# 3 Labour Market and Inflation

- Total employment growth moderated in Q4 2022. Although employment gains in the domestic-oriented sector continued to rise, the expansion of the workforce in the external-facing sectors slowed amid global economic headwinds.

- There are early indications that the degree of labour market tightness has begun to ease, with a decline in the number of job vacancies and a slight pickup in retrenchments. However, with the resident unemployment rate remaining below the pre-COVID average, nominal wage growth remained firm in Q4 2022, although the pace of increase is moderating.

- Weaker growth and tighter financial conditions are expected to dampen employment growth in the trade-related and modern services clusters in the quarters ahead. However, returning tourist arrivals and the ramp up in public infrastructure projects should support labour demand in the travel-related, domestic-oriented and construction sectors. Overall, despite weakening employment prospects in the external-facing sectors, the labour market is expected to remain at full employment conditions over the year, against its tight starting point.

- Resident wage growth is expected to ease further in the quarters ahead but stay above its historical average. Although wage growth will moderate in the external-facing sectors, it will remain firm in the travel-related and domestic-oriented clusters. Policies to uplift wages for lower-income resident workers will also boost overall wage growth.

- MAS Core Inflation rose to 5.4% y-o-y in Q1 2023, from 5.1% in Q4 2022, on account of the GST hike as well as firm business cost pressures amid tight domestic labour market conditions. Abstracting from the GST increase, various measures of core inflation indicate that the underlying pace of price increases in the economy has moderated. This reflected the early effects of declining imported inflation as well as slowing consumer demand. Meanwhile, CPI-All Items inflation slowed to 6.1% from 6.6% over the same period, as the fall in private transport inflation more than offset the increase in core and accommodation inflation.

- Core inflation will stay elevated in the next few months, as firms, especially those in the consumer services sectors, continue to pass on accumulated cost increases. However, core inflation is expected to slow more discernibly in H2 2023 and end the year materially lower. Barring fresh shocks to global supply, the further decline in Singapore’s imported inflation alongside lower commodity prices and the stronger S$NEER will continue to dampen externally driven inflation. Meanwhile, the cyclical easing of the pace of wage increases in Singapore will temper cost pressures and moderate domestic sources of inflation. For 2023 as a whole, MAS Core Inflation and CPI-All Items inflation are projected to average 3.5–4.5% and 5.5–6.5%, respectively. Excluding the effects of the GST hike, core and headline inflation are forecast to be lower at 2.5–3.5% and 4.5–5.5% respectively.

## 3.1 Labour Market[1]

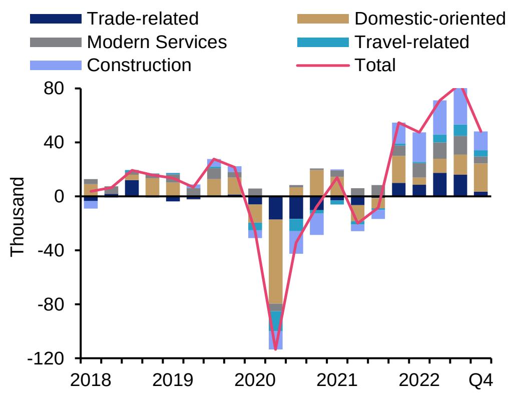
### Employment growth eased in Q4 last year

Total employment[2] expanded at a more moderate pace in Q4 2022 as employment growth slowed across most broad sectors in the economy **(Chart 3.1)**. Only the domestic-oriented cluster[3] saw a step-up in workforce expansion as sales and activity in retail trade, F&B services and other community, social & personal services approached pre-COVID levels. In comparison, the construction sector saw a significant slowdown in headcount growth, as labour shortages eased. Employment in construction has in fact risen well past the pre-COVID level **(Chart 3.2)**. Meanwhile, there were early signs that external headwinds had dampened employment growth in the trade-related and modern services clusters.

For 2022 as a whole, total employment expanded by 250,100, bringing the workforce to 2.9% above its pre-COVID (Q4 2019) level **(Chart 3.2)**. The labour market recovery is broadly complete across most sectors with the exception of the travel-related cluster.

**Chart 3.1** Most broad sectors saw a moderation of employment growth in Q4 2022

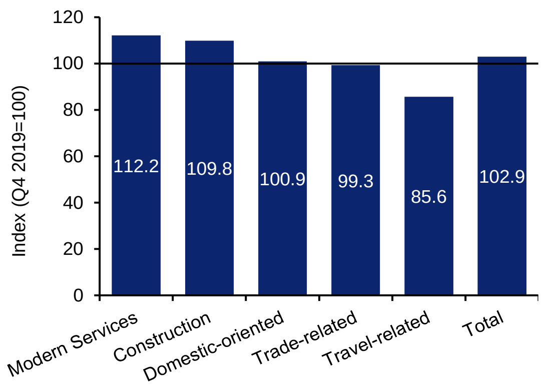
Employment change (q-o-q) by broad sector




Source: MOM and EPG, MAS estimates

**Chart 3.2** Headcount in the travel-related cluster was still significantly below pre-COVID level

Q4 2022 employment levels relative to pre-COVID (December 2019) levels by broad sector




Source: MOM and EPG, MAS estimates

1 The commentary in this section is based on labour data that is available only up to Q4 2022, unless otherwise stated.

2 Includes foreign work pass holders and migrant domestic workers.

3 The domestic-oriented cluster comprises real estate, retail trade, F&B services, land transport, administrative & support services, public administration & education, health & social services, other community, social & personal services, domestic work and utilities & others. The travel-related cluster comprises the accommodation, air transport and the AER sectors. The trade-related cluster comprises manufacturing, wholesale trade, water transport and other transport industries. The modern services cluster comprises financial & insurance services, information & communications, and professional services.

## There are nascent indications of easing in labour market tightness

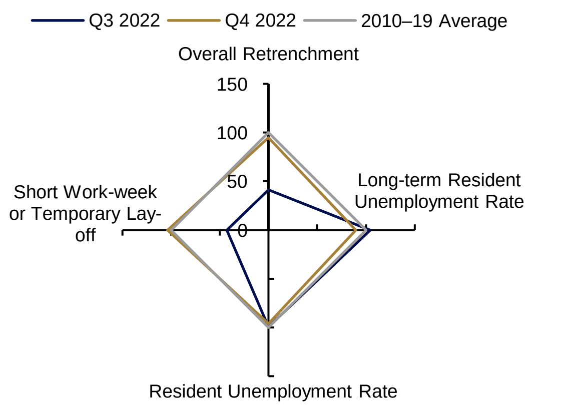
Lingering labour supply shortfalls in some services sectors and the continuing recovery in the travel-related cluster likely contributed to strong demand for resident workers in Q4 2022, keeping the labour market well supported. The resident unemployment rate declined from 2.9% in September to 2.8% in December 2022, and slipped further to 2.7% in the first two months of this year. The ratio of job vacancies to unemployed persons also rose from 2.02 to 2.33 over September to December, reflecting a larger decline in the number of unemployed workers compared to job vacancies.

However, several aggregate labour indicators suggest that the degree of labour market tightness has gradually eased. In Q4 2022, the number of employees placed on short work-week or temporary layoff rose and the number of retrenchments picked up, reaching a similar level to the pre-COVID average **(Chart 3.3)**. There was also some slowing in labour market churn, indicating that job-hopping among workers to higher-wage positions may have slowed **(Chart 3.4)**.

The easing in labour market conditions was however uneven across sectors, in line with sectoral differences in employment growth. The decline in job vacancy rates and increase in retrenchments were more pronounced in the trade-related and modern services clusters, resulting from their greater exposure to tighter financial conditions and weakening global demand. In comparison, job vacancy rates moderated to a smaller extent in the domestic-oriented and travel-related clusters. Resilient labour demand in these sectors likely supported firm employment outcomes for residents, particularly younger and lower-educated workers, as reflected in the large declines in the seasonally adjusted unemployment rates for these groups relative to pre-COVID levels.

**Chart 3.3** Labour market tightness eased in Q4

Labour market spare capacity indicators



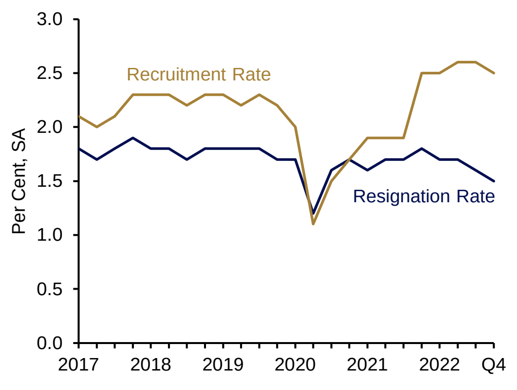

Source: MOM and EPG, MAS estimates

Note: A smaller quadrilateral indicates tighter labour market conditions.

All variables are indexed such that the 2010–19 historical average for each indicator takes a value of 100.

**Chart 3.4** Labour market turnover fell, suggesting some easing in competition for workers

Labour market turnover indicators




Source: MOM

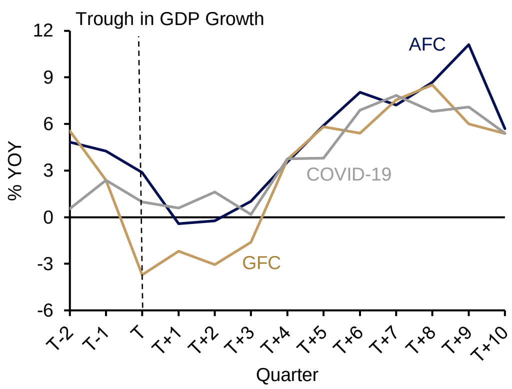
As overall labour market tightness eased, resident wage growth slowed to 5.4% y-o-y in Q4 2022, from 7.1% in the previous quarter. On a q-o-q SA basis, wage growth eased to 1.0% in Q4 from 1.2% in Q3. On the whole, the trajectory of resident wage growth has been broadly comparable to that of past cyclical recoveries, with wage growth gradually coming off as the recovery matures **(Chart 3.5)**.

## Employment growth is projected to moderate in 2023, particularly in the external-oriented sectors

Overall labour demand is expected to moderate this year in line with the slowdown in the Singapore economy. Forward-looking surveys conducted in December 2022 and early this year indicated that the pace of hiring should ease in H1 2023. MOM's poll of businesses in December 2022 showed that the share of firms planning to increase hiring in the next three months had fallen compared to September. In line with the relatively weaker prospects for the trade-related cluster, EDB's Business Expectations Survey reading for employment outlook in the manufacturing sector slipped into contractionary territory **(Chart 3.6)**. Meanwhile, DOS' survey of the services sector showed that firms' hiring intentions were less optimistic compared to the previous quarter, even as they still planned to expand headcount.

**Chart 3.5** The wage growth trajectory has been comparable to past cyclical recoveries

Resident wage growth

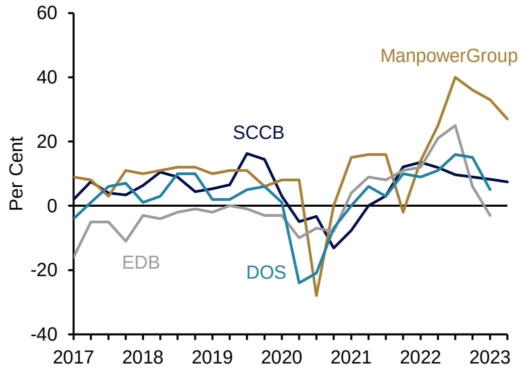



Source: CPF and DOS

Note: T refers to Q3 1998 for the Asian Financial Crisis (AFC), Q1 2009 for the Global Financial Crisis (GFC) and Q2 2020 for the COVID-19 pandemic.

**Chart 3.6** The hiring outlook has weakened

Employment outlook from firm-level surveys




Source: DOS, EDB, Singapore Commercial Credit Bureau (SCCB) and ManpowerGroup

Note: The net employment outlook refers to the percentage of surveyed employers expecting to increase headcount less the percentage of employers expecting to reduce employment during the period.

The employment outlook is likely to have deteriorated as turmoil in the international banking sector broke out after the surveys were conducted. Employment growth in the modern services cluster, which includes information & communications and financial services, is likely to slow further in the quarters ahead amid recent stresses in the global banking system and further increases in global interest rates. However, the extent of net employment losses in modern services should be contained given strong structural demand for finance and tech professionals in Singapore.

Meanwhile, employment gains should continue to be firm in the domestic-oriented and travel-related clusters, reflecting steady VA growth. The planned ramp-up in flights from China to Singapore should lead to a further recovery in tourist arrivals and spending, providing a boost to hiring in the travel-related and consumer services sectors, as well as in ancillary administrative & support services. At the same time, ongoing and upcoming public sector projects should support labour demand in the construction sector. Resilience in overall employment conditions would also reflect some degree of labour hoarding, with firms eager to hold on to workers through temporary demand softness after experiencing severe worker shortages over 2021–22.

In sum, resilient job creation in the more labour-intensive domestic-oriented and travel-related clusters is expected to offset the hiring slowdown and pockets of retrenchments in the trade-related and modern services clusters. Thus, the aggregate resident workforce should continue expanding, albeit at a slightly more modest pace compared to last year.

## Overall, the labour market should remain tight this year, reflecting in part persistent supply constraints

Manpower shortfalls will likely remain in some services industries this year. Services sectors such as F&B services and retail trade are likely to be more heavily impacted by the recent and upcoming tightening of policies for S-Pass holders (SPHs).[4] The progressive increase of the minimum qualifying salary for SPHs over 2022–26 will raise the medium-term marginal costs of employing these non-resident workers. The increase in relative cost for hiring SPHs should encourage employers to automate or switch to resident workers of comparable skill profiles where possible. However, firms' ability to substitute resident workers for SPHs will depend on further progress in the resident labour force participation rate, which was already close to its all-time high in 2022. There remains scope to entrench gains in the participation rates of some groups, notably women and older workers. Recent Budget 2023 measures, such as the expansion in full-day childcare places and extension of the Senior Employment Credit, should encourage greater labour force participation by women and older workers respectively.

The efficiency of matching job vacancies to jobseekers, which had fallen over the past few years, should also recover alongside increases in non-resident employment and job transformation efforts. Greater matching frictions in the economy, associated in part with travel constraints on non-resident worker inflows, likely contributed to the rightward shift of the Beveridge curve over 2020–22, explaining the unusually high number of job vacancies in the economy given the prevailing rate of unemployment (see **Box A** on "Labour Market Tightness and the Beveridge Curve in Singapore"). The travel restrictions have since been lifted.

Nevertheless, other sources of frictions persist for now, such as the affordability of rental accommodation and availability of flights. Global competition for healthcare workers has also structurally increased.[5] At the same time, there are likely to be significant structural frictions in reallocating resident workers to certain job roles with large numbers of vacancies. All in,

4 Over 2022–23, the foreign worker levy (FWL) will be raised, and minimum qualifying salary (MQS) increased for some SPHs. The tightened policies include higher Tier 1 FWL for SPH applicants as well as higher MQS requirements for SPH renewal applications from 1 September 2023.

5 In a speech at the MOH Committee of Supply Debate 2023, MOH noted that the global competition for nurses has intensified and attrition rates for non-resident nurses stepped up from 9.5% in 2019 to 14.5% in 2022.

employers will likely continue to face difficulties in filling some vacancies such as for positions that involve physically taxing work (e.g., cleaning) or specialised intensive training (e.g., nursing). This is likely to contribute to elevated job vacancies for some time even as general labour demand softens.

Taken as a whole, the resident labour market is projected to remain at full employment conditions over 2023. Given the starting point of a very tight labour market at the beginning of this year, pockets of retrenchments and fewer job vacancies should not induce outright contractions in resident employment, as firms are likely to retain workers already on their payroll and cut back on variable wage components where needed. The degree of labour market tightness will be higher in the domestic-oriented and travel-related clusters that are supply-constrained and still seeing strong underlying activity. Conversely, tightness should ease decisively in the external-facing sectors.

## Aggregate wage pressures will moderate, but remain elevated in 2023

Nominal resident wage growth should continue to moderate over the course of this year. Ongoing inflows of non-resident workers and softening overall labour demand should alleviate the excessive tightness present in the labour market at the start of this year. This should in turn temper the pace of wage increases within a few quarters. Moreover, the risk of accelerating wage momentum stemming from wages and prices recursively pushing each other higher is low. EPG's econometric work has shown that nominal wage growth has historically not been highly correlated with contemporaneous or past price inflation in Singapore.[6] As noted earlier, the current trajectory of wage growth is moderating in line with past cyclical recoveries.

Nevertheless, policy and administrative factors will put a floor on the extent to which resident wage growth in certain industries eases in the near term. Policies to uplift incomes of lower-wage workers, including the recent and upcoming expansions to the Progressive Wage Model, are estimated to provide a moderate boost of 0.2% point to average nominal wage growth this year. In addition, announced salary increases in the civil service, healthcare and education sectors will support overall resident wage growth.

Reflecting the differing cyclical and structural dynamics underpinning wage outcomes, significant variation across sectors and the income distribution should be expected. Wage growth is projected to be higher in the domestic-oriented sectors, compared to the external-oriented sectors, reflecting disparities in sectoral labour demand. Real wage growth is projected to be stronger among lower-income households compared to higher-income households due to relatively strong nominal wage growth among the former this year.[7]

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6 EPG's econometric estimates show that a positive shock to resident wage growth, including from excessive labour market tightness, historically fade two to three quarters after the initial impulse subsides. Separately, time series regression estimates also suggest that the pass-through from price pressures to wage increases is weak, implying that wages respond less than proportionately to prices in the near term.

7 Distributional real wage growth projections for 2023 are based on regressions of nominal wage growth for workers at different wage quantiles on various indicators of labour market slack, and take into account different rates of price inflation faced by households across the income distribution. The projections assume that income growth for lower-income households is equal to the wage growth of lower-income workers.

## 3.2 Consumer Price Developments

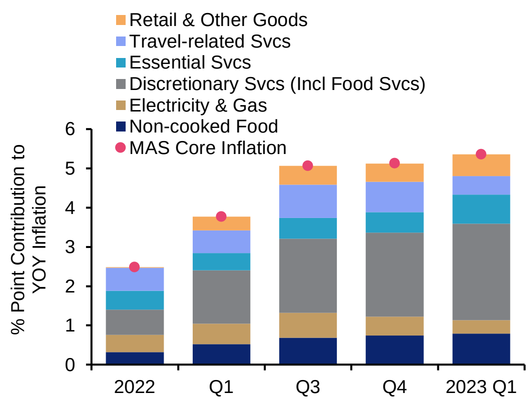
### Core inflation picked up in Q1 2023 on account of the GST increase and the pass-through of accumulated costs

In line with expectations, the increase in the GST rate from 7% to 8% contributed to a step-up in inflation in early 2023. MAS Core Inflation rose in both m-o-m and y-o-y terms in January 2023. In Q1 2023, MAS Core Inflation picked up to 5.4% y-o-y, from 5.1% in Q4 2022, with higher inflation for essential services and discretionary goods & services more than offsetting the decline in inflation for travel-related services and electricity & gas **(Chart 3.7)**. CPI-All Items inflation also rose in January but subsequently eased in February and March, coming in at 6.1% y-o-y for the quarter, down from 6.6% in Q4 2022. The fall in private transport inflation outweighed the increase in core inflation **(Chart 3.8)**.

EPG estimates that a substantial proportion of the GST hike has already been reflected in consumer prices, even as the full degree of pass-through has yet to occur for a few CPI components. There was strong evidence of significant GST pass-through in the services components, particularly food services, where business cost pressures have accumulated. In comparison, some local supermarket and pharmacy chains, as well as other retailers, absorbed the GST increase for some items, albeit temporarily for three to six months.

**Chart 3.7** Amid the GST hike, MAS Core Inflation rose alongside firmer services inflation

% point contribution to MAS Core Inflation

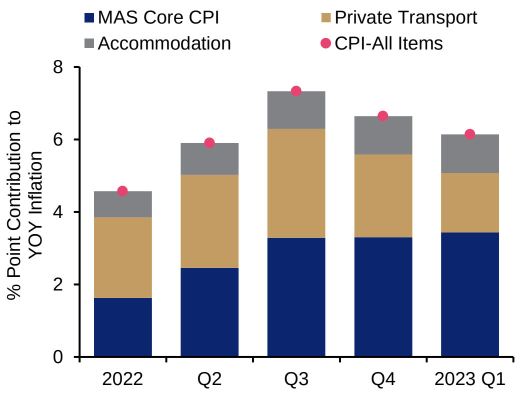



Source: DOS and EPG, MAS estimates

Note: Essential services mainly refer to public transport, healthcare and education services. Discretionary services include food services, recreational & cultural, point-to-point transport, telecommunication and personal care services.

**Chart 3.8** However, CPI-All Items inflation eased as private transport inflation fell markedly

% point contribution to CPI-All Items inflation




Source: DOS and EPG, MAS estimates

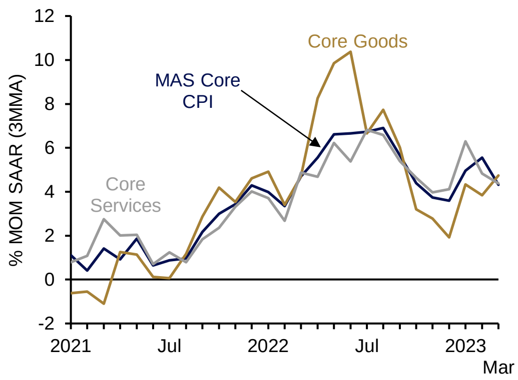
The impact of the GST increase on m-o-m core inflation ebbed in February and March. Overall, inflation momentum has fallen decisively from its peak for both core goods and services **(Chart 3.9)**. However, services inflation has been relatively stickier due in part to still-firm labour costs. In contrast, external cost pressures have waned and led to a much larger correction in the goods inflation momentum.

Alternative measures of underlying inflation in the economy affirm the decline in the pace of price increases in the economy. For instance, the sequential change in the 25% trimmed mean measure averaged 3.0% (annualised) in Feb–Mar, down from its pre-GST hike peak of 5.8% in July 2022 **(Chart 3.10)**. The weighted median inflation rate also averaged 3.0% (annualised) in Feb–Mar, similar to the average monthly pace seen over Oct–Dec 2022 and lower than its peak of 7.2% in July last year.[8]

A similar steady process of disinflation is evident in y-o-y core inflation. MAS Core Inflation reached a high of 5.3% y-o-y in September 2022, but has since moderated to 5.0% in March 2023. That this easing occurred despite the GST hike confirms the underlying disinflation trend.

**Chart 3.9** The decline in inflation momentum from its peak has been broad-based

Inflation momentum of MAS Core CPI and the CPI sub-aggregates

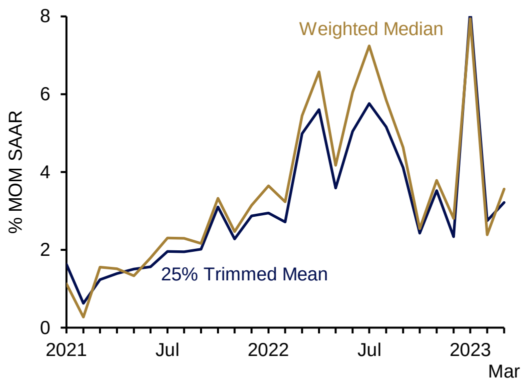



Source: DOS and EPG, MAS estimates

Note: The goods category includes non-cooked food, electricity & gas as well as retail & other goods. The services category includes discretionary services (including food services), essential services and travel-related services.

**Chart 3.10** Inflation momentum eased following the GST-related surge in January

25% trimmed mean inflation and weighted median inflation measure




Source: EPG, MAS estimates

## Essential services inflation rose on account of accumulated labour cost pressures and administrative factors

The pass-through of accumulated cost pressures arising from the tight labour market has been a source of underlying inflation in recent months. For instance, higher wage cost pressures in the healthcare and education sectors led to a pickup in essential services inflation.[9] Tuition & other fees inflation rose to 3.0% y-o-y in Q1 this year from 2.0% in Q4 2022, reflecting in part steeper price increases among private operators even as fee caps for government-supported preschool centres were lowered and financial assistance schemes

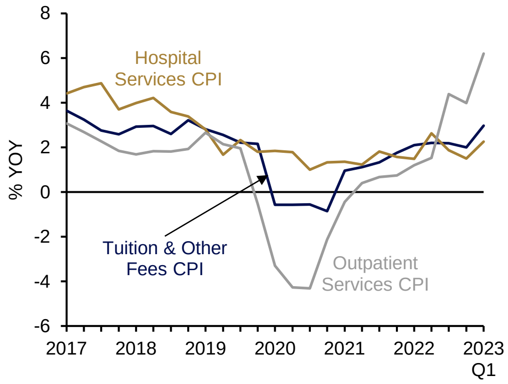
8 A recent NBER working paper compared outlier-exclusion core measures such as the weighted median (i.e., the inflation rate of the CPI component whose expenditure weight is in the 50th percentile of price changes) to standard core inflation (which excludes food and energy prices) across 38 advanced and emerging economies. The weighted median inflation was found to be less volatile than standard core, more closely related to economic slack and a better predictor of headline inflation over the next twelve months. (Source: Ball, L, Carvalho, C, Evans, C and Luca, A R (2023) "Weighted Median Inflation Around the World: A Measure of Core Inflation", *IMF*, Working Paper WP/23/44)

9 The base salaries of nurses in the public healthcare sector were raised by between 5% and 14% over the last two years. MSF also announced in October 2022 that pre-school educators in government-supported schools will see a 10% to 30% salary increase over 2023–24.

were enhanced **(Chart 3.11)**.[10] Over the same period, outpatient services inflation picked up to 6.2% y-o-y from 4.0%, driven by rising costs as well as reduced subsidies for patients in the specialist outpatient clinics.[11] The cessation of the MediShield Life premium subsidy in March this year also contributed to higher outpatient and hospital services inflation.[12]

**Chart 3.11** Essential services inflation picked up on rising labour cost and administrative factors

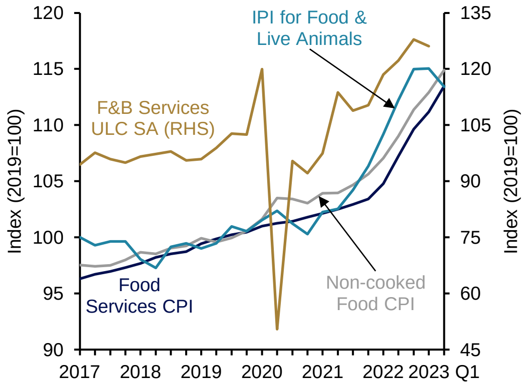
Essential services CPI components




Source: DOS and EPG, MAS estimates

**Chart 3.12** Food services inflation rose further amid elevated raw ingredient and wage costs

Food CPI components and cost indicators for F&B services sector




Source: DOS and EPG, MAS estimates

Note: The last datapoint for the food IPI series refers to the Jan–Feb average.

## Food inflation rose alongside the pass-through of imported and domestic costs as well as the GST hike

Non-cooked food inflation picked up to 7.3% y-o-y in Q1, from 6.9% in Q4, reflecting the pass-through of still-high import cost levels. While import prices of food & live animals fell sequentially early this year, this has yet to pass through to lower y-o-y CPI inflation **(Chart 3.12)**. In particular, import prices of some food items such as fish & seafood and vegetables were elevated in Jan–Feb this year, likely driven by tighter supplies due to prolonged heavy rain in Malaysia.

Meanwhile, food services inflation rose to 8.3% y-o-y in Q1, from 7.5% in Q4 last year. The pace of price increases was stronger for all components of food services, driven in part by the GST increase and the elevated cost of ingredients. F&B services firms have also had to contend with strong wage pressures: unit labour cost within the F&B services sector increased by 14.2% y-o-y in Q4 2022, well above its historical rate of 2.5%, albeit reflecting some low base effects a year ago. The firm pace of food services price increases also likely

10 Fee caps at centres appointed under the Anchor Operators and Partner Operator schemes were lowered with effect from 1 January 2023. In addition, the income eligibility criteria for various government financial assistance schemes (including MOE Financial Assistance Scheme and MOE Independent School Bursary) were also revised such that more students are expected to benefit from the schemes.

11 In January 2023, the subsidy framework for specialist outpatient clinics was revised such that subsidies for patients with per capita household income exceeding $3,300 were reduced.

12 In March 2021, MediShield Life premiums were raised by up to 35% and the government introduced a one-off COVID-19 subsidy to attenuate the impact of the premium increase. Specifically, 70% of the net increase in premiums were subsidised in the first year, followed by 30% in the second year.

reflected firms' rebuilding of profit margins, notwithstanding the absence of fresh shocks to costs in recent months.

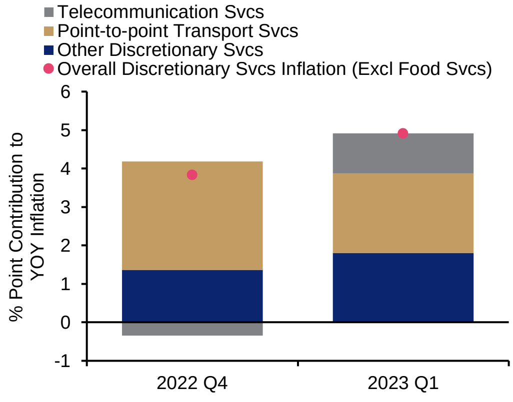
## Discretionary services and retail goods inflation picked up, although lower import costs and moderating demand likely capped the pace of increase

Other discretionary services inflation picked up in Q1, although this was driven primarily by a faster pace of increase in prices of telecommunication services **(Chart 3.13)**. In comparison, point-to-point transport services fares rose at a slower pace.

Retail & other goods inflation rose to 3.5% y-o-y in Q1 2023, from 2.9% in Q4 2022. The pickup largely reflected the increase in the GST from January and in tobacco duties from February. Nonetheless, the pass-through of tax hikes and accumulated cost pressures faced by domestic retailers was likely dampened by a number of factors. For one, import prices for retail goods have begun to decline in y-o-y terms **(Chart 3.14)**. This reflects moderating consumer demand growth globally, as well as the resolution of supply chain bottlenecks in worldwide shipping and production. Notably, international and domestic freight rates have fallen materially from their highs in 2021–22, lowering domestic business costs. In Singapore, while private consumption, as proxied by retail sales volumes (excluding that of motor vehicles), continued to expand in y-o-y terms in Jan–Feb, the pace of growth moderated from Q4. This might have been indicative of softening consumer sentiment, as well as some payback from the frontloading of consumption in late 2022 in anticipation of the GST hike.

**Chart 3.13** Higher discretionary services inflation was mainly driven by an increase in telecommunication services costs

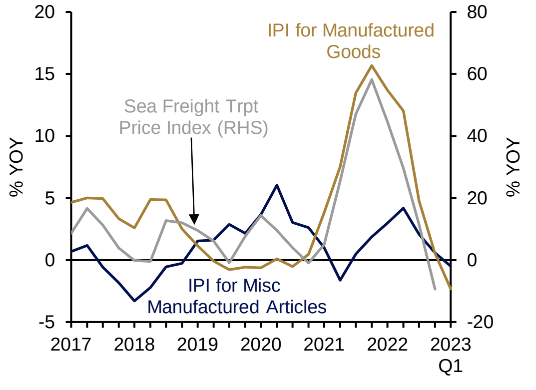
% point contribution to discretionary services inflation




Source: DOS and EPG, MAS estimates

**Chart 3.14** Import prices for retail goods declined in Jan–Feb 2023

Import price indices of retail goods and Singapore's sea freight transport price index




Source: DOS and EPG, MAS estimates

Note: The last datapoint for the IPI series refer to the Jan–Feb average.

## Meanwhile, oil- and travel-related services inflation eased

Brent crude oil prices peaked in Q2 2022 at US$114 per barrel (/b) and fell to US$89/b on average in Q4. The lagged effects of lower global crude oil prices in late 2022 resulted in domestic electricity & gas inflation moderating to 11.9% y-o-y in Q1 2023, from 17.4% in Q4 last year. Petrol prices, which adjust more quickly to changes in global crude oil prices, fell by 2.4% in Q1, compared to a 6.1% increase the quarter before. This occurred as Brent crude oil prices eased further to an average of US$81/b in the first three months of this year.

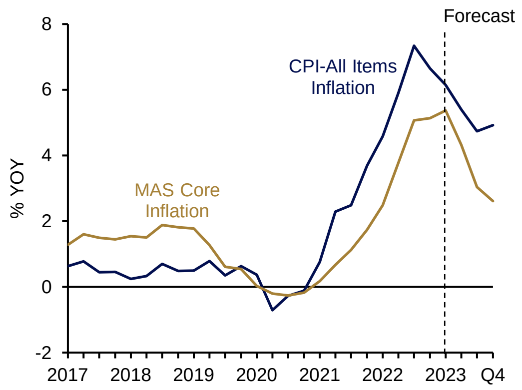
At the same time, travel-related services inflation stepped down significantly in Q1, with airfares falling by 4.8% y-o-y, a reversal from the 5.7% increase in Q4. Notwithstanding robust demand for air travel, the marked decline in airfares was in part driven by a ramp-up in flight capacity among airlines and the steady decline in jet fuel prices since their peak in Q2 last year.[13]

## For the rest of 2023, lower imported costs as well as moderating wage growth should entrench the easing path of core inflation

In the quarters ahead, headline and core inflation in Singapore are expected to moderate further **(Chart 3.15)**. Further slippages in global demand are expected such that prices of energy commodities and goods should stay broadly lower in 2023 as a whole compared to 2022. Unanticipated developments since the October 2022 *Review*—such as the earlier reopening of China's economy and OPEC+'s announced crude oil production cuts—have not altered this forecast. Hence, barring further shocks to global commodity prices, base effects associated with the step-up in prices last year should facilitate a decline in the y-o-y inflation rate for a range of core CPI items.

**Chart 3.15** Both core and headline inflation should broadly moderate in the quarters ahead

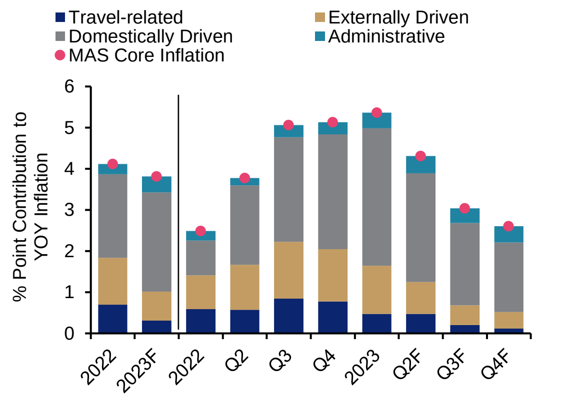
MAS Core Inflation and CPI-All Items inflation forecasts




Source: DOS and EPG, MAS estimates

**Chart 3.16** The easing of external and domestic cost pressures will underpin lower core inflation

% point contribution to MAS Core Inflation




Source: DOS and EPG, MAS estimates

13 Base effects from sharply higher airfares CPI in Q1 2022 also contributed to the significant decline in y-o-y airfares inflation this year. Airfares CPI started to increase sharply from end-2021 when international travel resumed progressively with the introduction of Vaccinated Travel Lanes. Actual air travel costs (including mandatory COVID-19 test costs) were progressively incorporated into the CPI, which led to airfares CPI inflation peaking at 19.5% y-o-y in Q1 2022.

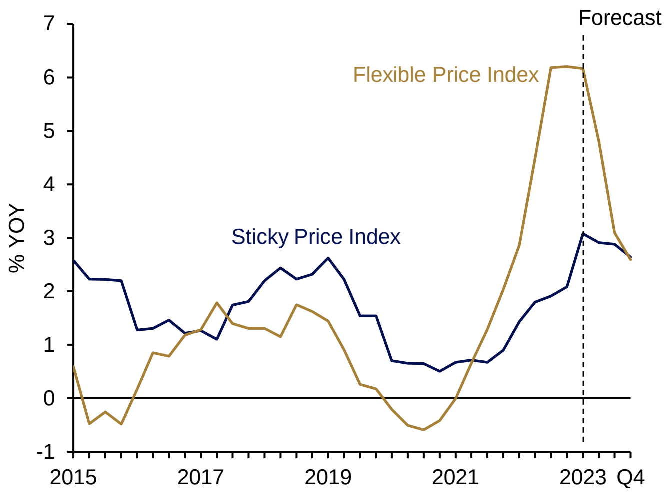
The externally driven components of core inflation, such as non-cooked food and energy-related items, as well as energy-intensive services such as point-to-point transport and air transport, are anticipated to account for most of the moderating profile of core inflation this year **(Chart 3.16)**. Meanwhile, softening demand conditions and an easing of resident wage growth should also tamp down domestically driven cost pressures over time. Overall, the easing profile of CPI items with more "flexible prices" will drive most of the disinflation in the quarters ahead **(Chart 3.17)**. At the same time, "sticky price inflation" is also forecast to be on a moderating trend. Inflation of items with generally greater intrinsic persistence is expected to ease to rates broadly consistent with that seen in 2019.

All in, core inflation momentum over the rest of 2023 will be more moderate compared to the average in 2022 when a series of large shocks drove costs, and thus prices, up sharply. The resultant profile of core CPI over 2023, when compared with price levels that had stepped up rapidly in 2022, will result in discernibly lower y-o-y inflation rates in H2 2023.

For 2023 as a whole, MAS Core Inflation is projected to average 3.5–4.5%. Headline inflation is expected to come in higher at 5.5–6.5%, reflecting the tight supply of COE and firm accommodation costs. Excluding the effects of the GST hike, core and headline inflation are expected to be lower at 2.5–3.5% and 4.5–5.5% respectively.

**Chart 3.17** The moderating profile of core inflation will be underpinned by the decline in inflation of components with flexible prices

Core sticky and flexible price indices




Source: EPG, MAS estimates

Note: A CPI component is considered to have a sticky price if its frequency of price change is lower than 3.2 months, which is the (weighted) average frequency of price change within the CPI basket.

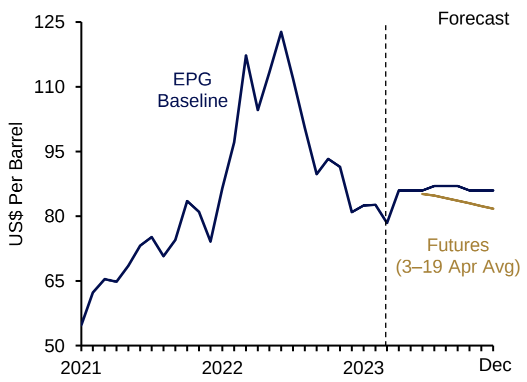
## Weakening global demand should keep commodity prices stable, following the decline in recent quarters

Singapore's import price index fell steadily over H2 2022 and was 3.1% below year-ago levels in Jan–Feb 2023. The decline was driven by both falling oil import prices as well as lower non-oil import price inflation.

Singapore's import prices for oil fell in line with declining global energy prices. In Q1 this year, Brent crude oil prices eased further to US$81/b, from US$89/b in Q4 2022. Russian oil production and exports proved resilient despite sanctions, while an unseasonably warm European winter dampened demand for energy. Fears of a broader economic slowdown, sparked by the international banking sector turmoil, also led to a marked step-down in Brent crude oil prices in March. However, prices have since risen to around US$87/b amid expectations of tighter supply following OPEC+'s announcement of production cuts. In the quarters ahead, Brent crude oil prices are expected to remain relatively stable at around current levels and average US$85/b over the whole of this year, 16% below the average level recorded last year **(Chart 3.18)**. Energy-related CPI components will therefore continue to exert a drag on overall inflation, with electricity & gas inflation expected to slow and petrol prices to fall on a y-o-y basis.

**Chart 3.18** Crude oil prices are expected to remain relatively stable in the quarters ahead

Brent crude oil prices, futures and forecasts

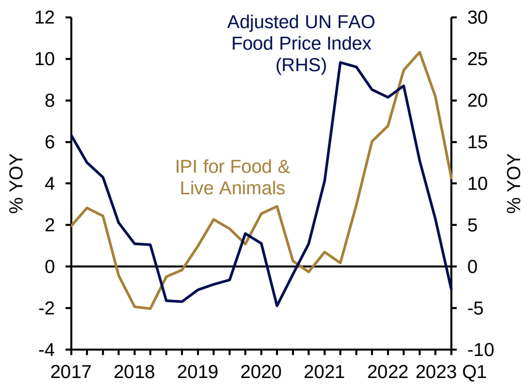



Source: Bloomberg and EPG, MAS estimates

Note: Prices of Brent futures with expiration months in Jun–Dec 2023 are based on average Brent futures prices over the working days between 3 April to 19 April 2023.

**Chart 3.19** Food import price inflation has eased alongside lower global food prices

Adjusted UN FAO food price index and Singapore's import price index for food & live animals




Source: DOS, UN Food and Agriculture Organization (FAO) and EPG, MAS estimates

Note: The Adjusted UN FAO Food Price Index is computed based on the weights of the respective food components in Singapore's IPI basket. The last datapoint for the IPI series refers to the Jan–Feb 2023 average.

Singapore's non-oil import price inflation has also fallen steadily since late last year and its effect should pass through to the CPI more discernibly in the quarters ahead. In particular, shipping logjams and backlogs in global consumer goods production have cleared, while growth in the global demand for goods has moderated. In the coming quarters, the decline in foreign producer and consumer price inflation for goods is expected to further dampen imported goods inflation. This should, in turn, contribute to a moderation in retail & other goods inflation over the course of 2023.

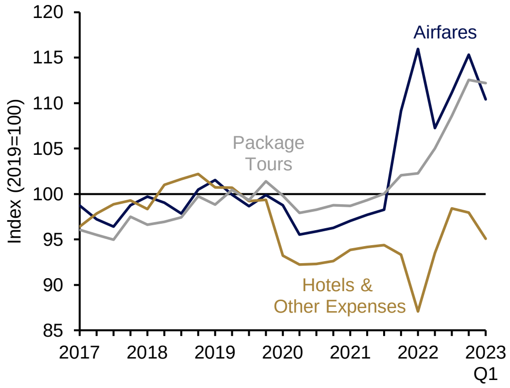
Meanwhile, Singapore's food & live animals import price inflation should moderate further in the quarters ahead **(Chart 3.19)**. While global food commodity prices are unlikely to fall much further amid the ongoing Russia-Ukraine war, climate events and disease outbreaks, they are expected to stay below year-ago levels, which—together with the appreciation of the S$NEER—should pass through to lower imported food inflation. Singapore's non-cooked food CPI inflation should therefore moderate over the course of the year.

## Travel-related services inflation is also expected to fall

For imported services, travel-related services inflation is anticipated to slow and contribute to the moderation in core inflation over this year. The high base effects associated with the spike in airfares for flights via Vaccinated Travel Lanes in the earlier part of 2022, coupled with the steady pickup in airlines' flight capacity to meet demand, should cap airfares inflation over 2023 **(Chart 3.20)**. Meanwhile, inflation for holiday expenses is expected to ease in the quarters ahead as the stronger S$ exchange rate dampens the pace of increase in overseas accommodation costs and package tour fees. Indeed, the price of hotel accommodation and package tours have already begun to fall sequentially after the surge in 2022.

**Chart 3.20** High base effects will weigh on travel-related inflation, particularly for airfares

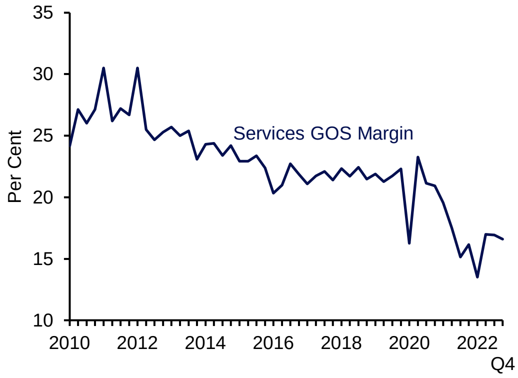
CPI of travel-related components




Source: DOS and EPG, MAS estimates

**Chart 3.21** The normalisation of services firms' margins will keep services inflation elevated

Seasonally adjusted gross operating surplus of selected consumer services sectors deflated by nominal value-added




Source: DOS and EPG, MAS estimates

Note: The services GOS index is derived from accommodation & food services and other services sectors. GOS of the other services sector is used to proxy for GOS in education, health & social services as well as arts, entertainment & recreation services.

## Domestically driven services inflation will also moderate but remain above its historical average amid the need to restore margins

Nominal resident wage growth should continue to moderate over 2023 as non-resident labour supply expands while demand for manpower slows alongside the economic downturn. In particular, wage growth is expected to weaken in the external-facing sectors such as manufacturing and modern services. Crucially, wage momentum is not expected to re-accelerate at this point: prospective labour demand has eased while nominal wage growth has historically not been highly correlated with contemporaneous or past price inflation in Singapore. Slower wage growth implies moderating labour cost pressures for firms and is also likely to weigh on private consumption growth.

Nevertheless, consumer services inflation is likely to remain elevated for some time as businesses seek to restore margins that have become highly compressed **(Chart 3.21)**. For sectors where demand is less sentiment-sensitive and price-inelastic, such as education and healthcare services, the pace of price increases will remain firm amid the pass-through of higher labour costs. Base effects arising from the removal of Public Health Preparedness

Clinics subsidies last year will also raise healthcare services inflation till July. For discretionary services, in comparison, the extent of cost pass-through could be capped by slowing consumption demand, which in turn reflects the erosion of real wage growth, softening sentiment, and the effects of higher interest rates.

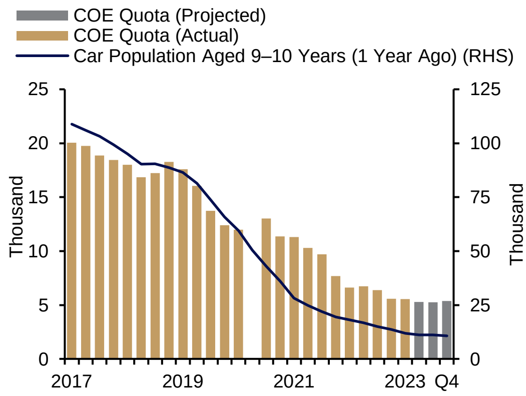
### The drag from private transport costs on headline inflation is expected to more than offset the boost from higher accommodation inflation

Excluding petrol costs, private transport inflation is projected to ease in 2023. COE premiums for cars are likely to rise at a slower pace compared to 2022 as COE quota stays around current levels, in line with the stable profile of cars approaching 10 years of age **(Chart 3.22)**. Meanwhile, incremental car demand is also likely to be muted as prospective buyers are confronted with record high COE prices, high interest rates and weaker wage growth.

In contrast, accommodation inflation is forecast to pick up this year. Leasing demand is projected to stay firm alongside the ongoing expansion in non-resident employment. While the tightness in supply will remain in H1 2023, it is expected to ease over the second half as the construction backlog of housing projects clears up (See **Box B** on "Residential Rental Markets"). In turn, the pace of increase in market rents should slow in H2 2023. However, the moderation in rents will take time to pass through to inflation as the CPI is calculated based on the outstanding stock of leases and only a fraction of these leases "turn over" in a given month (i.e., renewed or new leases). As market HDB and private residential rents are higher than a year ago, the new and renewed leases made at prevailing rental rates will continue to drive a faster pace of accommodation inflation in 2023 compared to 2022 **(Chart 3.23)**.

**Chart 3.22** The quota for car COEs is expected to stay broadly unchanged in the quarters ahead

Population of cars aged 9–10 years and COE quota for cars

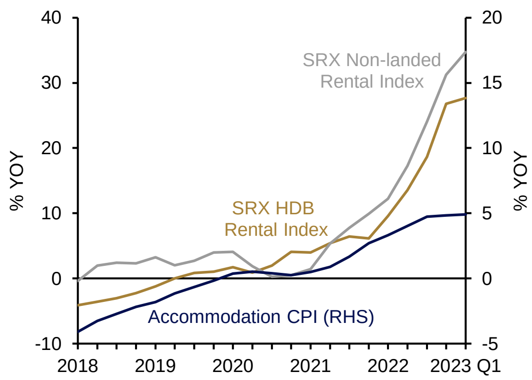



Source: LTA and EPG, MAS estimates

Note: COE bidding was halted in Apr–Jun 2020.

**Chart 3.23** Both HDB and private housing rents remain higher than a year ago

Market rental price indices and accommodation CPI




Source: DOS and Singapore Real Estate Exchange (SRX)

Note: The last datapoint for the SRX series refers to the Jan–Feb 2023 average.