Updated as of 9/22/2023

UK: Tightening Policy Starts to Bite

We are holding onto June forecasts although some downside risks to growth has arisen. This week, the BoE's MPC voted by the narrowest margin of 5-4 to hold the policy rate at 5.25% after seemingly relentless increase in interest rates since December 2021. The bank said that it will maintain a "restrictive policy stance" until "material progress had been made in returning inflation to the 2% target sustainably". It seems that over the next few months, choices are between holding or increasing the interest rates further; rate cuts do not see, likely any time soon.

Over the past few months, inflation continued to fall but core inflation proved sticky. However, the August data was a welcome surprise with the core CPI moving closely in line with the BoE expectations. Headline inflation had dropped to 6.8% in July, before inching down to 6.7% in August, 0.4 percentage points below the BoE forecast. While lower energy prices up to July contributed mainly to the lower headline inflation, the decline in August was driven by other components. In fact, while energy inflation rate rose in August, core CPI inflation fell to 6.2%, well below market expectations. Services CPI inflation also declined more sharply than had expected to 6.8% in August from a 31-year high of 7.4% in previous month. However, it's worth noting that the decline and July increase was more related to travelling. Excluding travel-related items, services inflation remained elevated. In addition, upward pressure on wages remaining an issue in the coming months.

The economy remains on course to avoid technical recession but growth is likely to remain fragile. After a stronger-than-expected growth in Q2, economic activity remained weak. Higher borrowing costs weigh on housing, with housing investment and house prices continuing to fall. Household consumption and business investment were strong in Q2 but have since taken a turn for the worse. In fact, July economic activity was weaker than expected with the monthly GDP estimated to have contracted 0.5% m/m. Meanwhile, the manufacturing downturn took a further turn for the worse in August, with the manufacturing PMI down to a 39-month low of 43.0. The services PMI also dipped into contraction territory in August for the first time since the beginning of the year. Trade is also likely to continue to

suffer, with both imports and exports projected to be down sharply this year due to soft global demand and the continuing impact of Brexit. Given the subdued global economic outlook and slow inflation descent, we expect the economy to flatline over the next two quarters, leading to overall growth of 0.4% for the year. As for 2024, downside risks have risen, but we still expect GDP growth of just over 1.0% given the moderating inflation and strong wage growth.

The job market is still tight, but is easing and vacancies continue to decline. The ILO unemployment rate for May to July rose to 4.3%, higher than the BoE's August projection. We expected some further modest increase in unemployment rate for the next few quarters. Despite the gloomy economic outlook, wage growth continued to exceed expectations, keeping the BoE under pressure, with growth in average total pay (including bonuses) sped up to 8.5%. The growth in regular pay (excluding bonuses) held steady at 7.8%.

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— United Kingdom, Policy Rates, Bank of England, Bank Rate

Figure 6: Is The BoE Done Hiking?

Sources: SSGA Economics, ONS, BoE

Eurozone: Underappreciated Resilience It is unusual to make no changes whatsoever to a quarterly forecast, but that has been the case with the eurozone projections this time around. Admittedly, given steep upgrades to US growth, this widens the eurozone's underperformance relative to the US, but hidden underneath that gap is a degree of resilience that we feel is under-appreciated by market participants.

To begin with, last quarter we wrote about a "de minimis" recession in the eurozone (contractions of -0.1% q/q in real GDP in Q4 2022 and Q1 2023). As it turns out, subsequent revisions erased even that smallest of possible technical recessions as the economy inched 0.1% higher in both Q1 and Q2. To be sure, consumer spending stalled in the second quarter and remains under pressure from still-elevated inflation. However, that lack of spending seems to be more a function of choice rather than necessity as household savings remain robust and could support healthier spending. In fact, as headline inflation continues to moderate,

consumer confidence should recover and spending along with it, especially since the labor market remains quite strong.

Figure 7: Euro Area Household Savings Rate Still Elevated Percent 27.5 25.0 22.5 20.0 17.5 15.0 12.5 10.0 Q3 Q3 Q1 Q1 15 16 17 18 19 21 22 23 Euro Area 20, Eurostat, Gross Household Saving Rate, Calendar Adjusted, SA

Sources: Macrobond, SSGA Economics, Eurostat Updated as of 9/22/2023

Investment has also held up reasonably well so we remain comfortable with our real GDP growth forecasts of 0.7% for this year and 1.1% for 2024. In this respect, it was good to see the new ECB staff forecasts essentially converge on our numbers (0.7% and 1.0%, respectively, compared with 0.9% and 1.5%, three months ago). Last year, there was acute concern around the region's ability to secure enough energy supply to avoid broad disruptions to economic activity. In the event, none of the worst case (or even second-worst case) scenarios came to pass. That resilience is once again being rebuild as natural gas storage levels are filled to roughly 90-95% of capacity in many countries. The combination of improved supply security and lower natural gas prices should begin to partly unwind the deterioration in eurozone competitiveness that followed the Ukraine war. It is perhaps in this space that we see more room for healing relative to generally gloomy consensus views.

The inflation data has also come in largely as expected so we leave the 2023 and 2024 headline inflation forecasts unchanged at 5.8% and 2.4%, respectively. We acknowledge ongoing uncertainties around the outlook and risks related to the recent move higher in oil prices, but see developments so far as consistent with our assumptions. The ECB staff forecasts envision a slower inflation descent but we see the 3.2% 2024 forecast as too conservative.

With the main refinancing rate now at 4.5%, the ECB's policy stance is now quite restrictive. The transmission of monetary policy also appears faster in the eurozone than in the US—partly a function of less supportive fiscal backdrop—so we believe the ECB is down hiking. Following the September hike, we were told that "the Governing Council considers that the key ECB interest rates have reached levels that, maintained for a sufficiently long duration, will make a substantial contribution to the timely return of inflation to the target." Not a promise, but definitely a strong

hint that the Council's preference (or perhaps, hope) would be to let the rate hikes delivered so far work through the system. We share that preference and hope. Unlike in the US, where we believe there is room for multiple rate cuts in 2024, the ECB appears more constrained in respect to pivoting lower. Even so, 50 basis points worth of cuts in the latter part of next year is a reasonable baseline.

Japan: A Requiem For Normality

Our outlook on the Japanese economy has improved (again) as we raise the 2023 growth forecast three tenths to 1.8% y/y. However, we expect growth to be less reliant on household consumption as households are burdened by inflation. Furthermore, domestic consumption is moving sideways and could rise just 0.9% y/y this year and 0.6% in 2024, below its historic average. This weak momentum is also captured in declining import volumes, which contributed the lion's share to sequential GDP growth in the past two quarters. This boost may diminish or even reverse at some point over the coming quarters, however.

That being said, a higher government consumption expenditure (GCE) is the key addition to outlook. Although, GCE had contributed just 0.2 percentage points to growth since 2022 Q1, the improved outlook is backed by a potentially higher defense spending. The government is further expected to draw up a stimulus package soon which is aimed to boost potential growth by incentivizing firms to invest in cutting edge technologies and improving wages. Furthermore, the government proposed to increase defense allocation by 13% in FY 2024, and spending could be higher in the next five years as allocation is set to double to 2% of GDP by 2027. Another significant tailwind could be exports, which may rise on the back of a strong machinery orderbook. Hence, despite slower household consumption, GDP could end up higher than we expected in June at 1.8% y/y in 2023 and 1.1% in 2024.

Given the 12.2% depreciation of the yen and 6.8% rise in gasoline prices year-to-date, there is a strong probability of inflation reaccelerating in the months ahead. Hence, we now expect headline CPI to average 3.0% y/y in 2023 and 2.2% in 2024. The BoJ may also sharply revise its forecasts next month in their outlook report. Finally, wage growth remains the most important factor for inflation and we expect the next year's *shunto* negotiations to result in a 3.0% rise in overall pay, similar to this year on stronger corporate profits.

After the BoJ tweaked its YCC in July, the 10y JGB yield has risen to 0.75% rather fast and may rise towards 1.0%, the level where the BoJ will conduct fixed rate JGB purchases. Together with governor Ueda's interview in *Yomiuri Shimbun*, these developments put the onus on the BoJ to normalize monetary policy expeditiously and hence, we bring forward our expectation of the Bank amending the Yield Curve Control (YCC) from Q1 2024 to Q4 2023. We expect them to raise the YCC target to 0.5% (or 1.0% now) with a 100/50 bps tolerance band by Q1 2024, so that the BoJ could conduct fixed rate purchases at around 1.5%, however, only if needed. An outright removal of YCC is still improbable, to avoid yields jumping to unmanageable levels. Timing wise, we see the October meeting to be a live event, as it includes an outlook report and also, because the Bank maintained policy, without any new guidance in September. Furthermore, if Japan and the global economy endure this shift, we see a stronger possibility of Japan exiting negative interest rates in H1 2024 (also brought forward from H2 24).

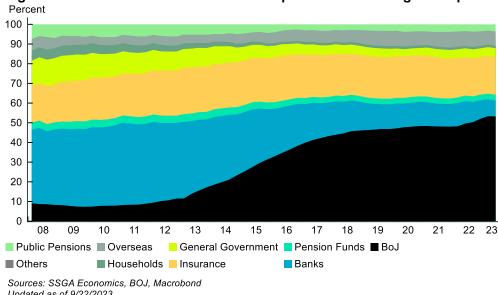


Figure 8: Domestic Institutions Could Improve JGB Holdings In Japan

Updated as of 9/22/2023

However, the most important development could be the BoJ reducing its JGB purchases, to encourage higher domestic participation, as Japanese institutions turned net buyers of foreign debt for the first time since 2022 February recently. Hence, there is a requiem of higher yields to elicit their interest, which is possible only by fewer JGB purchases by the central bank, and if piloted successfully, the Bank could also consider tapering its holdings.

All in all, growth and inflation are expected to be firm, which might allow the BoJ to normalize monetary policy sooner than expected earlier.

Australia: Straightjacketed As we had anticipated, Australians decreased their spending to accommodate higher mortgage interest costs in 2023, so household spending contributed only 25% of GDP growth in last three quarters. With interest rates slated to remain higher for longer, the outlook on household consumption remains weak; we now only see a 0.7% increase in 2023 as a whole before spending growth guickens to 2.2% next year. Normally, this would have been a drag on GDP growth but net trade has been an offsetting catalyst on the back of strong service exports.

Capital expenditures were also strong during the first half, contributing 0.5 ppts to growth in both quarters. Public investments increased a whopping 8.2% q/q, not on public infrastructure spending, but, on second hand transfers from the private sector. The government is reviewing (to be released soon) its Infrastructure Investment Program which has been overburdened by higher labor and raw material costs so this may result in a recommendation to step down infrastructure commitments. The pipeline of public projects is already marred with higher costs and delays. A review in December 2022 highlighted three key risks: A\$15 bn increase to the investment value in 2022 itself, a 24% rise in the material costs and a typical delay of 45 weeks in delivering large diameter concrete pipe. Hence, we do not have high hopes on public capital expenditures to lift growth. However, a beacon of hope is in the forward looking private

intentions, estimated nominally at A\$157.8 bn for the current fiscal, nearly 7% higher than from last year. However, much of this may reflect higher prices so the boost to growth could be modest.

Inventories detracted 1.1 percentage points (ppts) from growth in Q2, partly due to the clearing to cater to external demand in mining, and also by clearing off of quarantine backlogs of motor vehicles and parts. The key question hence is, whether and to what extent could these inventories be restocked. We see a good chance of sufficient restocking to turn this into a growth tailwind in H2 2023.

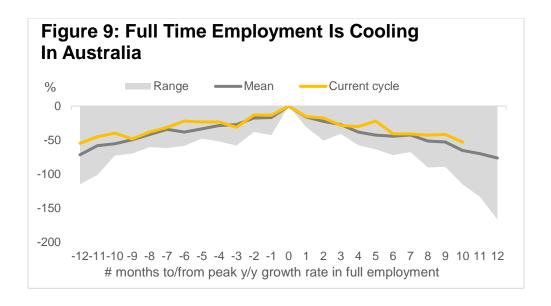
Still, the fundamentals to growth are not very strong. We look for real GDP growth of 1.8% this year and 1.4% in 2024. The economy will remain on weak footing with higher interest rates, but we expect consumers to weather the pain.

This picture is worsened by potentially sticky inflation in the quarters ahead. With *El Nino* looking increasingly likely, food prices (17.2% CPI weight) perhaps have the highest chance to prove sticky or even reaccelerate; we expect them to rise 5.7% y/y this year and 4.7% in 2024. The transportation category (10.7% weight) could also experience some reacceleration. Even inflation in alcohol & tobacco (7.74%) could be sticky due to higher taxes recently.

All of this means that housing (22.18%), recreation (11.90%), health (6.22%) and clothing (3.22%) are the only components where inflation might continue to decline towards the 2% target by Q4 2024. Hence, we expect CPI inflation to average 5.2% in 2023 and 3.7% in 2024.

The economy has much more of a cost of living problem than an inflation problem. The Selected Living Cost Indexes (SLCI) for a representative working household jumped 9.6% y/y in Q2, with the difference with CPI reaching an all-time high of 3.6 percentage points! The SLCIs were designed to measure the effect of prices on costs of living and include mortgage interest changes, which the CPI excludes. So, although inflation is coming down gradually, the cost of living is significantly worse.

Although the consensus view is that the Australian labor market is strong, we believe strongly that it is set to cool. Nearly 950k people are working multiple jobs, over 200,000 more than before the pandemic. Indeed, 90% of the 65k jobs added in August were part-time. This is consistent with the countercyclical nature of part-time employment, rising while full-time employment cools during slowdowns. Furthermore, annual growth of employment in the current cycle peaked in October 2022; by August 2023, the growth rate slowed to half of the peak level, this is also consistent with the historic cycles. The key message is that the labor market indeed is cooling.



Predicting the Reserve Bank of Australia (RBA) policy function is a daunting task. The data flow has been mixed enough to warrant some upside risks to the cash rate target. The minutes of the September RBA meeting showed the Bank held rates as data were "consistent with inflation returning to target within a reasonable timeframe". However, more tightening "may be required, should inflation prove more persistent than expected." The best outcome is for inflation to continue to cool without a reacceleration in employment. Given the plausible risks, we add 25 bps to our terminal cash rate target forecast, now at 4.50%. We expect the RBA to cut interest rates by 100 bps in 2024, ending the year at 3.50%. Furthermore, we expect the balance sheet rundown to actually lead policy in 2024, as nearly A\$40 bn government bonds are expected to mature in the year.

In summary, the straightjacket of tight monetary policy will reduce consumer spending and, in turn, inflation. However, the advent of El Nino and higher oil prices might keep inflation stickier than expectations. Finally, the labor market may cool sufficiently to prevent inflation from reaccelerating.

Data Calendar

Week in Review (Sep 18- Sep 22)

Country	Release (Date, format)	Consensus	Actual	Last	Comments
Monday,	Sep 18	•		•	
US	NAHB Housing Market Index (Sep)	50.0	45.0	50.0	Mortgage rates are just too high!
CA	Housing Starts (Aug, thous)	256.2	252.8	255.0	Relatively firm level.
Tuesday,	Sep 19			•	
US	Building Permits (Aug, thous)	1445	1543	1443 (↑)	Big rebound. Can we trust it?
US	Housing Starts (Aug, thous)	1440	1283	1447	Big drop. Can we trust it?
CA	CPI (Aug, y/y)	3.8%	4.0%	3.3%	Escalating.
EC	CPI (Aug, y/y, final)	5.3% (p)	5.2%	5.3%	Inflation picture is improving.
Wednesd	ay, Sep 20				
US	FOMC Rate Decision (Upper Bound)	5.50%	5.50%	5.50%	Hawkish dots.
UK	CPI (Aug, y/y)	7.0%	6.7%	6.8%	Welcome surprise.
GE	PPI (Aug, y/y)	-12.8%	-12.6%	-6.0%	Energy base effects.
Thursday	v, Sep 21				
US	Initial Jobless Claims (Sep 16, thous)	225	201	221(†)	Extremely low.
US	Continuing Claims (Sep 09, thous)	1,692	1,662	1,683	Very low.
US	Philadelphia Fed Business Outlook (Sep)	-0.4	-13.5	12.0	Soft; price metrics up again on higher energy.
US	Existing Home Sales (Aug, m/m)	0.7%	-0.7%	-2.2%	Mortgage rates are just too high!
US	Leading Index (Aug, m/m)	-0.5%	-0.4%	-0.3% (↑)	Yet another contraction.
UK	Bank of England Bank Rate	5.50%	5.25%	5.25%	Close-call decision, 5-4 in favor of holding.
UK	GfK Consumer Confidence (Sep)	-27.0	-21.0	-25.0	Weak but improving.
FR	Business Confidence (Sep)	98.0	100.0	99.0	Somewhat odd improvement.
JN	National CPI (Aug, y/y)	3.0%	3.2%	3.3%	Good resilience.
JN	Manufacturing PMI (Sep, prelim)	na	48.6	49.6	Worrying.
JN	BoJ Policy Balance Rate	-0.1%	-0.1%	-0.1%	Expectations building up for October.
Friday, S	ep 22				
CA	Retail Sales (Jul, m/m)	0.4%	0.3%	0.1%	Modest.
UK	Retail Sales Inc Auto Fuel (Aug, m/m)	0.5%	0.4%	-1.1%	Modest.
UK	Manufacturing PMI (Sep, prelim)	43.4	44.2	43.0	Very weak.
UK	Services PMI (Sep, prelim)	49.1	47.2	49.5	Noticeable step down.
EC	Manufacturing PMI (Sep, prelim)	44.0	43.4	43.5	Very weak!
EC	Services PMI (Sep, prelim)	47.8	48.4	47.9	Aided by Germany.
GE	Manufacturing PMI (Sep, prelim)	39.5	39.8	39.1	Dismal.
GE	Services PMI (Sep, prelim)	47.4	49.8	47.3	At least rate of decline is slowing.
FR	Wages (Q2, q/q, final)	1.0% (p)	1.0%	1.9%	As already reported.
FR	Manufacturing PMI (Sep, prelim)	46.3	43.6	46.0	Big step down.

Source: for data, Bloomberg®; for commentary, State Street Global Advisors Economics.

Data Calendar

Week In Preview (Sep 25 - Sep 29)

Country	Release (Date, format)	Consensus	Last	Comments
Monday, S	Sep 25			
GE	IFO Business Climate (Sep)	85.1	85.7	
JN	PPI Services (Aug, y/y)	1.8%	1.7%	
Tuesday,	Sep 26			
US	FHFA House Price Index (Jul, m/m)	0.4%	0.3%	These gains may me driven mostly by compositional effects.
US	S&P CoreLogic CS 20-City (Jul, m/m, sa)	0.65%	0.9%	These gains may me driven mostly by compositional effects.
US	New Home Sales (Aug, thous)	699	714	, , , ,
US	Conf. Board Consumer Confidence (Sep)	105.5	106.1	
Wednesda	ay, Sep 27			
US	Durable Goods Orders (Aug, prelim)	-0.4%	-5.2%	
GE	GfK Consumer Confidence (Oct)	-26.0	-25.5	
AU	Retail Sales (Aug, m/m)	0.3%	0.5%	
Thursday				
US	GDP Annualized (Q2, q/q)	2.2%	2.1%	
US	Initial Jobless Claims (23-Sep, thous)	215	201	
US	Continuing Claims (16-Sep, thous)	1,6705	1,662	
US	Pending Home Sales (Aug, m/m)	-1.0%	0.9%	
US	Kansas City Fed Manf. Activity (Sep)	-2	0	
UK	Nationwide House PX (Sep, m/m)	-0.5%	-0.8%	Weakening.
GE	CPI (Sep, y/y, prelim)	4.6%	6.1%	
IT	Consumer Confidence Index (Sep)	105.4	106.5	
JN	Jobless Rate (Aug)	2.6%	2.7%	
JN	Retail Sales (Aug, m/m)	0.5%	2.1%	
JN	Industrial Production (Aug, m/m, prelim)	-0.8%	-1.8%	
AU	Private Sector Credit (Aug, m/m)	0.3%	0.3%	
Friday, Se	ep 29		•	
US	Personal Income (Aug)	0.4%	0.2%	
US	Personal Spending (Aug)	0.4%	0.8%	
US	MNI Chicago PMI (Sep)	47.4	48.7	
US	U. of Mich. Sentiment (Sep, final)	67.7	69.5	
UK	GDP (Q2, q/q, final)	0.2% (p)	0.1%	Relatively flatline.
UK	Mortgage Approvals (Aug, thous)	48	49.4	Likely to decline further.
CA	GDP (Jul, m/m)	0.1%	-0.2%	Weak.
GE	Retail Sales (Aug, m/m)	0.5%	-1.0%(↓)	
GE	Unemployment Claims Rate (Sep, sa)	5.7%	5.7%	
FR	CPI (Sep, y/y, prelim)	5.1%	4.9%	
FR	Consumer Spending (Aug, m/m)	-0.4%	0.3%	
IT	CPI NIC incl. tobacco (Sep, y/y, prelim)	5.4%	5.4% (↓)	
IT	Industrial Sales (Jul, m/m)	n/a	0.4%	
JN	Annualized Housing Starts (Aug, m)	0.814	0.778	
JN	Consumer Confidence Index (Sep)	36.2	36.2	

Source: for data, Bloomberg®; for commentary, State Street Global Advisors Economics.

Economic Indicators

Central Bank Policy Ta	Central Bank Policy Targets											
Region	Target		Year/Year	% Change	in Target							
		Apr	May	Jun	Jul	Aug						
US	Target: PCE price index 2.0% y/y	4.3	3.8	3.0	3.3							
Canada	Target: CPI 2.0% y/y, 1.0%-3.0% control range	4.4	3.4	2.8	3.3	4.0						
UK	Target: CPI 2.0% y/y	8.7	8.7	7.9	6.8	6.7						
Eurozone	Target: CPI below but close to 2.0% y/y	6.9	6.1	5.5	5.3	5.2						
Japan	Target: CPI 2.0% y/y	3.5	3.2	3.3	3.3	3.2						
Australia	Target Range: CPI 2.0%-3.0% y/y	6.0	6.0	6.0								

Source: Macrobond

Key Interest Rates											
	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
US (top of target range)	3.25	4.00	4.50	4.50	4.75	5.00	5.00	5.25	5.25	5.50	5.50
Canada (Overnight Rate)	3.75	3.75	4.25	4.50	4.50	4.50	4.50	4.50	4.75	5.00	5.00
UK (Bank Rate)	2.25	3.00	3.50	3.50	4.00	4.25	4.25	4.50	5.00	5.00	5.25
Eurozone (Refi)	1.25	2.00	2.50	2.50	3.00	3.50	3.50	3.75	4.00	4.00	4.25
Japan (OCR)	-0.06	-0.08	-0.02	-0.01	-0.01	-0.03	-0.07	-0.07	-0.08	-0.06	-0.06
Australia (OCR)	2.58	2.84	3.05	3.10	3.29	3.54	3.60	3.83	4.05	4.10	4.10

Source: Macrobond

General Government Structural Balance as a % of Potential GDP										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
US	-2.5	-3.6	-4.3	-5.1	-6.0	-10.7	-10.7	-5.9	-6.6	-6.7
Canada	0.0	0.0	-0.3	0.0	-0.2	-8.1	-3.3	-1.2	-0.5	-0.1
UK	-2.5	-1.6	-1.3	-1.4	-1.6	0.8	-3.6	-4.5	-4.3	-2.8
Eurozone	-0.5	-0.5	-0.4	-0.3	-0.5	-4.0	-3.8	-2.8	-3.1	-2.5
Germany	1.2	1.2	1.1	1.6	1.3	-2.9	-3.0	-2.6	-3.2	-1.4
France	-2.1	-1.9	-1.9	-1.5	-2.1	-5.8	-5.2	-4.4	-4.6	-4.1
Italy	-0.4	-1.0	-1.5	-1.6	-0.9	-6.1	-6.7	-2.4	-2.0	-3.0
Japan	-4.5	-4.5	-3.7	-3.0	-3.3	-8.1	-6.2	-7.8	-6.4	-4.1
Australia	-2.5	-2.2	-1.5	-1.1	-4.0	-7.9	-6.1	-3.5	-3.3	-2.9

Source: International Monetary Fund, World Economic Outlook

Headline Consumer and Producer Price Inflation

	CPI Year/Year % Change						PPI Year/Year % Change				
	Apr	May	Jun	Jul	Aug		Apr	May	Jun	Jul	Aug
US	4.9	4.0	3.0	3.2	3.7		2.3	1.1	0.1	0.8	1.6
Canada	4.4	3.4	2.8	3.3	4.0		-3.5	-5.7	-5.5	-3.2	-0.5
UK	8.7	8.7	7.9	6.8	6.7		5.2	2.7	0.4	-0.7	-0.4
Eurozone	6.9	6.1	5.5	5.3	5.2		0.9	-1.7	-3.3	-7.6	
Germany	7.2	6.1	6.4	6.2	6.1		4.1	1.0	0.1	-6.0	-12.6
France	5.9	5.1	4.5	4.3	4.9		5.0	3.3	1.0	-1.5	
Italy	8.2	7.6	6.4	5.9	5.4		-1.5	-4.3	-5.5	-10.2	
Japan	3.5	3.2	3.3	3.3	3.2		5.8	5.1	4.1	3.4	3.2
Australia	6.0	6.0	6.0				3.9	3.9	3.9		

Source: Macrobond

Economic Indicators

Real GDP Growth (Q/Q Seasonally Adjusted
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	Quarter/Quarter % Change						Year/Year % Change					
	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23		Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	
US	-0.1	0.8	0.6	0.5	0.5		1.8	1.9	0.9	1.8	2.5	
Canada	0.9	0.6	0.0	0.6	0.0		4.7	3.8	2.1	2.1	1.1	
UK	0.1	-0.1	0.1	0.1	0.2		3.8	2.0	0.6	0.2	0.4	
Eurozone	0.8	0.3	-0.1	0.1	0.1		4.2	2.3	1.7	1.1	0.5	
Germany	-0.1	0.4	-0.4	-0.1	0.0		1.6	1.2	0.8	-0.3	-0.1	
France	0.4	0.3	0.1	0.0	0.5		3.9	1.2	0.7	0.8	1.0	
Italy	1.2	0.3	-0.2	0.6	-0.4		5.1	2.5	1.5	2.0	0.4	
Japan	1.3	-0.3	0.1	0.8	1.2		1.4	1.5	0.5	1.8	1.7	
Australia	0.7	0.7	0.7	0.4	0.4		3.1	6.0	2.7	2.4	2.1	

Source: Macrobond

Industrial Production Index (M/M Seasonally Adjusted)

(,									
	Month/Month % Change						Year/Year % Change				
	Apr	May	Jun	Jul	Aug		Apr	May	Jun	Jul	Aug
US	0.5	-0.3	-0.4	0.7	0.4		0.3	0.0	-0.3	0.0	0.2
Canada	0.3	-0.6	-0.4				0.7	0.6	-0.4		
UK	0.1	-0.7	1.8	-0.7			-1.3	-2.1	0.8	0.5	
Germany	0.3	-0.1	-1.4	-0.8			0.9	0.1	-1.7	-2.2	
France	0.7	1.1	-0.9	0.8			1.5	2.2	-0.3	2.7	
Italy	-2.0	1.7	0.5	-0.7			-7.2	-3.5	-0.8	-2.0	
Japan	0.7	-2.2	2.4	-1.8			0.2	2.5	0.0	-2.4	

Source: Macrobond

Unemployment Rate (Seasonally Adjusted)

	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
US	3.7	3.6	3.5	3.4	3.6	3.5	3.4	3.7	3.6	3.5	3.8
Canada	5.2	5.1	5.0	5.0	5.0	5.0	5.0	5.2	5.4	5.5	5.5
UK	3.7	3.7	3.7	3.8	3.9	3.8	4.0	4.2	4.3		
Eurozone											
Germany	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.7
France	7.2	7.2	7.2	7.1	7.1	7.1	7.3	7.3	7.3	7.4	
Italy	7.9	7.8	7.9	8.0	7.9	7.8	7.8	7.7	7.5	7.6	
Japan	2.6	2.5	2.5	2.4	2.6	2.8	2.6	2.6	2.5	2.7	
Australia	3.4	3.5	3.5	3.7	3.5	3.5	3.7	3.6	3.5	3.7	3.7

Source: Macrobond

Current Account Balance as a % of GDP (Seasonally Adjusted)

Current Account Balance as a 700 GDF (Geasonally Adjusted)											
	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23
US	-3.3	-3.1	-3.5	-3.9	-3.8	-4.6	-3.9	-3.5	-3.3	-3.2	-3.2
Canada	-1.4	0.0	-0.4	-0.6	0.0	0.6	0.7	-1.4	-1.2	-0.5	-0.9
UK	-6.6	-1.9	-0.4	-3.3	-0.4	-8.3	-4.6	-2.0	-0.4	-1.7	
Eurozone	3.2	3.5	3.1	2.3	1.2	0.4	-1.3	-3.6	1.0		
Germany	8.4	8.8	8.2	7.6	6.7	5.5	3.9	2.7	4.8	5.8	6.7
France	0.0	0.9	0.6	0.4	-0.4	-0.4	-1.8	-3.0	-2.8	-1.3	-0.5
Japan	4.3	3.7	4.6	4.2	3.6	4.0	3.4	3.1	3.4	3.5	3.5
Australia	-1.5	-2.5	-2.8	-3.5	-2.2	-2.7	-2.2	-1.4	-0.2	1.2	

Source: Macrobond

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- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 29 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's fourth-largest asset manager* with US \$3.8 trillion† under our care.

^{*}Pensions & Investments Research Center, as of December 31, 2022.

[†] This figure is presented as of June 30, 2023 and includes approximately \$63 billion USD of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

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