1 The International Economy

- Following a firm start to 2023, global economic activity is expected to slow markedly over the coming quarters, as the full impact of the rapid and simultaneous tightening in global monetary policy over the past year filters through to the real economy. The boost from economic reopening and pent-up consumer demand is also set to wane.

- Against this backdrop, GDP growth in most of Singapore's trading partners is expected to be below trend or even negative, in the coming quarters. China will be a notable exception as its economy experiences a strong post-reopening rebound, but this will be mainly driven by less import-intensive consumer services, which could limit the benefits for the rest of the region.

- Meanwhile, global headline inflation is projected to moderate to 3.8% in 2023 from 5.3% last year, but it will still be above pre-pandemic norms. While the disinflation trend in the goods components of national CPIs is expected to resume after a pause early in the year, the moderation in services inflation is likely to lag as the acute labour market imbalances will take several more quarters to be resolved.

- The rise in global interest rates has surfaced latent vulnerabilities within the financial system, and their recent manifestation in bank failures present risks to global financial stability and the growth outlook. For now, the swift and proactive response by policymakers to emerging vulnerabilities has been sufficient in preventing further downside risks from being built into the baseline.

1.1 Global Economic Developments

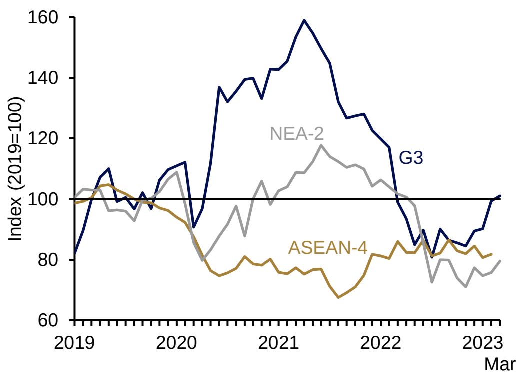
The global economy demonstrated some resilience at the turn of the year, underpinned by a pick up in services

Early data for Q1 suggest that the global economy exhibited some resilience following the weak end to 2022. A confluence of factors, including the peaking of global inflation, above-trend growth in employment and nominal wages, as well as China's reopening led to an improvement in consumer and business sentiments across most regions **(Chart 1.1)**. This, in turn, has provided support for services activities.

The latest global composite PMI reading maintained its recent uptrend in March, rising to a nine-month high of 53.4, after languishing in contractionary territory last quarter **(Chart 1.2).** The uptick over the past four months largely reflects the improvement in the global services PMI sub-index, underpinned by a strong boost from China as well as a pick up in services in the Eurozone.

Chart 1.1 Consumer confidence has continued to improve in the G3

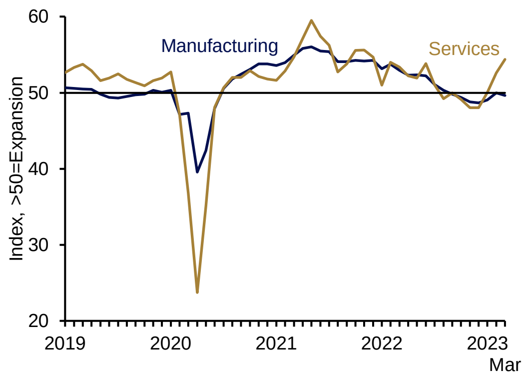
Consumer Confidence Surveys



Source: Haver Analytics and EPG, MAS estimates

Chart 1.2 Global economic activity was buoyed by an uptick in services

Global PMI Survey



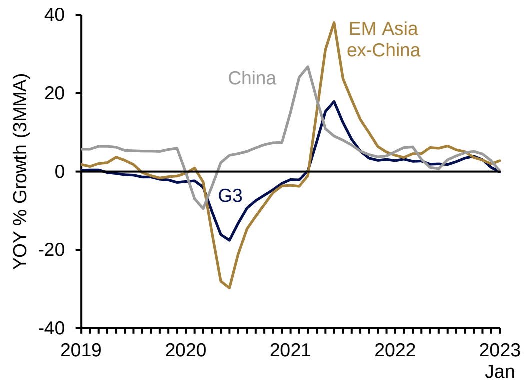
Source: Haver Analytics and EPG, MAS estimates

In contrast, global manufacturing and goods exports have continued to weaken given sluggish goods demand. Production fell sharply particularly among those Asian economies that are more exposed to the downturn in the global electronics cycle **(Chart 1.3)**. In particular, manufacturers in South Korea and Taiwan recorded double-digit declines in output over early 2023.

The weakness in global industrial production was mirrored in trade flows. World trade volumes declined for the third consecutive month in January **(Chart 1.4)**. More timely Asian trade data signal that goods exports have remained soft across most of the region.

Chart 1.3 Manufacturing output slowed further in Q1

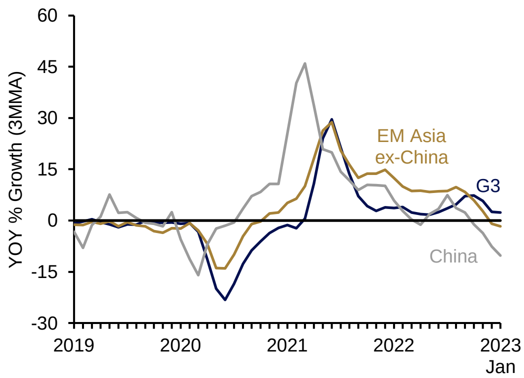
Industrial Production Index



Source: CPB Netherlands Bureau for Economic Policy Analysis and EPG, MAS estimates

Chart 1.4 Goods exports contracted in tandem with the global electronics downcycle

Goods Exports Volume



Source: CPB Netherlands Bureau for Economic Policy Analysis and EPG, MAS estimates

Further weakness in global trade is expected over the coming quarters as new export orders remained in contractionary territory among the key consumer goods- and electronics-exporting Asian economies. Retail and manufacturing inventories are also still above pre-pandemic levels. Given the ongoing normalisation in consumer goods demand, it will take several more months to reduce the current global inventory overhang.

While headline inflation has peaked, core inflation remained sticky

Headline inflation has continued to moderate into 2023. Since peaking at 6% in September 2022, global headline inflation[1] has slowed to 3.9% y-o-y in March. This was driven mainly by the easing of energy inflation as wholesale energy prices have fallen from their peaks last year. However, the moderation in global core inflation has been somewhat gradual, and most countries have experienced core inflation rates significantly above central banks' inflation targets. The persistence in core inflation reflects the continued strength in the labour market as well as the lagged pass-through of the higher energy and food costs incurred last year.

Notably, US core inflation averaged at 0.4% m-o-m SA in Q1, slightly stronger than the 0.3% in the previous quarter and higher than the 0.2% before the pandemic. The step-up was attributed to the stagnation of goods disinflation and persistent strength in services ex-rental inflation. Likewise, core inflationary pressures remained strong in the Eurozone, reaching a record 5.7% y-o-y in March, with similar dynamics as in the US.

Core inflation rates in Asia ex-Japan have also stepped up since H2 2022 and stayed sticky at around 2% y-o-y, as price pressures picked up alongside the broader reopening in most economies in early 2022. In some ASEAN countries, minimum wage hikes have also added to higher business costs. Nevertheless, core inflation in Asia ex-Japan has remained relatively modest compared to most AEs as labour market conditions in the former are comparatively less tight.

Although supply-side pressures have eased, firm demand has contributed to the persistence of core inflation in the AEs

The elevated global inflation rates since the beginning of last year can be attributed to a combination of demand and supply drivers. In the initial acceleration phase of global inflation, supply factors—reflecting pandemic-related supply chain disruptions and the surge in commodity prices following the commencement of the Russia-Ukraine conflict—primarily drove the surge in prices.

However, a decomposition of core Personal Consumption Expenditure (PCE) inflation by the San Francisco Federal Reserve shows that the contribution of supply factors in the US has lessened from its peak since March 2022.[2] In contrast, demand factors—seen, for instance, in firm retail sales—have continued to intensify into early 2023 and are currently the main driver of y-o-y core inflation, contributing 2.2%-points to US core PCE price increases in February 2023 **(Chart 1.5)**. Moreover, there is some evidence of continuing broad-based price pressures, as 73.0% of the core CPI basket recorded 2% or higher y-o-y price gains in March, little changed from the 75.3% in Q4 **(Chart 1.6)**. Indeed, about half of the core CPI basket registered increases in excess of 4%.

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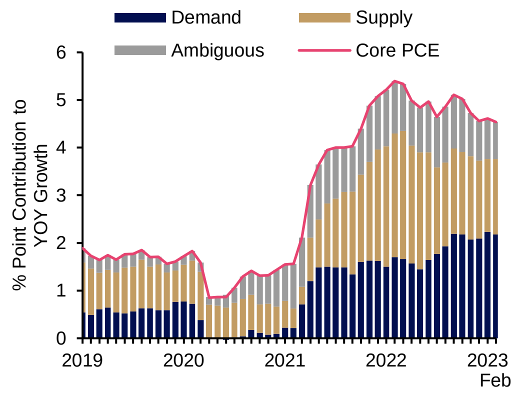
1 All regional and global CPI aggregates are weighted by countries' shares in Singapore's direct imports, unless otherwise stated.

2 Shapiro, A H (2022), "How Much do Supply and Demand Drive Inflation", *Federal Reserve Bank San Francisco Economic Letters,* Vol. 2022-15, pp. 288–314

A similar decomposition estimated for the Eurozone shows that demand factors have been an increasing driver of increases in the core Harmonised Index of Consumer Prices (HICPX) over recent months **(Chart 1.7)**. As in the US, the breadth of inflationary pressures has not narrowed, with 77.7% of HICPX components registering increases above the ECB target of 2% in March, up from 69.5% in Q4 **(Chart 1.8)**.

Chart 1.5 Demand factors have overtaken supply factors as the main driver of US inflation

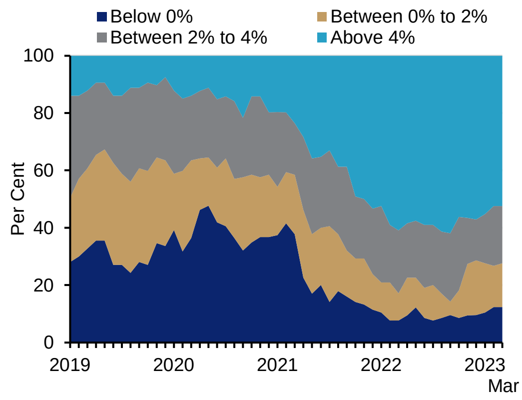
Drivers of US Core PCE Inflation



Source: San Francisco Federal Reserve

Chart 1.6 Price gains remained broad-based in the US

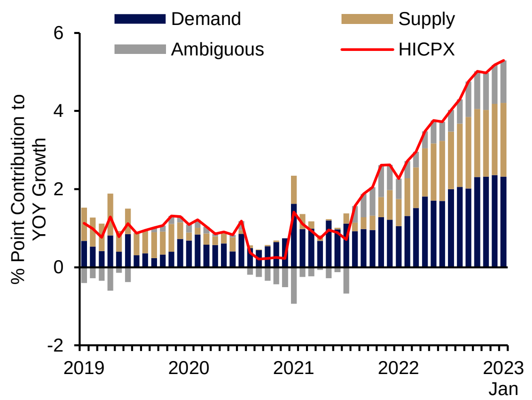
Breakdown of US Core CPI Inflation



Source: Haver Analytics and EPG, MAS estimates

Chart 1.7 Demand factors have contributed more to the HICPX in the Eurozone

Drivers of Eurozone HICPX Inflation

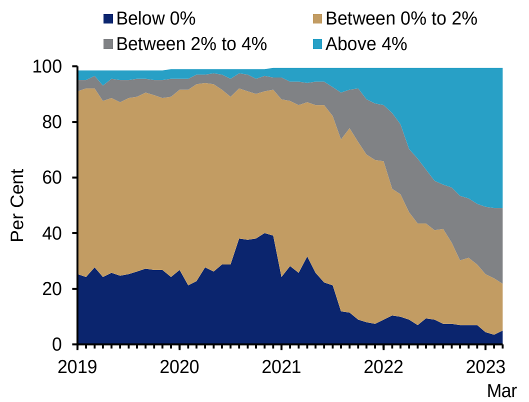


Source: Eurostat and EPG, MAS estimates

Note: Latest available estimate is for January 2023.

Chart 1.8 The breadth of HICPX inflation has not shown signs of narrowing in the Eurozone

Breakdown of Eurozone HICPX Inflation



Source: Haver Analytics and EPG, MAS estimates

1.2 Global Outlook

Global growth will slow over 2023 as the cumulative effects of monetary policy tightening grip tighter and cyclical tailwinds dissipate

The recent strength in activity has led to some upward revisions to the near-term global growth outlook, particularly in the Eurozone where the region is expected to avoid a winter recession, but also in the US and China. Global growth momentum is now forecast to accelerate to 1.0% q-o-q SA in Q1 2023, from 0.3% in Q4 2022 **(Table 1.1)**.[3]

Table 1.1 Global GDP growth, TiVA-Weighted

	QOQ SA (%)			Annual (%)		
	2022 Q4	2023 Q1*	2023 Q2*	2022	2023*	2024*
G3	0.3	0.2	-0.1	2.4	0.6	1.1
Asia ex-Japan	0.2	1.7	1.2	3.9	4.6	4.7
ASEAN-5	0.1	1.1	1.2	5.8	4.6	5.2
Global	**0.3**	**1.0**	**0.6**	**3.3**	**2.8**	**3.1**

Source: OECD TiVA Database and EPG, MAS estimates

* EPG, MAS forecasts

Note: The G3 grouping refers to the Eurozone, Japan and the US, while the ASEAN-5 are Indonesia, Malaysia, the Philippines, Thailand and Vietnam. Asia ex-Japan comprises China, Hong Kong SAR, India, South Korea, Taiwan and the ASEAN-5. All aggregates are weighted based on Singapore's value added by destination of final demand (using TiVA data).

However, global GDP growth is expected to weaken to a greater extent over the coming quarters, and it is forecast to ease to 2.8% in 2023 from 3.3% in 2022. This will mark its slowest pace since 2008, outside the pandemic.

The slowdown will be primarily led by a retraction in G3 growth to 0.6% from 2.4% in 2022. Specifically, the US and Eurozone are likely to experience a period of significantly below trend growth, reflecting the combined effects of the substantial monetary policy tightening over the past year as well as dissipating cyclical tailwinds. The US, in particular, is expected to fall into a brief technical recession later this year.

A downturn in investment is expected to weigh on GDP growth among the AEs

The impact of cumulative interest rate hikes across the advanced economies—ranging from 350 to 475 bps since 2022—and tightened lending standards due to recent banking industry stresses are expected to lead to a sharp downturn in investment. Notably, interest rate sensitive sectors such as housing investment are already contracting discernibly across the AEs. In the US, dwelling investment has fallen 21.4% since its peak in 2021. The Eurozone has recorded three consecutive quarters of contraction in new investments in the sector, with Germany and France experiencing the largest declines. Given further increases in mortgage rates, the deterioration in housing affordability over the pandemic, and tighter credit conditions, dwelling investment is set to fall further over the coming quarters.

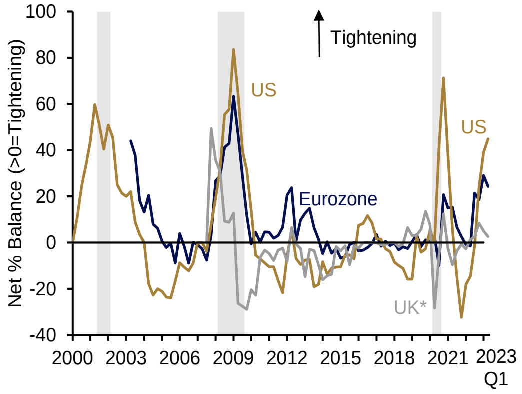
Bank lending standards have tightened to levels that typically precede a sharp downturn in US business investment **(Charts 1.9 and 1.10)**. Already, there are some signs that business investment is set to slow: US core durable goods orders remained below shipments in February, while the Small Business Economics survey is pointing to weaker capital expenditure intentions over the coming six months. Eurozone banks' lending standards for businesses have tightened discernibly over the past year, notwithstanding a modest easing

3 All regional and global GDP aggregates are weighted based on Singapore's value-added by destination of final demand (using TiVA data), unless otherwise stated.

in Q1. In addition, the demand for credit has weakened sharply, slumping to levels similar to that in the aftermath of the GFC for the US and the sovereign debt crisis for the Eurozone.

Chart 1.9 Bank lending standards have tightened even before the recent bank funding stresses

Net Percentage of Domestic Banks Tightening (Next Three Months)



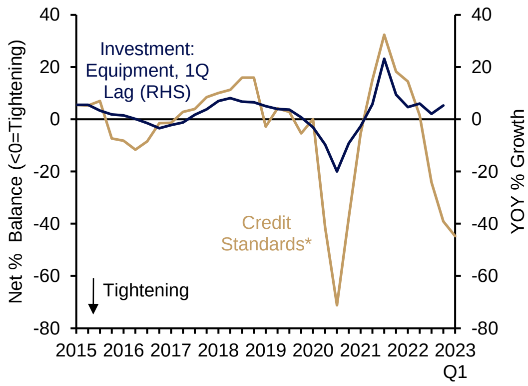
Source: Haver Analytics, Federal Reserve Board and EPG, MAS estimates

* Inverted BoE survey on availability of corporate sector credit (next three months)

Note: Shaded regions represent US recessions.

Chart 1.10 Tighter lending conditions typically lead US equipment investment by one quarter

US Equipment Investment and Credit Standards



Source: Haver Analytics and EPG, MAS estimates

* Federal Reserve Board Senior Loan Officer Survey

Given the increase in banking industry stresses across global markets since March, lending conditions are expected to tighten even further, translating to a sharper slowdown in credit growth and weaker economic activity in the period ahead. Estimates of the loan multiplier for the US indicate that a 1% contraction in credit supply is associated with a 0.1% to 0.45%-point decline in GDP growth.[4] While there are no comparable surveys for Asia, credit loan growth has already slowed markedly across the region, with the exception of China, and is well below pre-pandemic trends.

Consumer spending is expected to slow in the AEs as cyclical support factors fade

Thus far, the impact of tighter monetary policy on consumer spending has been playing out more slowly compared to past tightening cycles. This reflects a combination of structural (higher share of fixed rate mortgages) and cyclical factors (low real interest rates, excess savings, and reopening driven shifts in consumer spending patterns).

The increased share of fixed rate mortgages in the US and Eurozone since the GFC implies that the impact of higher interest rates on debt servicing costs and, therefore, household disposable income, takes longer to flow through in the near term. On average in Q4 2022, fixed rate mortgages accounted for 93% of all US mortgage loans and 75% of those

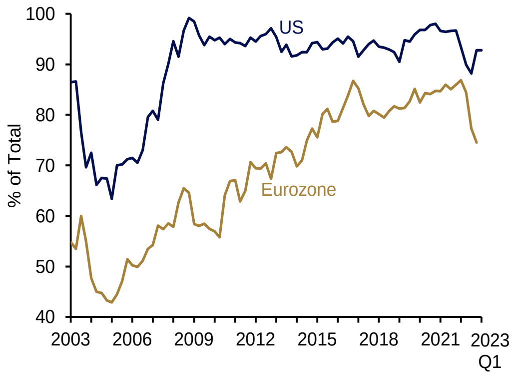
[4] Ashcraft, A B (2006), "New Evidence on the Lending Channel", *Journal of Money, Credit and Banking,* Vol. 38(3), pp. 751–775; Calomiris, C W and Mason, J R (2003), "Fundamentals, Panics, and Bank Distress during the Depression", *American Economic Review,* Vol. 93(5), pp. 1615–1647

in the Eurozone. This was an increase from the average of 84% and 57%, respectively, in 2007, albeit with significant heterogeneity across the region **(Chart 1.11)**.

Despite the increase in nominal interest rates, higher inflation has resulted in real interest rates that are still negative in the US, Eurozone, and most of Asia **(Chart 1.12)**. Nonetheless, real interest rates will turn increasingly restrictive this year as inflation moderates and policy rates remain elevated.

Chart 1.11 The proportion of fixed rate mortgages has risen sharply

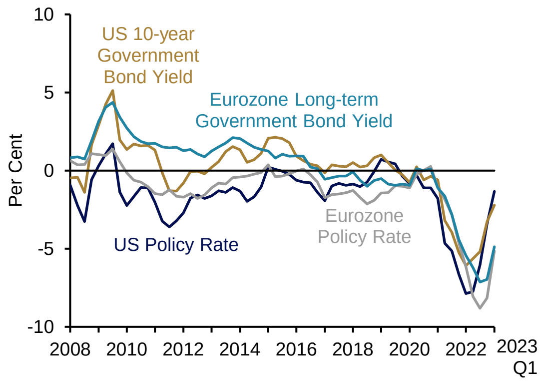
US and Eurozone Share of Fixed Rate Mortgages



Source: Eurostat, Bloomberg and EPG, MAS estimates

Chart 1.12 Real interest rates are currently negative in the US and Eurozone

US and Eurozone Real Interest Rates



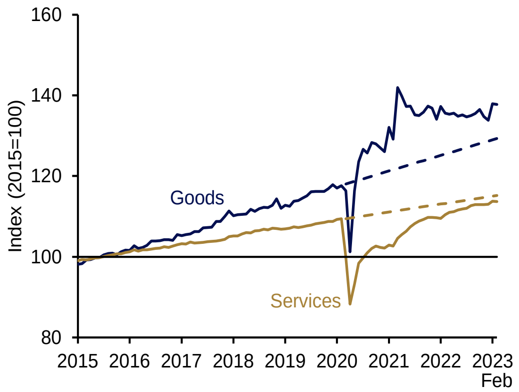
Source: Haver Analytics and EPG, MAS estimates

The tailwinds from the reopening are also set to fade. In the US, spending on services has largely returned to levels implied by its pre-pandemic trend. While spending on goods has declined over the past six months, it remains around 7% above pre-COVID trend levels, suggesting that it should wane further in the period ahead **(Chart 1.13)**.

In the Eurozone, the recovery in consumer spending from the depths of the pandemic has been less complete **(Chart 1.14)**. As of Q4 2022, private consumption has not yet returned to pre-pandemic levels, despite spending on services having risen 5% above its pre-pandemic trend. Coupled with the stock of excess savings, this suggests that there could be some upside potential to consumer spending in the Eurozone, even though consumers' purchasing power is still being eroded by high inflation.

Chart 1.13 Consumer spending has nearly exceeded pre-COVID trend levels in the US

US Goods and Services Spending

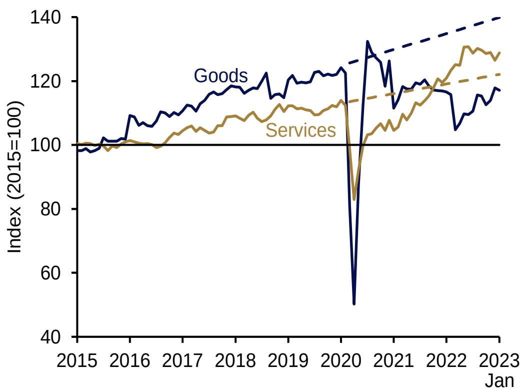


Source: Haver Analytics and EPG, MAS estimates

Note: Dotted lines denotes what the spending level would have been if it had grown at a pre-pandemic trend rates.

Chart 1.14 A shortfall in consumer spending on goods is persisting in the Eurozone

Eurozone Goods and Services Spending



Source: Eurostat and EPG, MAS estimates

Note: Dotted lines denotes what the spending level would have been if it had grown at a pre-pandemic trend rates.

Growth in Asia ex-Japan is forecast to pick up in 2023 led by a recovery in China

Asia ex-Japan is expected to fare better than the AEs, with GDP growth forecast to rise slightly from 3.9% in 2022 to 4.6% in 2023, led by a solid recovery in China.

A strong cyclical rebound in China's domestic demand is already underway following the rapid reopening of the economy in late 2022. Household spending is expected to recover strongly this year, supported by an acceleration in income growth, an improvement in confidence, and a rundown of excess savings built up over the past three years. Government efforts to manage property market vulnerabilities, including through measures to ease liquidity constraints faced by developers late last year, are expected to underpin some improvements in household confidence. In contrast, net exports are expected to exert a drag on China's growth amid the slowdown in global demand.

In the rest of Asia, the NEA-2 (South Korea and Taiwan) are projected to underperform the ASEAN-5 given the former's larger exposure to the global electronics downturn. ASEAN economies are also expected to benefit from the boost in tourists from China **(Chart 1.15)**. This, in turn, will support domestic employment and real income growth, particularly in high contact services. Hence, ASEAN-5 growth is forecast at 4.6% in 2023, higher than the 1.1% for NEA-2.

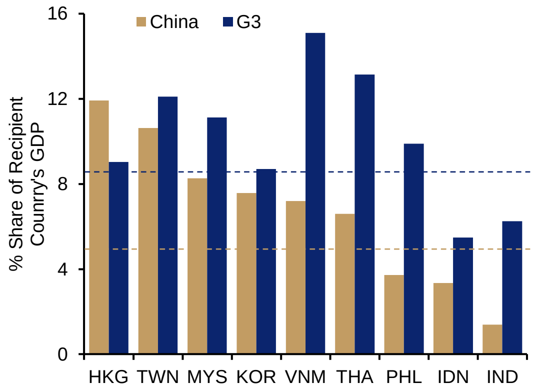
Chart 1.15 ASEAN countries are set to benefit from a boost in Chinese tourists

Visitor Arrivals from China

Source: Haver Analytics

Chart 1.16 Boost from China's reopening will be offset by faltering AE demand

Value added of China and G3 Final Demand



Source: OCED TiVA

Note: The dotted lines denote the nominal GDP weighted average for China (gold) and G3 (dark blue).

Outside of tourism, the boost from China's reopening on Asian exports is projected to be relatively muted. Bilateral trade between China and the rest of Asia is closely linked to the broader global economic (G3) cycle as well as China's industrial cycle. The overall contribution from China to regional manufacturing value chains will be weighed down by faltering global demand **(Chart 1.16)**.

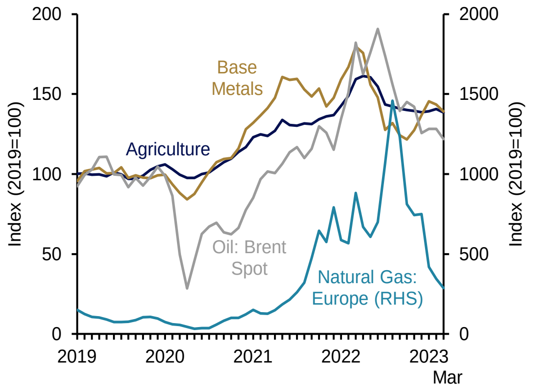
The disinflation trend in goods is expected to resume after a short pause

Global inflation is forecast to moderate from 5.3% in 2022 to 3.8% in 2023, with price gains still above advanced economies' central bank targets as at end-2023. Core inflation is expected to decline gradually, given ongoing momentum in services demand and tight labour markets. As such, the speed and further progress on disinflation is likely to be tempered in the short-term. Further out in 2024, global prices are forecast to fall back to their 2% annual rate of increase, facilitated by the sustained easing in both demand- and supply-side price pressures.

A range of indicators point to corrections of prices in the goods space, following a short pause recently. Indeed, commodity prices are down sharply from their peaks in Mar–Aug 2022, particularly natural gas prices, which have plummeted by more than 70% from their high in August 2022 **(Chart 1.17)**. Lower commodity prices, together with easing supply chain pressures, are filtering through to reduced input costs for businesses and impacting producer prices already **(Chart 1.18)**.

Chart 1.17 Commodity prices have fallen sharply from their peaks last year

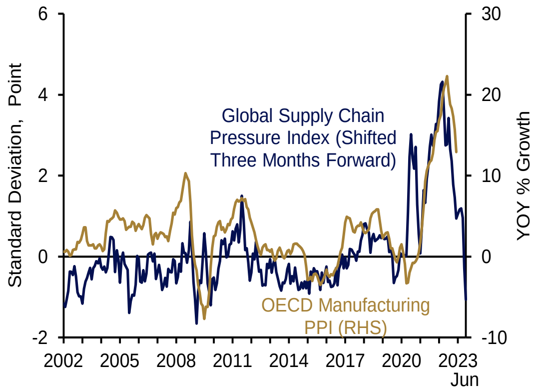
Global Commodity Prices



Source: Haver Analytics and EPG, MAS estimates

Chart 1.18 Supply chain pressures and input costs have continued to ease

Global Supply Chain Pressure and Producers Price Index (PPI)



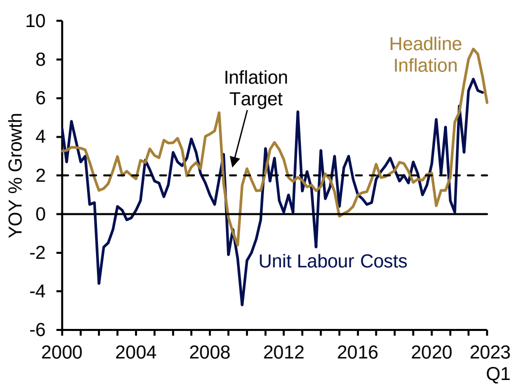
Source: Haver Analytics and EPG, MAS estimates

In comparison, the disinflation in services is likely to be more gradual given the slow adjustments in labour markets. The persistence of services inflation, particularly in the US and Eurozone, partly reflects the continued tightness in the labour market. Elsewhere, labour supply remains ample and labour markets are less of a factor fuelling inflation.

It will take several more quarters for the labour market imbalances to be resolved in the G2 (US and Eurozone). Despite some tentative signs that labour market conditions are cooling, labour shortfalls, particularly in the more labour-intensive services sectors, have continued to bolster nominal wage growth above the 3.5% threshold needed to bring inflation back to the 2% inflation target (assuming productivity growth of 1.5%). For instance, US unit labour costs rose by 6.3% y-o-y in Q4 as the labour force participation rate remains persistently below its pre-pandemic trend **(Charts 1.19)**.

Chart 1.19 Unit labour costs in the US rose by 6.3% in Q4

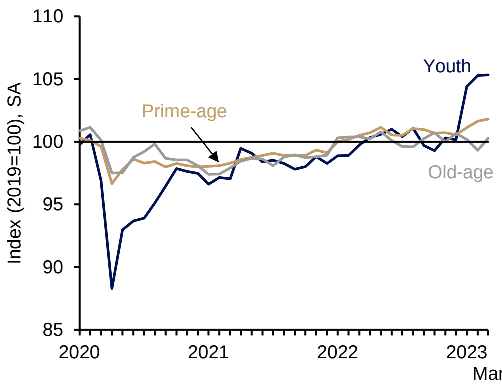
US Headline CPI Inflation and Unit Labour Costs



Source: Haver Analytics and EPG, MAS estimates

Chart 1.20 Labour supply of older workers remains lower than pre-pandemic levels

US Labour Supply by Age



Source: Haver Analytics and EPG, MAS estimates

While job creation is expected to slow this year as economic activity decelerates, the adjustment is likely to take place gradually. Meanwhile, there is evidence of a structural level shift down in US labour supply since the pandemic.

For example, the size of the US labour force is only 1.5% above pre-COVID levels (versus 2.1% for employment) as above-trend participation rates among prime-age workers has not been able to completely offset the increase in early retirees during the pandemic and lower immigration. Labour supply of older workers is still depressed relative to pre-pandemic levels **(Chart 1.20)**. Given the labour supply constraints, the rise in US unemployment is likely to be more modest than during previous recessions, which implies that wage growth may remain elevated for some time.

Tail risks to baseline growth and inflation have risen, potentially magnifying the trade-offs facing central banks

There are considerable uncertainties on how the rapid and simultaneous tightening in monetary policy worldwide over the past year will impact global growth and inflation.

The recent turmoil in global financial markets underscores the potential for banks and financial markets to intensify and propagate the effects of tightening monetary policy. In an adverse tail-risk scenario where more banks succumb to stresses, the subsequent tightening in credit conditions could lead to liquidity being severely restricted, causing a rise in debt defaults and business failures. The likely sharp deterioration in confidence would further amplify the non-linear impact on economic activity, leading to a more severe downturn in global growth. Greater caution among households and businesses would also see inflation pressures diminish more rapidly than currently anticipated.

Meanwhile, inflation may prove more persistent on the back of ongoing resilience in consumer demand particularly if the labour demand imbalance continues to support wage growth. The projected moderation in inflation could also be derailed by a resurgence in energy prices if global oil demand and supply balances tighten by more following the recent cut in OPEC+ members' production in early April, and Chinese oil demand is stronger than currently expected. Higher energy prices would also lead to a negative terms of trade shock among net commodity importers in Asia (Philippines, South Korea, and India) and may reignite energy security concerns in the Eurozone.