

3 Labour Market and Inflation

- Total employment rebounded in Q4 2021 as non-resident employment rose for the first time in two years and resident employment grew at a faster pace. The expansion in non-resident employment was led by hiring in construction, although most sectors saw some increases in non-resident headcount. Meanwhile, resident employment continued to register robust growth, driven by the modern services as well as consumer-facing industries. Consequently, the labour market tightened further. The resident unemployment rate continued to edge down, returning to pre-COVID levels by February this year.
 - A significant relaxation of border controls in April should lead to increased inflows of non-resident workers, further alleviating manpower shortages. Meanwhile, resident employment growth should continue to rise, albeit at a slower pace, as resident labour supply is largely utilised. Amid the overall tight labour market, as well as policies to boost wages of low-wage resident workers, nominal wage growth is anticipated to pick up.
 - Consumer price pressures continued to intensify in Q1 2022, with stronger inflation seen across all broad CPI categories. Higher oil and imported food prices at the turn of the year led to a pickup in electricity & gas and non-cooked food inflation, while accumulating business costs passed through to greater services price increases. Meanwhile, the faster rate of increase in private transport and accommodation costs led to a larger rise in headline inflation *vis-à-vis* core inflation.
 - The Russia-Ukraine conflict that erupted in end-February has exacerbated ongoing pandemic-induced disruptions to global supply chains and will add further to global price pressures. International oil and food commodity prices have stepped up sharply and are expected to remain firm for a sustained period. These will keep domestic electricity & gas, fuel and food inflation elevated over the year. At the same time, tight domestic labour market conditions are leading to higher unit labour cost.
 - Consequently, MAS Core Inflation is expected to continue rising in the near term. It should moderate towards the end of the year as external inflationary pressures ease alongside a partial resolution of global supply constraints. Nevertheless, underlying inflation will remain above its historical level, as businesses pass on higher operating costs amid firm demand. All in, the forecast ranges for MAS Core Inflation and CPI-All Items inflation have been revised up to 2.5–3.5% and 4.5–5.5%, respectively. The larger 2% points revision in the forecast range for headline inflation reflects recent strong outturns in COE premiums for cars as well as higher fuel costs.
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3.1 Labour Market¹

Employment grew robustly in Q4 2021 as the non-resident workforce expanded for the first time since 2019

The labour market staged a strong rebound towards the end of 2021. Total employment² rose by 54,600 in Q4 last year, following a contraction of 8,400 in the preceding quarter. The turnaround was driven by a firm expansion in non-resident employment, which rose by 30,900 after having declined steadily since early 2020. Hiring of non-resident workers was largely led by sectors that rely on them more heavily, such as construction and domestic work, enabled by a progressive loosening of border restrictions. Resident employment expanded robustly as well, picking up by 23,700 compared to a 19,100 increase in the previous quarter.

Total employment rose across all broad sectors in Q4 2021, for the first time since the pandemic began (**Chart 3.1**). Employment in modern services³ grew rapidly, continuing the trend of steady expansion in the sector since Q3 2020. Meanwhile, all other sectors saw a turnaround in employment, with the largest rebounds in the construction and domestic-oriented sectors. Alongside the easing of domestic safe management measures, employment expanded strongly in some consumer-facing domestic-oriented industries—F&B services and retail trade—supported by year-end festivities. Notably, even the worst-hit travel-related sector registered positive employment growth, as some travel resumed with the implementation of Vaccinated Travel Lanes (VTLs).

For the year as a whole, total employment rebounded by 40,200 in 2021, returning to 96.3% of its pre-COVID level. By the end of the year, resident employment was 3.7% higher than its pre-pandemic level, while non-resident employment was 15.9% below. As at December 2021, the share of non-resident workers in total employment was 32.9%, 4.8% points below its pre-COVID (December 2019) share of 37.7%.

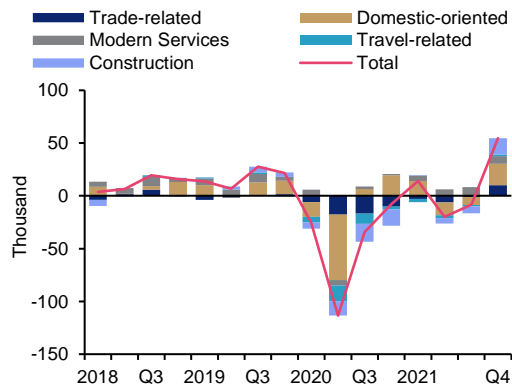
¹ The commentary in this section is mostly based on available labour market data up to Q4 2021.

² Includes foreign work pass holders and migrant domestic workers.

³ *Modern services* comprise information & communications, financial & insurance services and professional services. The *domestic-oriented* sector encompasses land transport, retail trade, F&B services, real estate, administrative & support services, public administration & education, health & social services, other community, social & personal services, domestic work and utilities & others. The *travel-related* sector is made up of air transport, accommodation, as well as AER. The *trade-related* sector consists of manufacturing, wholesale trade, water transport and other transport industries.

Chart 3.1 All broad sectors saw employment expansions in Q4 last year

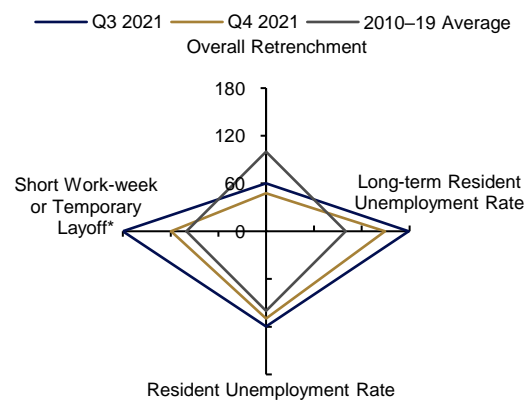
Employment change (q-o-q) by broad sectors



Source: MOM and EPG, MAS estimates

Chart 3.2 Slack in the labour market continued to be absorbed

Labour market spare capacity indicators



Source: MOM and EPG, MAS estimates

* The Q3 2021 reading for short work-week or temporary layoff was 404 but was shown to take the maximum value of the axis in this chart.

Note: A smaller quadrilateral indicates tighter labour market conditions. Each variable is indexed such that its 2010-19 historical average takes a value of 100.

The labour market continued to tighten in Q4 2021 but did not appear overheated

Most labour market indicators pointed towards a further reduction of slack in Q4 last year (**Chart 3.2**). The resident unemployment rate fell from 3.5% in September to 3.2% in December, and edged down further to 3.0% in February this year, comparable to pre-COVID rates. The decline in the number of unemployed residents came on the back of strong demand for workers. On a seasonally adjusted basis, job vacancies rose further from September to December, with almost all sectors⁴ maintaining higher vacancy numbers than pre-pandemic. Consequently, the seasonally adjusted ratio of job vacancies to unemployed persons rose from 1.95 in September 2021 to 2.11 in December, the highest rate since 1997 (**Chart 3.3**). The six-month re-entry rate of retrenched residents into employment also continued to improve in Q4 2021, from 66% to 67%, with increases seen across most age and education groups.

Latent labour market slack also diminished. The long-term unemployment rate for residents fell from 1.2% in September 2021 to 1.0% in December, but remained above the 2019 annual average level of 0.7%. Similarly, fewer employees were placed on short work-week or temporary layoff (SWWTL) in Q4 last year (1,200) compared to the previous quarter (4,060), although the number remained above the pre-pandemic norm. Meanwhile, time-related underemployment held steady at 2.9% in Q4, which is within the typical pre-COVID range.

Nevertheless, in sectors that were still bound by pandemic restrictions in Q4 2021, a number of indicators suggest that existing labour resources were not excessively stretched.

⁴ The exception was the AER sector where vacancies were at 67% of pre-COVID (December 2019) levels, while vacancies in the insurance sector were similar to pre-COVID.

Average weekly total paid hours worked per employee in end-2021 remained below pre-COVID averages for all domestic-oriented and travel-related industries, except land transport and health & social services. Moreover, resignation rates were lower than before the pandemic in several domestic-oriented services industries, where output had not fully recovered to pre-COVID levels, indicating that better job opportunities could have remained relatively scarce.

As slack in the labour market was largely eliminated, resident wage growth rebounded

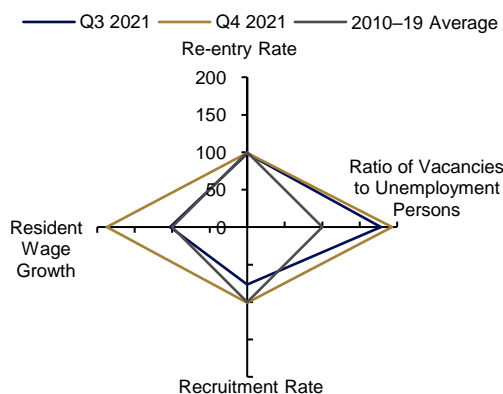
Resident wage growth picked up to 6.9% y-o-y in Q4 2021 from 3.8% in the preceding quarter, reflecting robust labour demand and the restoration of year-end bonuses in some sectors. Overall, the strong full-year resident wage growth of 3.6% was mainly on account of binding constraints in labour supply as well as a catch-up of wage growth following the weak outturn in 2020.

Strong nominal wage growth for resident workers during recoveries from recessions is not unusual. In the post-GFC period, average wage growth in the four quarters from Q2 2010 (when the resident unemployment rate declined to 3.0%) to Q1 2011 was 2.4% points higher than the five-year pre-GFC average. Wages grew above average by a similar magnitude in H2 2021 during the current recovery, averaging 2.1% points higher than the pre-COVID trend.

Overall, despite the recent rebound, resident wage growth averaged 2.5% p.a. in 2020 and 2021, below the pre-COVID average of 3.3%. Resident wage growth has thus far not been substantially stronger than expected given current cyclical economic conditions.

Chart 3.3 Labour demand continued to strengthen

Labour demand indicators

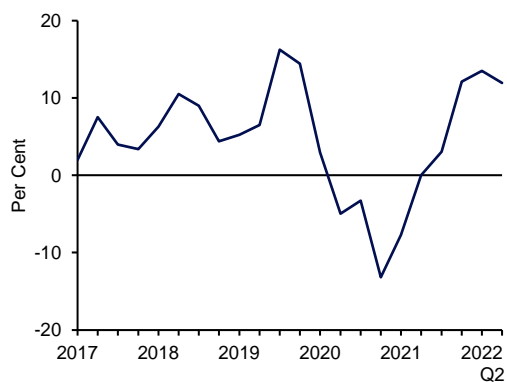


Source: MOM, Haver Analytics and EPG, MAS estimates

Note: A larger quadrilateral indicates stronger labour demand conditions. Each variable is indexed such that its 2010-19 historical average takes a value of 100.

Chart 3.4 Most firms intend to expand headcount in the near term

SCCB BOI employment outlook



Source: Singapore Commercial Credit Bureau (SCCB)

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.

Although labour demand in some external-oriented sectors could ease, employment growth is projected to be firm across most sectors this year

On the whole, hiring is expected to remain firm in 2022, despite drags from the Russia-Ukraine conflict and the still-evolving regional pandemic situation. Hiring in petrochemicals, wholesale trade and water transportation could slow due to weaker near-term growth prospects in those sectors, while increased volatility in global financial and commodities markets could also lead to greater caution in headcount expansions in modern services. Nevertheless, the Singapore Commercial Credit Bureau (SCCB) Business Optimism Index (BOI) survey conducted after the onset of the conflict showed that hiring sentiment remains robust (**Chart 3.4**). Although the reading for Q2 dipped slightly, it is still highly positive. Labour demand is expected to pick up in the consumer-facing domestic-oriented and travel-related sectors alongside easing safe management measures and recovering tourist arrivals, while hiring in the health & social services sectors should continue to expand.

While the resident labour force will be largely utilised, relaxation of border restrictions should help alleviate manpower shortages

Amid the continuing strong demand for workers, residual slack in the labour market should fully dissipate this year. Meanwhile, growth in the resident labour force should moderate after the labour force participation rate reached a record high of 70.5% in June last year. As resident labour supply becomes increasingly binding, resident employment growth is expected to level off somewhat, even as the resident unemployment rate potentially dips further over the next few months.

Overall, as the economy reaches full employment⁵, difficulties in finding suitable workers to fill job vacancies would lead firms to turn to non-resident labour supply to meet their remaining manpower needs. The removal of most testing and quarantine requirements, including under the new Vaccinated Travel Framework, is expected to significantly reduce frictions to the inflow of non-resident workers from April. While the increase in non-resident employment is expected to be broad-based across industries, the largest gains are likely to be concentrated in sectors where labour shortages have been most acute, such as the construction sector and in domestic work. The easing of labour supply constraints in a wide range of sectors is expected to help sustain economic recovery.

Nevertheless, non-resident workers are likely to form a smaller proportion of total employment relative to their pre-COVID share over the next few years, even as the economy recovers from COVID-19. Some reduction in demand for non-resident workers could take place as a result of increases in labour productivity arising from investments in automation and labour-saving technologies.

Resident wage growth is projected to pick up this year, with unemployment remaining low

The labour market as a whole is expected to be tight in 2022. Heightened competition for workers should lead to increased labour market churn, contributing to wage pressures and keeping nominal wage growth above recent historical averages. In addition, the

⁵ Full employment is reached when labour resources in the economy are employed at maximum capacity without inducing sustained rising wage inflation from competition for workers. An economy at full employment will still experience some unemployment, as there will be individuals in the process of searching for jobs at any one point in time (frictional or structural unemployment).

implementation of several policies that aim to raise the wages of low-wage resident workers—in particular, the expansion of coverage for the Local Qualifying Salary, and the introduction of the Progressive Wage Credit Scheme and Progressive Wage Model in the retail sector—will boost average resident wage growth in the second half of the year.

However, wage outturns should also be capped by the easing of non-resident worker supply constraints, which will moderate the rise in unit labour cost and limit excessive bidding-up of prices and wages. Further, uncertainties from the regional pandemic situation and the Russia-Ukraine crisis could dampen wage pressures slightly.

Overall, upside risks to wage growth stemming from more aggressive nominal wage indexation to prices should be relatively limited. Nominal wage growth has historically not been highly correlated with contemporaneous or past price inflation in Singapore, with real wage growth and headline inflation displaying a weak negative relationship.⁶ This observation is consistent with EPG's earlier estimates of the Wage Phillips Curve in Box B of the October 2019 *Review*, which found that controlling for measures of slack, nominal wage growth is not strongly correlated with various measures of near-term inflation expectations (backward or forward-looking), implying that long-run nominal expectations relevant for wage setting are likely to be well anchored.

3.2 Consumer Price Developments

Price pressures strengthened and broadened in Q1

MAS Core Inflation rose to 2.5% y-o-y in Q1 2022, from 1.7% in Q4 last year, on the back of stronger price increases across all broad categories (**Chart 3.5**). Higher global oil and imported food prices towards the end of 2021 and in early 2022 supported a pickup in Singapore's electricity & gas and non-cooked food inflation. Meanwhile, against a backdrop of accumulating imported and domestic costs, recovering consumer demand led to stronger discretionary goods and services inflation. Higher operating costs also elicited a step-up in essential services inflation, such as the recent hike in public transport fares.

CPI-All Items inflation saw a larger increase to 4.6% in Q1, from 3.7% in Q4 last year, as private transport and accommodation inflation rose more sharply as well (**Chart 3.6**). Rents strengthened across all housing types, leading to higher accommodation inflation of 3.3% in Q1, as compared to 2.7% in the preceding quarter. Meanwhile, private transport inflation rose, in tandem with the steeper increase in car prices as COE premiums accelerated.

While higher core inflation was partially due to idiosyncratic factors and low base effects, the seasonally adjusted 3-month moving average (3MMA) of month-on-month core price increases also rose from an annualised rate of 2.9% in Oct–Dec to 3.7% in Jan–Mar. In the same vein, the 25% trimmed mean inflation measure⁷ averaged 2.2% y-o-y in Q1, up from 1.7% in Q4, indicating that underlying inflation continued to rise even after excluding volatile items such as those related to oil and airfares. Overall, underlying price pressures have been

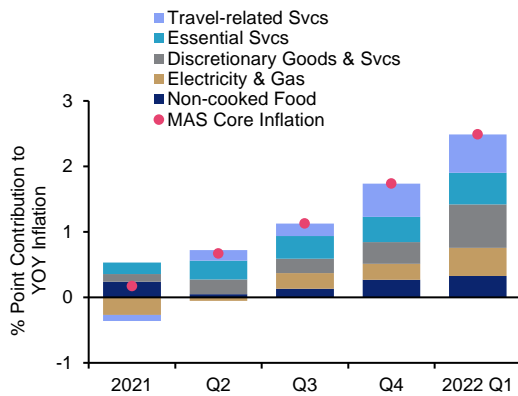
⁶ From a regression analysis using quarterly data from 1992 to 2021, it is estimated that a 1% point increase in y-o-y headline inflation leads to a 0.5% point decline in real average monthly earnings growth for residents (with both variables expressed as deviations from trend and controlling for the output gap).

⁷ The 25% trimmed mean inflation measure is computed by excluding 25% of the largest and smallest weighted price changes in the components of the CPI basket (i.e., the most volatile CPI components).

broad-based, with the proportion of core CPI items experiencing an above-historical average rate of inflation picking up to 54% in Q1, from 32% in Q4 last year.

Chart 3.5 Inflation rose across a broad range of CPI goods and services in Q1

Contribution to MAS Core Inflation

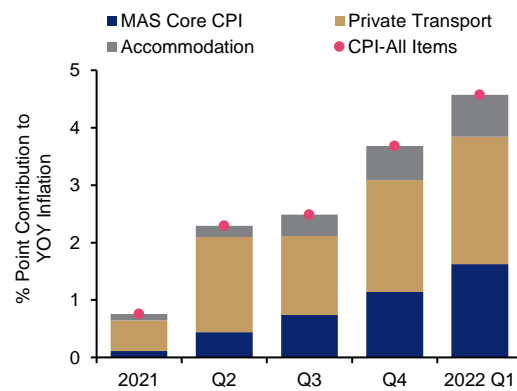


Source: DOS and EPG, MAS estimates

Note: Discretionary goods & services refer to retail & other goods as well as discretionary services including food services. Essential services mainly refer to public transport, healthcare and education services.

Chart 3.6 Stronger price increases for non-core components drove headline inflation higher

Contribution to CPI-All Items inflation



Source: DOS and EPG, MAS estimates

Higher electricity & gas and non-cooked food inflation accounted for around a third of the increase in core inflation

Electricity & gas inflation rose to 17.2% y-o-y in Q1, from 9.5% in Q4, contributing to a quarter of the 0.7% point increase in core inflation. Electricity and gas tariffs picked up by 22.6% and 17.2% respectively from a year ago, following the 80.1% y-o-y increase in Brent crude oil prices to US\$80 per barrel in Q4 2021.⁸ Households under the Open Electricity Market (OEM) saw electricity prices step up more strongly as well, as rates of new and renewed plans were adjusted significantly higher.

At the same time, non-cooked food inflation climbed to 3.0% y-o-y in Q1, from 2.5% in Q4, amid stronger price increases in fish & seafood, as well as meat. Adverse weather conditions including severe flooding in Malaysia late last year affected fish supplies. Meanwhile, labour shortages in Singapore's key meat import source countries (e.g., Brazil and Malaysia) as well as elevated feed costs drove poultry prices higher. The pace of price increases of fruits and vegetables also remained elevated at 3.4% and 4.8% respectively in Q1, even as they eased from Q4 last year.

Amid recovering demand, inflation for discretionary services and retail goods rose

Reflecting stronger upstream cost pressures and a recovery in consumer demand, food services inflation rose significantly to 2.6% y-o-y in Q1, from 1.6% in Q4. Notably, higher

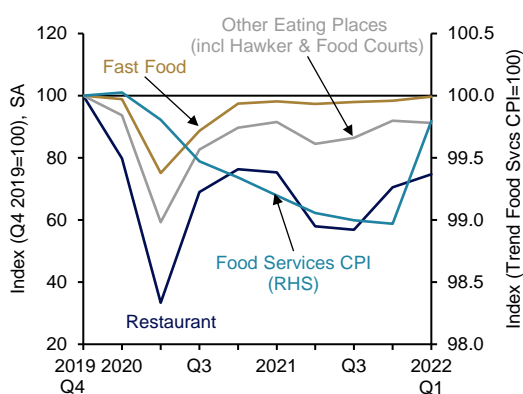
⁸ The fuel cost component in the electricity tariff is computed using the average daily natural gas prices in the first two-and-a-half-month period of the preceding quarter. The Q1 2022 tariff was therefore based on natural gas prices in October to mid-December 2021.

hawker and restaurant meal inflation accounted for about 30% of the rise in core inflation in Q1 from the preceding quarter. Apart from greater cost of ingredients, labour costs had also increased amid intensified manpower shortages in the F&B services sector.⁹ The exit of OEM retailers late last year had further led to substantially higher electricity prices for some F&B businesses.¹⁰ Meanwhile, stronger consumer demand likely enabled F&B operators to pass on cost increases to consumers. As Singapore's safe distancing measures were eased, spending on prepared meals improved with the volume of F&B sales rising by 2.4% y-o-y in Jan–Feb this year (Chart 3.7).

Inflation in other discretionary services also picked up in Q1 this year. For instance, point-to-point transport (taxi and private hire car) services costs rose more steeply by 6.9% in Q1, compared to the 4.8% increase in Q4. The step-up reflected the recovery in commuting demand as well as the upward revision in taxi fares among local taxi operators in March, in a bid to defray higher operating costs. In addition, recreational & cultural services inflation rose amid stronger increases for sport services & other fees, cinema ticket prices, and charges to places of interest. The acceleration in price pressures in these components was offset by larger declines in telecommunication services fees and a moderation in domestic & household services inflation. Intense competition in the telecommunication sector likely continued to constrain pricing power. Meanwhile, domestic & household services inflation eased as a larger inflow of migrant domestic workers alleviated the shortage in domestic helpers.

Chart 3.7 Demand for F&B services continued to recover in Q1

Food & beverage services sales volume and deviations in food services CPI from trend

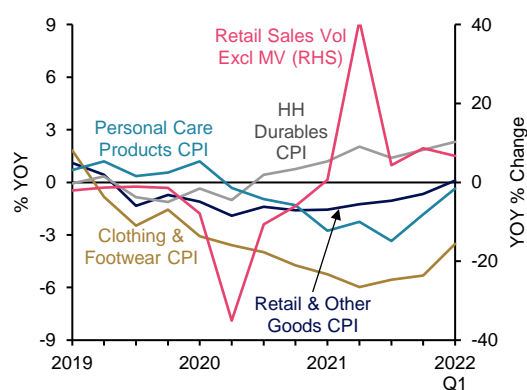


Source: DOS and EPG, MAS estimates

Note: Trend inflation for food services is 2.0%. Deviations in food services prices from trend are calculated by normalising actual food services CPI against a counterfactual food services CPI for Q1 2020 to Q1 2022. The counterfactual series is computed by assuming that food services CPI rises steadily at the historical (2010–19) rate of increase from Q1 2020 to Q1 2022. An upward movement implies prices rise at a pace faster than the historical trend and vice versa. The last datapoint for the sales volumes of restaurant, fast food and other eating places refer to the Jan–Feb 2022 average.

Chart 3.8 Retail prices rose, on the back of firming consumer demand

Retail sales volume and CPI for selected retail goods



Source: DOS and EPG, MAS estimates

Note: Personal care products CPI refers to the "Other personal care" CPI category published by DOS. The last datapoint for retail sales volume excluding motor vehicles refers to the average y-o-y change in Jan–Feb 2022.

⁹ Low, Y. (2022), "Manpower nightmare: F&B businesses offer higher pay to no or few takers, urge MOM to relook foreign labour policy", *Today*, April 8.

¹⁰ Tang, S. K. (2022), "There goes all my profit': Soaring electricity bills a rude shock for businesses in Singapore", *Channel News Asia*, February 25.

In line with the resumption of leisure activities and return to offices, retail sales volume (excluding motor vehicles) continued to expand on a y-o-y basis in Jan–Feb, leading to a rise in retail & other goods inflation (**Chart 3.8**). Firming consumer demand for a range of consumer products likely enabled the pass-through of higher imported and material costs to consumer prices. Excluding oil, Singapore’s import price index rose by 4.8% y-o-y in Jan–Feb 2022, a pickup from the 4.1% increase in Q4 last year. Import costs rose more strongly for travel goods & handbags, articles of apparel & clothing accessories, as well as photographic apparatus & equipment. Reflecting higher import costs as well as strengthening demand, the decline in prices of clothing & footwear and personal care products eased markedly while household durables registered stronger price increases. Accordingly, prices of retail & other goods rose by 0.1% y-o-y in Q1, rebounding from the 0.7% decline in the previous quarter.

Higher core inflation was partly driven by airfares, while administrative price revisions also affected essential services inflation

Airfares inflation increased further to 19.5% y-o-y in Q1, from 13.4% in Q4, contributing about a fifth of the step-up in core inflation. Excluding airfares, core inflation would have come in at a more modest 2.0% in Q1, albeit still stronger than the 1.4% in Q4 last year. The progressive incorporation of actual airfares as well as the inclusion of mandatory COVID-19 test costs into a larger proportion of the airfares CPI led to higher airfares inflation.¹¹ On a q-o-q basis, however, the rise in airfares CPI moderated in Q1 as the type and number of COVID-19 tests required in Singapore and some destination countries were relaxed. Meanwhile, holiday expenses inflation fell in the first quarter as global demand for travel was dampened by the spread of the Omicron variant.

Essential services inflation rose to 1.8% y-o-y in Q1, from 1.5% in Q4. This pickup was partly on account of administrative price revisions, such as the public transport fare hike and increase in household refuse collection fees. Disinflationary effects of (permanent) preschool subsidies introduced early last year also faded, contributing to the step-up in education inflation on a year-on-year basis.

Stronger external inflationary pressures have raised the domestic inflation outlook significantly since the previous *Review*

Since the October 2021 *Review*, global developments, in particular the Russia-Ukraine conflict, have worsened the external inflation outlook considerably. Sharply higher global commodity prices and renewed supply disruptions as a result of both the Russia-Ukraine crisis and the regional pandemic situation are adding to pre-existing global inflationary pressures. Against this backdrop, consumer price inflation in Singapore is expected to increase and remain elevated for some time. Notably, the surge in global energy and agricultural commodity prices will raise domestic inflation for fuel, electricity & gas and non-cooked food, which will in turn feed into higher inflation for transport and food services over time. (For a review of the effects of previous global oil price shocks, please refer to **Box A**).

¹¹ With the introduction of VTLs since late-2021, actual air travel costs have been progressively re-incorporated into the CPI, compared to the previous approach of imputing these fares using the overall change in CPI-All Items at a time when there were no flights or when recreational travel was hindered due to quarantine requirements.

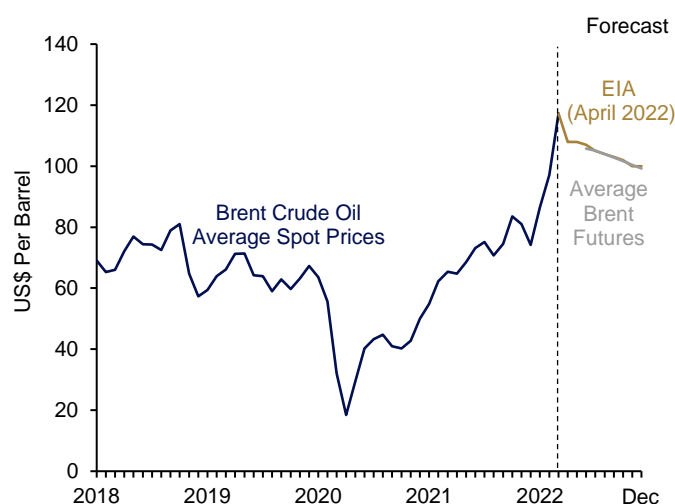
The recent surge in global energy prices will push up domestic inflation of oil-related items this year

Brent crude oil prices rose significantly in March amid heightened uncertainty over the future supply of Russian gas and oil. The surge in European gas futures as a result of the war spilled over to Asian gas futures prices, while some Russian oil has also effectively been kept off the international market due to import bans and “self-sanctioning” by major oil traders and firms. Further, global precautionary demand for gas and oil built up rapidly. While Brent crude oil prices have eased recently, they are projected to remain at a considerably higher level than before the hostilities, reflecting tight supply conditions, and the potential for further oil supply disruptions. For 2022 as a whole, Brent crude oil prices are forecast to average US\$105 per barrel, 49% above the US\$71 last year (**Chart 3.9**).

The pass-through of higher global oil prices to domestic petrol pump prices was rapid, with local petrol companies raising pump prices in late February upon news of the invasion. Regulated electricity and gas tariffs for Q2 were adjusted upwards as well, although the price revisions largely reflected global oil prices in January and February. Elevated global oil prices, following the surge in March, will continue to place upward pressure on energy tariffs in Q3. While households on fixed price plans under the OEM are temporarily insulated from changes to the regulated electricity tariff, upcoming renewals of OEM contracts will occur at sharply higher rates that will reflect the step-up in global energy prices. This will cause electricity & gas inflation to rise over time.

Chart 3.9 Brent crude oil prices surged in March and are projected to remain high this year

Brent crude oil prices



Source: Bloomberg, US Energy Information Administration (EIA) and EPG, MAS estimates

Note: Prices for Brent futures with expiration months in Jun–Dec 2022 are based on average Brent futures prices taken over the working days between 2 April to 25 April 2022.

Supply shocks to global food commodities could lead to elevated domestic non-cooked food inflation beyond this year

The Russia-Ukraine conflict will have significant repercussions on global prices of food, which had already risen to close to record levels before the war (**Chart 3.10**). As Ukraine and Russia are both major global exporters of grains and edible oils, the conflict has led to steep price increases in these commodities. Some countries have imposed export bans to secure their own supply, exacerbating the global supply tightness. Meanwhile, fertiliser costs have been pushed up by reduced supplies from Russia and Ukraine, which could lead to lower agricultural yield as farmers worldwide scale back on the use of fertilisers. Compounded by adverse weather conditions in other major grain-producing regions¹², the shortfall in grain supply is expected to persist till next year.¹³ Reduced grain supply will result in a protracted increase in the cost of animal feed, that will eventually translate to higher global prices of meat and dairy.

The rise in global food prices will pass through to Singapore's import prices and lead to higher domestic non-cooked food inflation over time. However, in the short term, Singapore's imported food prices will likely rise more gradually and modestly than global food price indices, with food suppliers absorbing some of the increase in costs amid fixed contracts or pricing-to-market strategies. Singapore's imported food prices have displayed far less volatility compared to global food commodity prices, and non-cooked food CPI has, in turn, been more stable than import prices (**Charts 3.10 and 3.11**). The incomplete short-run pass-through of higher costs to domestic prices likely reflects firms' ability and willingness, at all stages in the supply chain, to temporarily absorb some cost changes within their profit margins with the aim of preserving market share. In tandem, the increasing diversification of Singapore's imported food sources also helps to moderate and smooth out some of the impact of idiosyncratic supply-driven price shocks.¹⁴

However, the higher level of global food prices will eventually be fully reflected in domestic food prices. Elevated global food prices are therefore expected to continue to exert pressure on Singapore's food inflation beyond 2022.

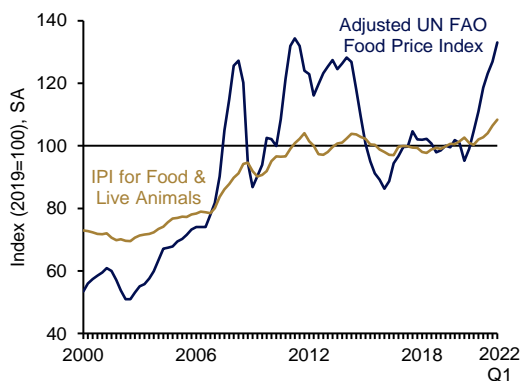
¹² China has warned that the upcoming winter crop harvest could be the worst in history as unfavorable weather conditions in 2021 delayed the planting of one-third of the normal wheat acreage. In the US, drought-affected areas such as Kansas, Oklahoma and Texas also reported weak crop conditions for their winter harvests.

¹³ The shortage of fertilisers is expected to impact grain harvests for the next 1–2 years. April to June is a crucial planting season and fertiliser shortages may reduce agricultural yield for the harvest in 2023.

¹⁴ A larger proportion of Singapore's supply of hen shell eggs, chicken, beef, mutton and vegetables was imported from alternative sources (i.e., countries that were not the top three import sources for Singapore) in 2021, compared to 2019. Source: Singapore Food Agency's Singapore Food Statistics 2021.

Chart 3.10 Global food prices are more volatile than domestic import prices of food...

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

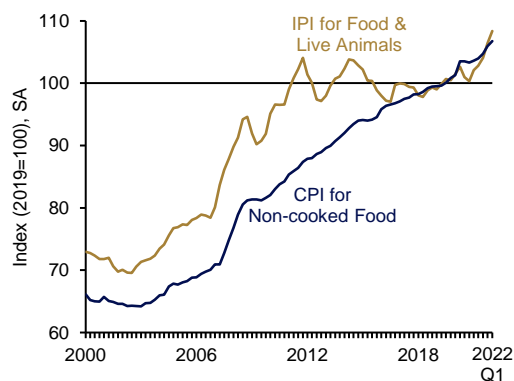


Source: DOS, UN Food and Agriculture Organization (FAO) and EPG, MAS estimates

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 2022 average.

Chart 3.11 ... which are in turn less stable than the non-cooked food CPI

Singapore's IPI for food & live animals and CPI for non-cooked food



Source: DOS and EPG, MAS estimates

Note: The last datapoint for the IPI series refers to the Jan–Feb 2022 average.

Business cost pressures are anticipated to build up, amid rising material, utility and labour costs

Meanwhile, domestic cost pressures will continue to build up for most businesses. For the F&B sector, the step-up in raw ingredient prices will be compounded by rising utility charges. Given the F&B sector's greater outlay on utilities *vis-à-vis* other services sectors, the sector is particularly vulnerable to the surge in energy costs.¹⁵

Likewise, the hike in international prices of metals and other raw materials (such as silicon and plastics), as well as elevated freight charges, could exert persistent upward pressure on the costs of a range of consumer goods. Import prices of consumer goods are expected to remain firm and, in turn, support the rise in retail goods inflation.

In addition, all consumer-facing sectors are likely to experience stronger wage pressures. The tight domestic labour market and the cessation of most COVID-related wage subsidies will lead to a pickup in unit labour cost for the services sector. Nevertheless, labour cost pressures should be kept in check as the further relaxation of border policies from April enables the brisk resumption of inflows of non-resident workers. The Progressive Wage Credit Scheme should also help to cushion some of the labour cost increases associated with implementing policies to lift the incomes of lower-wage workers. As at Q1 2022, commercial retail rents also remained subdued at 18.8% below pre-COVID (2019) levels.

¹⁵ From DOS' *Annual Survey of Services* for 2020, utility cost accounted for 3.1% of operating expenditure in F&B services, larger than the 0.1% share for the overall services industry.

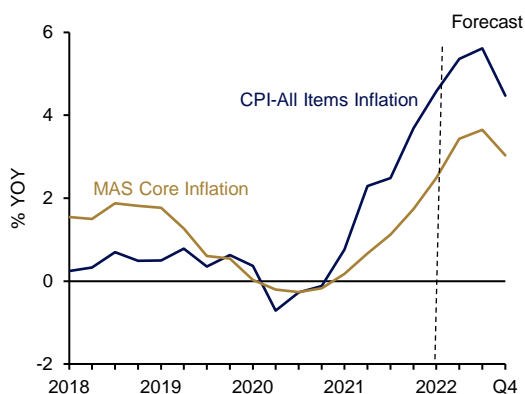
External inflationary pressures and domestic cost pressures should keep core inflation elevated for the rest of this year

All in, MAS Core Inflation is projected to pick up in the coming months and peak in Q3 this year as the recent surge in energy prices filter through to electricity and gas tariffs in that quarter (**Charts 3.12 and 3.13**). Underlying price pressures could ease towards the end of this year, on the premise that global commodity prices stabilise and global supply constraints loosen to some extent. While the ongoing commodity price shock will impart strong direct and indirect price pressures, the risk of second-round effects on the general price level is relatively contained.¹⁶ Nevertheless, underlying inflation will remain above its historical level, supported by a steady increase in unit labour cost and as businesses pass on higher operating costs amid firm demand conditions. For the whole of 2022, MAS Core Inflation is projected to come in at 2.5–3.5%, up from the previous forecast range of 2.0–3.0%.

Given high private transport costs from elevated COE premiums and petrol prices, CPI-All Items inflation will step up by more than core inflation this year.¹⁷ Accommodation costs will add further to headline inflation as the backlog of construction delays in residential projects takes time to complete and catch up with firm demand. Accordingly, CPI-All Items inflation is forecast at 4.5–5.5%, up from the earlier range of 2.5–3.5%.

Chart 3.12 Both inflation measures are expected to pick up sharply in the coming months

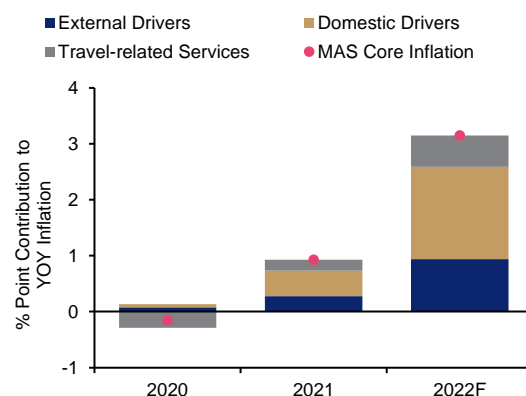
MAS Core Inflation and CPI-All Items inflation forecasts



Source: DOS and EPG, MAS estimates

Chart 3.13 The step-up in core inflation reflects a broad-based increase in price pressures

Contribution to MAS Core Inflation



Source: DOS and EPG, MAS estimates

¹⁶ A structural vector autoregression (SVAR) model was used to study the effects of commodity price shocks on underlying inflation excluding oil-related and non-cooked food items in Singapore. The SVAR results show that the effects of (negative) supply induced shocks to oil production on Singapore's underlying inflation are not statistically significant. This likely reflects anchored long-term inflation expectations which have not varied significantly over time, despite volatile commodity prices.

¹⁷ Average car COE premiums rose by 20% in the first three months of 2022 to \$83,500 in March, a high last seen in October 2013.