

2 The Singapore Economy

- The Singapore economy expanded by 3.8% q-o-q SA in Q4 2020, easing from 9.0% in Q3. The deceleration was due to a decline in manufacturing output, and growth normalisation in the consumer-facing industries after the post-circuit breaker rebound. In the first quarter of this year, overall GDP growth moderated further to 2.0% q-o-q SA, but the slowdown was less pronounced than anticipated. Overall, the economy was close to recouping the output lost from Q4 2019 to the trough of Q2 2020. However, sectors worst-hit by the crisis, especially the travel-related industries, remained substantially below pre-pandemic levels.
 - The outlook for the Singapore economy has improved amid strengthening external demand. GDP growth in 2021 is projected to exceed the upper end of the official 4–6% forecast range, barring a significant setback in activity from a weaker recovery of the global economy or surge in locally transmitted cases. However, growth outcomes will remain disparate across sectors. While the prospects for sectors less affected by the pandemic, especially manufacturing, have brightened, the prognosis for the worst-hit sectors is weak, as an early, widespread reopening of international borders remains unlikely.
 - There are both upside and downside risks to the baseline outlook. A stronger-than-expected upturn of the global electronics cycle could further boost growth, but the recovery could also be derailed if vaccination schemes turn out to be less effective than expected, leading to recurrent and widespread virus outbreaks around the world.
 - The COVID-19 pandemic can have a longer-term impact through the impairment of labour & capital accumulation. Government initiatives have alleviated the adverse impact on the resident workforce in Singapore, while the resilience of business investment during the pandemic bodes well for productivity gains in the medium term.
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2.1 Recent Economic Developments

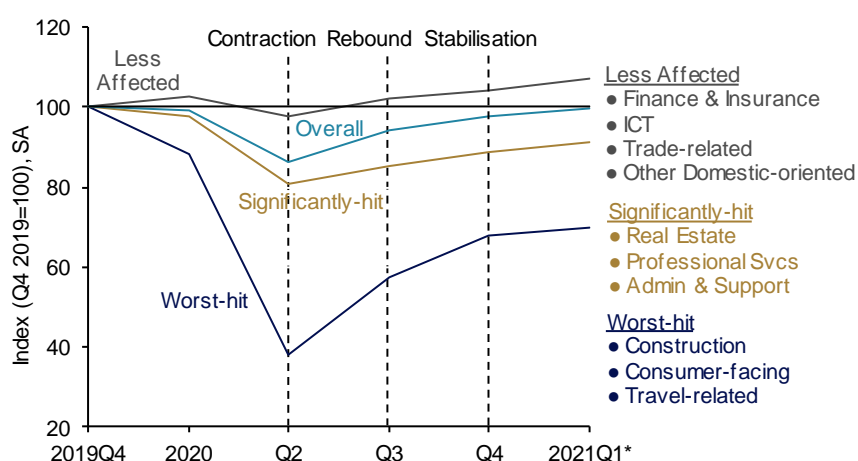
The Singapore economy continued on its recovery path, although growth momentum has eased

The Singapore economy has gone through several phases of adjustment since the onset of COVID-19 (**Chart 2.1**). It suffered its worst contraction in history in Q2 2020, of 13.1% q-o-q SA, before rebounding sharply by 9.0% in Q3 as the circuit breaker measures were lifted. Subsequently, the easing of sequential growth to 3.8% in Q4 reflected some pullback in manufacturing following the strong performance in Q3, as well as the dissipation of the growth rebound in the consumer-facing industries. The latter is corroborated by data from Google Location Services which showed that mobility levels at public places such as malls and bus/train stations have increased at a slower pace since Q4 last year (**Chart 2.2**).

Despite worsening virus infections in a number of its major trading partners, Singapore's GDP expanded by 2.0% q-o-q SA in Q1 2021 (**Chart 2.3**). On a year-ago basis, GDP grew by 0.2%, following three consecutive quarters of contraction. Compared to Q4 last year, growth momentum eased further across most sectors in Q1, except for the trade-related sector, which was bolstered by the continued resilience of manufacturing. By Q1 2021, real GDP had reached 99.6% of its pre-COVID (Q4 2019) level, compared to 97.6% in Q4 2020 and 86.4% during the trough in Q2 2020. While the economy as a whole had almost recouped the output lost in H1 last year, outturns remained varied across sectors. Among the worst-hit sectors, travel-related activities were still operating at below 50% of pre-COVID levels, while the consumer-facing and construction sectors fared better, recovering to about 80–90% of their respective pre-pandemic levels.

Chart 2.1 The Singapore economy has gone through several phases of adjustment during the COVID-19 pandemic

Phases of economic contraction and recovery

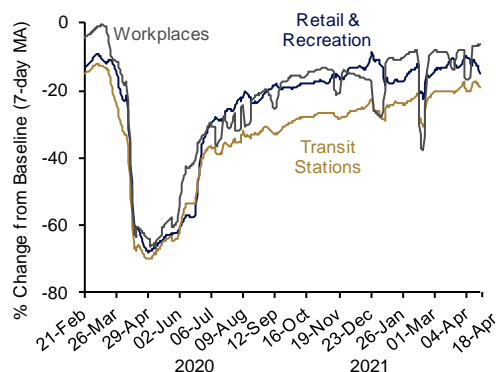


Source: DOS and EPG, MAS estimates

* Advance estimates

Chart 2.2 Recovery in mobility has moderated following the rebound in Q3 2020

Change in population mobility

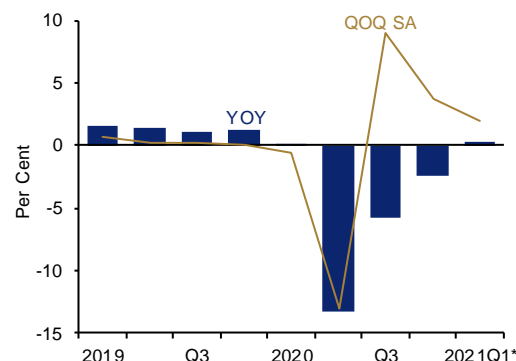


Source: Google Community Mobility Report, Singapore and EPG, MAS estimates

Note: The baseline is the median value for the corresponding day of the week during the five-week period from 3 Jan–6 Feb 2020.

Chart 2.3 Sequential GDP growth has decelerated in recent quarters

Singapore's real GDP growth



Source: DOS

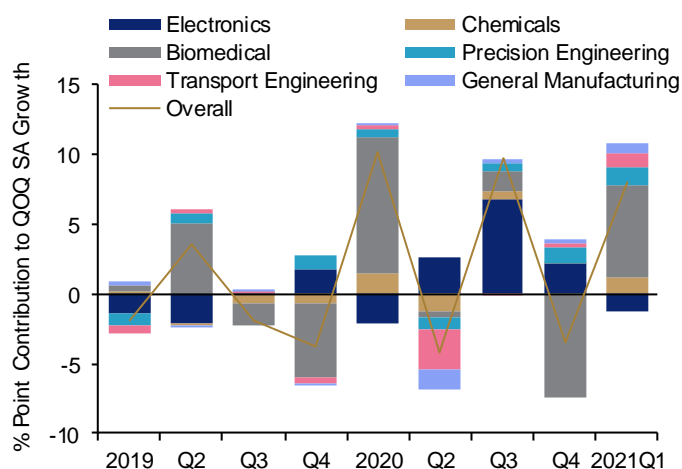
* Advance estimates

The trade-related industries have held up relatively well

Singapore's Index of Industrial Production (IIP) contracted by 3.4% q-o-q SA in Q4 2020, before expanding by 8.0% in Q1 2021 (**Chart 2.4**). A large part of the volatility was due to the pharmaceuticals segment (part of the biomedical cluster), which fell by 46% q-o-q SA in Q4 2020, before rebounding by 69% in Q1. Excluding biomedical, IIP growth slowed to 2.7% in Q1 2021, from 5.1% in Q4 and 11% in Q3. Output in the semiconductor industry (under the electronics cluster) increased at a more moderate pace of 5.5% in Q4 compared to 18% in Q3 and declined by 2.7% in Q1. While the underlying demand for semiconductors remained strong, some near-term consolidation was expected in view of the industry's exceptional performance in the earlier quarters.

Chart 2.4 Industrial production rose in Q1 2021, supported by the biomedical cluster

Index of industrial production



Source: EDB

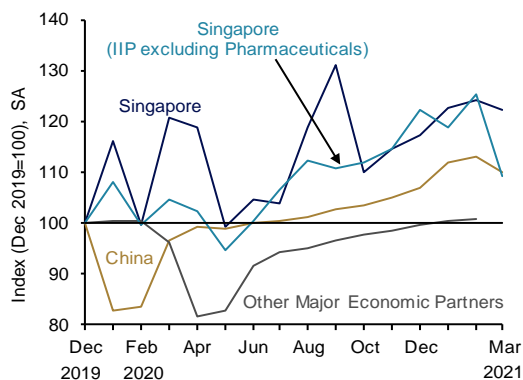
Note: Due to chain-linking, the additive property of sub-aggregate series may not hold.

In comparison, the precision engineering cluster grew by 8.4% q-o-q SA in Q4 2020. Its pace of growth was broadly maintained at 8.9% in Q1 2021, supported by firm underlying demand for semiconductor-related equipment. Meanwhile, manufacturing industries with a high reliance on work permit holders, such as marine & offshore (transport) engineering (M&OE), recovered further in Q1 2021. The M&OE industry expanded by 31% q-o-q SA, extending the double-digit increase in Q4, supported by steady normalisation of workforce strength. Nevertheless, output in this segment, together with that of aerospace, remained below pre-pandemic levels.

Domestic production levels have largely tracked the performance of China's manufacturing sector, with industrial production in both economies climbing in tandem since mid-2020 (**Chart 2.5**). Moreover, firm demand from China has supported exports, with NODX to China outperforming the rest of Singapore's trading partners, underpinned by strong exports of machinery & transport equipment and chemical products (**Chart 2.6**).

Chart 2.5 Industrial production in Singapore rose in tandem with that in China

Index of industrial production

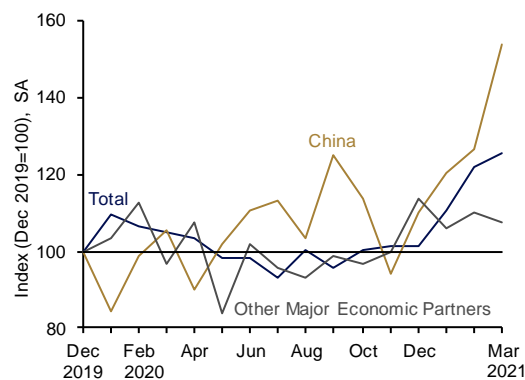


Source: Haver Analytics, EDB and EPG, MAS estimates

Note: Other major economic partners comprise the US, Japan, Malaysia, Germany, South Korea and Taiwan. Their IIP were weighted by their respective shares of VA inputs into Singapore's exports. The latest data point is Feb 2021.

Chart 2.6 Singapore's NODX to China have been firm

Singapore's NODX excluding gold

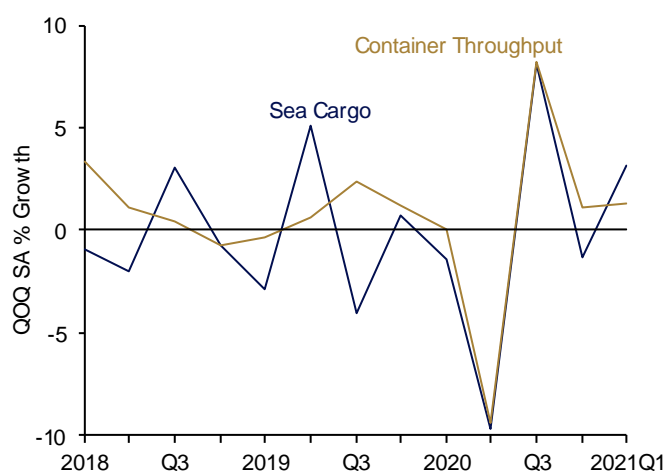


Source: Haver Analytics, Enterprise Singapore and EPG, MAS estimates

Similar to the manufacturing sector, the water transportation segment expanded on a sequential basis in Q1 2021, with the volume of total sea cargo handled at Singapore's ports rising by 3.2% q-o-q SA, after falling in Q4 2020 (**Chart 2.7**). This was largely driven by stronger shipments of oil. Meanwhile, container throughput rose by 1.3% q-o-q SA in Q1, up from 1.1% in Q4. While Singapore has been hit by disruptions to global supply chains which resulted in port congestion, PSA International has been working with shipping lines to adjust its capacity as throughput fluctuated.

Chart 2.7 Both sea cargo handled and container throughput rose sequentially at the start of 2021

Sea cargo handled and container throughput



Source: MPA and EPG, MAS estimates

Note: Container throughput refers to the total number of containers loaded and unloaded at the Port of Singapore. The figures include transshipment containers. Sea cargo handled includes both general cargo (mainly containerised) and bulk cargo (oil and non-oil).

Modern services lost some momentum after firm growth in the preceding quarter

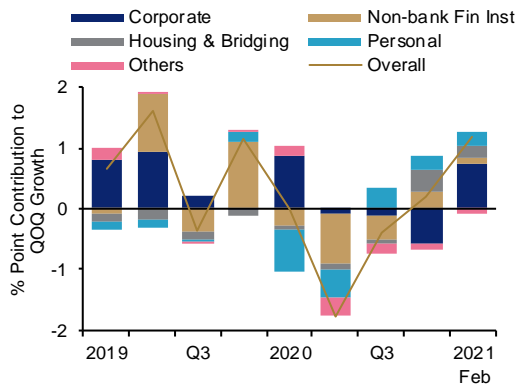
Information & communications, finance & insurance and professional services collectively grew by 5.1% q-o-q SA in Q4 2020, before contracting by 0.7% in Q1 this year. The earlier expansion was driven by industries which had done well throughout the ongoing pandemic. For instance, the payments and IT & information services segments were supported by the rise of e-payments, e-commerce and remote working arrangements. Meanwhile, the insurance segment experienced strong demand for single-premium life insurance products, in part because the further reduction in market interest rates decreased the attractiveness of bank deposits. The fund management segment performed well amid healthy returns in equity markets. However, these segments saw slower growth in early 2021.

Similarly, the pace of expansion in the professional services sector continued to moderate after the initial sharp rebound in Q3 2020. The recent weakening was fairly broad-based across architectural & engineering services, business consultancy and head office functions.

In contrast, credit intermediation has picked up in recent quarters. Among DBUs, non-bank loans increased by 0.2% q-o-q in Q4 2020 and subsequently by 1.2% in the first two months of 2021, supported by loans to non-bank financial institutions and more recently, corporate loans to the building & construction and general commerce sectors (**Chart 2.8**). ACU non-bank loans fared even better, climbing by 1.9% in Q4 and accelerating to 5.8% in February 2021, as loans and trade bills to East Asia rose significantly (**Chart 2.9**).

Chart 2.8 DBU non-bank loans increased mainly due to corporate loans

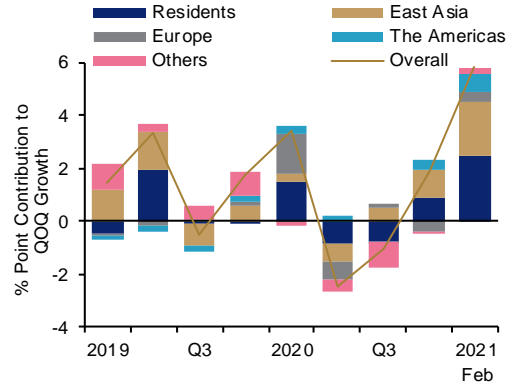
DBU non-bank loans by loan type



Source: MAS

Chart 2.9 ACU non-bank loans were supported by loans to East Asia

ACU non-bank loans by region



Source: MAS

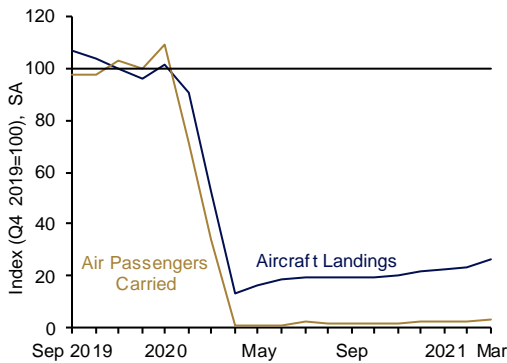
There are few indications as yet of a revival in the travel-related sector

Within the travel-related sector, output in the air transport segment remained severely depressed. The number of aircraft landings and air passengers only picked up slightly to reach 24% and 2.9% of pre-COVID levels in Q1 2021 (**Chart 2.10**). While visitor arrivals rose by 31% q-o-q to 68,679 in Q1 2021, this was well below the quarterly average of 4.8 million in 2019.

Meanwhile, the hotel occupancy rate averaged 57% in Q4, declining from 64% in Q3, in part reflecting the release of hotels contracted for Government use and the opening of newly-licensed hotels which resulted in an increase in the stock of available rooms (**Chart 2.11**). With the moderation in demand for staycations after the year-end holidays, the average hotel occupancy rate fell further to 43% in Jan–Feb.

Chart 2.10 The air transport industry remained severely depressed

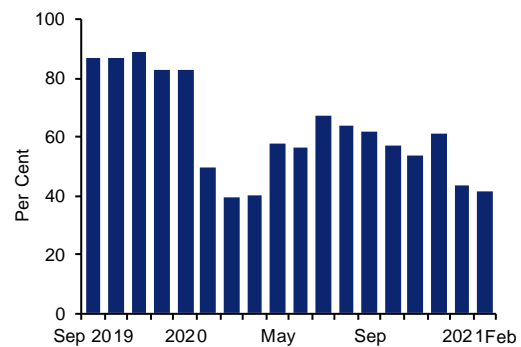
Indicators of air transport



Source: CAAS and EPG, MAS estimates

Chart 2.11 Hotel occupancies have trended down

Hotel occupancy rate



Source: STB

Growth in consumer-facing segments tapered off following the post circuit breaker surge

Following the rebound in Q3 2020, growth in retail sales eased to 2.8% q-o-q SA in Q4, before contracting slightly by 1.3% in Jan–Feb this year. While spending on discretionary items such as telecommunications & computers and watches & jewellery continued to recover and supported overall retail sales in Jan–Feb, this was insufficient to offset the decline in spending on supermarket goods, optical products & books, as well as medical goods & toiletries. Meanwhile, turnover of F&B outlets grew at a slower pace of 8.1% q-o-q SA in Q4 compared to 45% in Q3, before falling by 3.9% in Jan–Feb. Most sub-segments remained weak at the start of the year. Notably, restaurant sales fell by 7.9% in Jan–Feb relative to Q4, even as turnover of food caterers rose by 9.5% from a low base. By Jan–Feb, retail and F&B sales had recovered to 94% and 77% of pre-COVID levels.

The construction sector continued to pick up amid constraints

Activity in the construction sector surged by 55.6% q-o-q SA in Q4 2020, faster than the 37.5% increase in Q3, as more foreign workers residing in dormitories resumed work. However, growth slowed in the first quarter of this year, as activity remained capped by safe management measures, with cross-deployment of workers across projects still disallowed. By Q1, the sector's VA had recovered to 79% of its Q4 2019 level, from a trough of 34% in Q2 last year. The improvement was broad-based across segments, with public and private sector certified payments returning to 80% and 85%, and the residential segment exceeding 90% of their respective pre-pandemic activity levels.

2.2 Economic Outlook

The growth outlook for the Singapore economy has improved, with external demand picking up

Singapore continues to record a relatively low rate of COVID-19 infections, and the vaccination programme is well underway with 2.21 million shots administered as at 18 April 2021. Coupled with stronger external demand, the outlook for the Singapore economy has improved. The Q1 2021 Business Expectations Survey by DOS and EDB showed that business sentiment has finally turned positive. A net weighted balance¹ of 32% of firms in the manufacturing sector and 7% in the services sector anticipated a more favourable business outlook following several quarters of negative readings.

However, the projected growth outcomes across sectors have become more disparate than previously envisaged. The prospects for sectors less affected by the pandemic, especially manufacturing, have brightened. Meanwhile, the prognosis for the worst-hit sectors such as air transport and accommodation has deteriorated somewhat amid the global surge in COVID-19 cases and the emergence of more contagious strains of the virus, diminishing hopes of substantial reopening of international borders in the near term.

Manufacturing is expected to see strong growth in 2021, led by electronics production

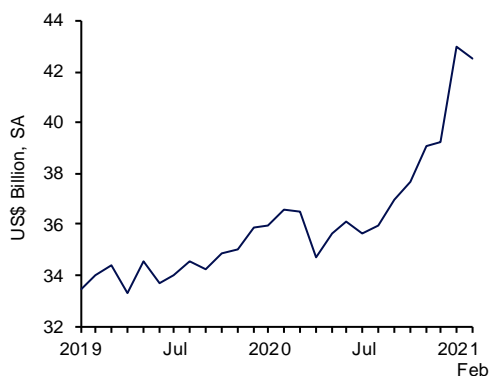
The robust upswing in the global tech cycle amid the supply shortage for semiconductor chips will boost production in Singapore's electronics cluster in 2021. Global chip sales rose by an average of 17.7% y-o-y in Jan–Feb this year, accelerating from 9.6% in Q4 2020 (**Chart 2.12**). A decomposition suggests that final investment demand and rising chip prices have been the main drivers of sales since Q3 2020 (**Chart 2.13**). In contrast, global chip sales in H1 2020 were supported by stockpiling activity in China, ahead of the imposition of trade sanctions by the US. More recently, strong underlying demand for semiconductors has been underpinned by the widespread rollout of 5G technology in smartphones and base stations; a faster recovery in the automobile market; and derived demand for IT equipment from increased work-from-home arrangements.

Reflecting the stronger outlook, Gartner forecasts global semiconductor revenue to grow by 12% in 2021, following the 10.4% expansion in 2020. The uptick in demand for chips has led to a global supply shortage, with inventory-to-shipment ratios of semiconductors falling to historically low levels in Korea, Taiwan, and the US. Lean inventory levels have pushed up chip prices, which portend further strengthening in electronics production and shipments going forward. Domestically, the strong performance of the electronics cluster will also benefit the closely related precision engineering industry, which will be boosted by higher demand for semiconductor production equipment and ancillary inputs. Gartner has upgraded its 2021 forecast for global semiconductor capital expenditure growth from 3.1% to 6.3%, though this remains lower than the 7.6% increase recorded last year.

¹ The net weighted balance is commonly used to reflect the direction and extent of the business sentiments. It is calculated by taking the difference between the weighted percentages of "ups" and "downs". A plus sign in the net weighted balance indicates a net upward trend and a minus sign denotes a net downward trend.

Chart 2.12 Global chip sales rose at a faster pace in Jan–Feb, compared to Q4 2020...

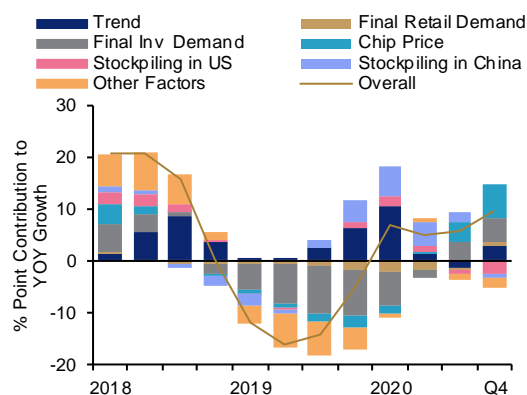
Global chip sales



Source: World Semiconductor Trade Statistics and Haver Analytics

Chart 2.13 ... with growth in recent quarters driven by final investment demand and rising chip prices

Decomposition of global chip sales growth



Source: Haver Analytics and EPG, MAS estimates

Note: Global chip sales data was first decomposed into trend and cyclical components using the Frequency Domain filter. The cyclical component was then regressed on the corresponding components in electronics retail sales (China and US), gross fixed capital formation (G3 and Asia), South Korea’s PPI for semiconductors, materials inventory of electronics manufacturers in the US and integrated circuit imports by China. These regressors capture consumer demand, investment demand, chip price, stockpiling in the US and stockpiling in China.

As the pandemic recedes, previously strong demand for some modern services segments could begin to ebb

The pandemic has accelerated several trends, such as the rise of e-payments and e-commerce, as well as the digitalisation of business processes. Even as the pandemic gradually recedes, these trends are likely to continue. Associated modern services segments, such as payments, credit card processing and IT & information services, which performed well last year, should expand at a steady clip over the near to medium term.

In comparison, the growth momentum of other segments which performed well during the pandemic could moderate in the coming quarters. Within the fund management segment, asset prices could come under pressure due to already-stretched valuations and weigh on VA growth. Likewise, the surge in demand for shorter-term single-premium insurance products could fade as the improved economic outlook puts upward pressure on market rates and encourages substitution back into other financial products. Meanwhile, credit intermediation activities are likely to expand in tandem with the economic recovery of Singapore and the regional economies.

The travel-related sector is projected to see weaker recovery than previously anticipated, as global travel restrictions are unlikely to be lifted this year

Global travel is expected to remain weak in 2021, with governments cautious about the reopening of borders amid the emergence of new COVID variants. It will also take time for travellers to regain confidence. Leisure travel is expected to rise only gradually in the second

half of the year even if the International Air Transport Association (IATA) Travel Pass² scheme leads to some reopening of borders. Meanwhile, Singapore will be launching its air travel bubble with Hong Kong on 26 May and is also in discussions with Australia and Taiwan on similar arrangements. In comparison, business travel is expected to resume more slowly, as many companies have adapted to virtual meetings, a behavioural shift that is likely to prove lasting. Accordingly, Singapore's air transport industry is expected to continue operating at less than half of pre-COVID levels even by year-end. At the same time, domestic tourism will provide a thin lifeline to the accommodation and arts, entertainment & recreation industries, but revenue from such a short-term pivot will not be sufficient to compensate for the diminution of international travel.

Improved labour market conditions should provide some support to the consumer-facing segments

The consumer-facing retail and F&B sectors are expected to be bolstered by an improvement in consumer sentiment amid strengthening labour market conditions. Both sectors should also continue to benefit from the partial reallocation of residents' foregone overseas consumption towards the domestic market. However, sequential growth in these sectors is unlikely to pick up substantially in the coming quarters. First, visitor spending, which accounts for around 13%³ of total retail sales, may not see a material recovery in 2021 as international borders remain closed for the large part of the year.⁴ Second, the recovery of the F&B sector continues to be held back by limits on dining-in and large-scale events, affecting in particular the demand for catering services.

Construction output should be supported by firm demand, but supply impediments may take some time to resolve

Activity in the construction sector should be supported by the backlog of projects held back by COVID-19 and an anticipated pickup in construction demand in 2021. Regression analysis of the historical relationship between certified payments and contracts awarded points to a lag that could extend to eight quarters. The numerous contracts awarded in late 2018 and 2019, and projects delayed by COVID-19, are expected to progressively bolster construction VA in 2021 (**Chart 2.14**). Moreover, construction demand should improve following the sharp pullback during the pandemic. The expected increase in the number of contracts awarded in the coming quarters, including for public housing projects, major public infrastructure projects such as the Jurong Region Line MRT stations, redevelopment of remaining en-bloc sites and major retrofitting of commercial buildings, should further support certified payments in the medium term.

However, supply-side constraints will continue to hamper the industry in the near term. Around 50,000 foreign construction workers (12% of the workforce in the construction sector) were shed last year. In the absence of renewed labour inflows or a substantial improvement in productivity, manpower shortages will likely be binding, though the distribution of vaccines to construction workers should result in a gradual easing of safe management measures. The ongoing manpower shortage and rising global material costs are likely to exert upward

² The IATA travel pass is a mobile application under development which will allow travellers to store and manage certifications for COVID-19 tests or vaccines. The information can be shared with border authorities requiring proof of vaccination or tests for international travel.

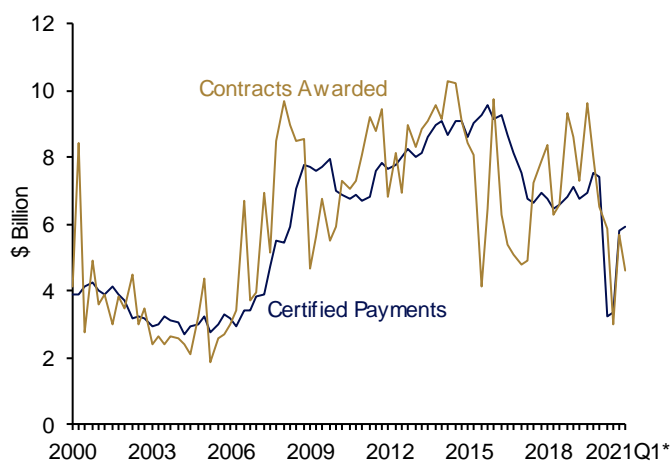
³ Based on 2019 estimates.

⁴ There was also a significant outflow of foreign workers in 2020.

pressures on construction costs and tender prices this year, which may cause firms with less financial buffers to put some projects on hold. As a result, construction output is expected to remain below its pre-COVID level at end-2021.

Chart 2.14 Construction sector output in 2021 will be supported by contracts awarded in previous years including projects delayed by the pandemic

Contracts awarded & certified payments



Source: BCA

* Estimated based on Jan–Feb data

Singapore's GDP growth could exceed 6% in 2021, turning around from the 5.4% contraction in 2020

All in, Singapore's GDP growth in 2021 is likely to exceed the upper end of the official 4–6% forecast range, barring a significant setback in activity from a weaker recovery of the global economy or a surge in locally transmitted cases. The robust GDP estimate belies continued unevenness in the dispersion of the recovery and is accompanied by elevated uncertainty. The "worst-hit" and "significantly-hit" sectors in the economy will continue to see output shortfalls relative to pre-COVID levels by the end of the year. There are upside risks to growth such as from a stronger-than-anticipated upturn in the global electronics cycle, but these are accompanied by downside risks pertaining to the mutation of the virus and efficacy of vaccination.

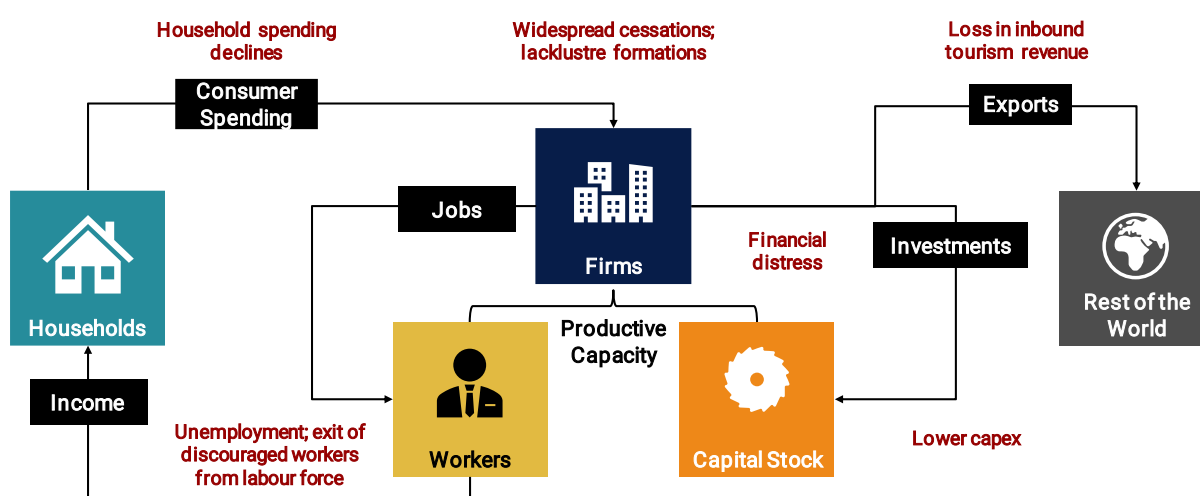
2.3 Possible Longer-Term Effects from the COVID-19 Pandemic

COVID-19 can have a longer-term impact through the impairment of labour & capital accumulation

This section examines the possible persistent effects of the pandemic and the channels through which they may occur, as illustrated in **Figure 2.1**.

Figure 2.1 Impact of COVID-19 through the impairment of labour & capital accumulation

Transmission channels of the COVID-19 shock



Source: EPG, MAS

The pandemic has unleashed simultaneous supply and demand shocks on economic activity. On the supply side, temporary work stoppages, travel restrictions, and social distancing measures have reduced the effective productive capacity of the economy, particularly in the contact-intensive sectors. These supply effects are amplified when cross-border supply chains are also disrupted. On the demand side, consumers' ability and willingness to purchase goods and services are impacted as a result of the supply restrictions, as well as through an increase in precautionary savings amid uncertainty about their future earning capacity. For countries that are highly dependent on trade or tourism flows, the demand shock is transmitted more significantly through the external demand channel.

Persistent shortfalls in economic activity can result in an impairment of human and physical capital accumulation. First, as revenue and profitability stay depressed, firms may be forced to cut back on production and costs, resulting in layoffs. If businesses are forced to cease operations, there will be a permanent loss in capability. Unemployed workers who are unable to find work after a prolonged period may experience a deterioration in their skills that reduces human capital. Second, firms will reduce investment, leading to slower physical capital accumulation, and in turn, inhibiting the pace of technology adoption and productivity gains.

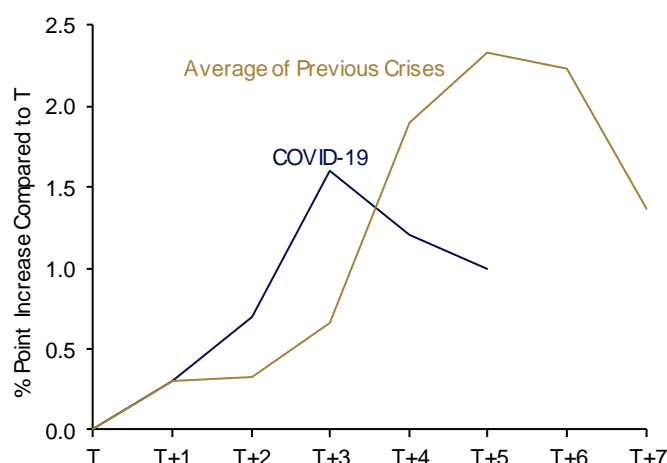
The following section considers whether these possible long-term effects are occurring in the Singapore economy.

Government initiatives have ameliorated some of the adverse effects of the pandemic on the resident workforce

In the labour market, a range of indicators suggest that the consequences of COVID-19 have been alleviated at this stage. First, the rise in unemployment has been relatively restrained. The resident unemployment rate peaked at 4.8% in Q3 2020, a rise of 1.6% points three quarters after the start of the crisis (**Chart 2.15**). This peak was reached earlier, and at a lower rate, compared to previous downturns, when the resident unemployment rate peaked after five quarters, rising by an average of 2.3% points. The impact of the COVID-19 recession on unemployment was significantly mitigated by the nature of the recession as well as by prompt and sizeable policy interventions in the labour market. Demand for workers collapsed with the imposition of the circuit breaker, but then rebounded quickly when domestic transmission of the virus was contained and the economy began to reopen. At the same time, measures to help firms retain their workers such as the Jobs Support Scheme (JSS) played a critical role in tempering the fall in employment through the period of sharply reduced output and incomes. (For an analysis of the labour market policy response to COVID-19, please refer to Box B in Chapter 3.)

Chart 2.15 Resident unemployment rate peaked at a lower level in the current crisis

% point change in seasonally-adjusted quarterly resident unemployment rate compared to time T



Source: MOM and EPG, MAS estimates

Note: T=Q4 2019 for COVID-19 and peak VA quarter for the previous recessions: AFC (Q3 1997), IT Downturn (Q3 2000) and 2008–09 Recession (Q1 2008). The last datapoint for the COVID-19 series is the average reading for Jan–Feb 2021.

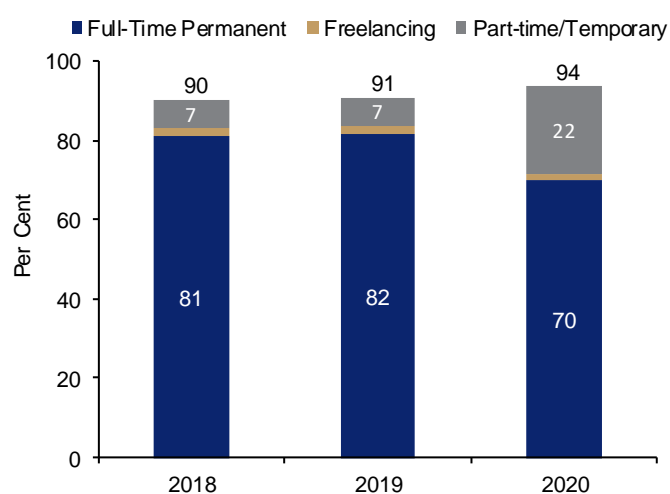
Second, workers who were displaced from their jobs have largely been able to re-enter employment. While there is evidence that displaced workers have faced more difficulty re-entering employment than in normal economic times, the re-employment rate has held up relatively well compared to past downturns. The rate at which retrenched resident workers re-entered employment within six months fell by a modest 2% points from the previous year to

62% in 2020⁵. Amid the intensive public sector effort to help unemployed workers get matched to jobs, the rise in the resident long-term unemployment⁶ rate has also been modest, reaching 1.1% in Q4 2020, a small increase from the 0.9% reading in the same period last year.

Third, weak labour demand and elevated job losses during the pandemic have not resulted in a significant number of residents exiting the labour force. Even in the most acute phase of the crisis, the labour force participation rate held up at 68.1% in June 2020, similar to that in June 2019. While recessions can have negative effects on labour force engagement for younger workers, early indications suggest that the 2020 graduating cohorts have largely been able to secure jobs or traineeships. The share of university graduates who managed to secure employment within six months in fact rose to 94% in 2020, from 91% in 2019 (Chart 2.16). However, amid weaker labour demand, the share of university graduates in part-time or temporary roles increased from 7% to 22%, with about three in four of these graduates participating in the SGUnited Traineeship Programme. The employment rate for polytechnic graduates also largely held up in 2020, with the proportion who secured employment opportunities within six months (87%) seeing only a moderate decline compared to the previous cohort (91%). Of the graduates in temporary roles, 16% took up SGUnited Traineeships. SGUnited Traineeships thus appear to have provided an important bridge for graduates to gain some early-career job experience during a period of weak hiring.

Chart 2.16 University graduating cohorts have largely been able to secure jobs

Employment opportunities of fresh graduates from full-time programmes



Source: MOE 2020 Graduate Employment Survey

Note: The survey covers fresh graduates from full-time programmes at the National University of Singapore, Nanyang Technological University, Singapore Management University and Singapore University of Social Sciences.

⁵ MOM (2021), "Labour Market Report 2020", March 16.

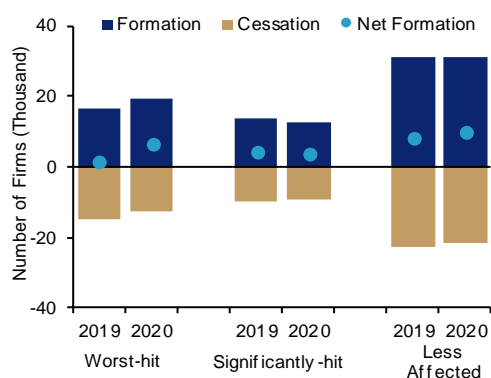
⁶ Individuals are considered long-term unemployed if they are out of work for more than 25 weeks.

Overall net firm formation remained positive; setback to the aviation industry could be long-drawn

There were fewer firm cessations in 2020 compared to the year before (**Chart 2.17**). Firm formations in the worst-hit sectors rose by almost 3,000 during the pandemic year. The retail and food & beverage sectors saw a large number of firm formations, while firm cessations also fell, possibly reflecting a rise in the number of small, or home-based businesses, which have thrived amid resilient resident spending. These trends are corroborated by the observation that more sole proprietorships and partnerships were formed in 2020 compared to 2019 (**Chart 2.18**). There were also fewer closures of sole proprietorships and partnerships during the same period. In comparison, there was a decline in the formation of companies, limited partnerships and limited liability partnerships.

Chart 2.17 Net firm formation was supported by small firms in the retail and F&B sectors...

Net firm formation by sector

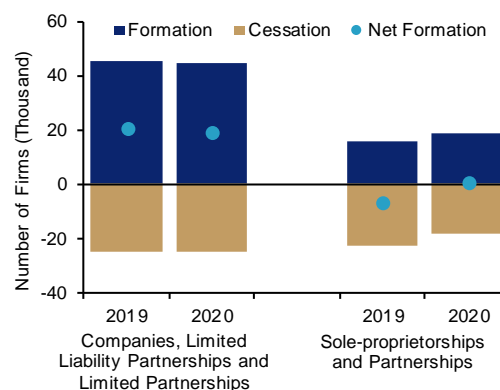


Source: DOS and EPG, MAS estimates

Note: Refer to Chart 2.1 for the detailed industries within the sectors.

Chart 2.18 ... alongside a rise in the formation of sole proprietorships and partnerships

Net firm formation by firm type



Source: DOS and EPG, MAS estimates

Firms in the aviation industry could face serious impairment.⁷ According to IATA's December 2020 forecasts, global passenger traffic could recover to about 50% of pre-COVID levels by end-2021 and return to 2019 levels only in 2024 (**Chart 2.19**). There are risks to these forecasts from the emergence of new variants of the virus and uncertainty over the efficacy of the vaccines, which could cause governments to be more cautious in reopening borders. In the worst-case scenario, IATA forecasts that global air passenger traffic may only reach 38% of 2019 levels by the end of this year.

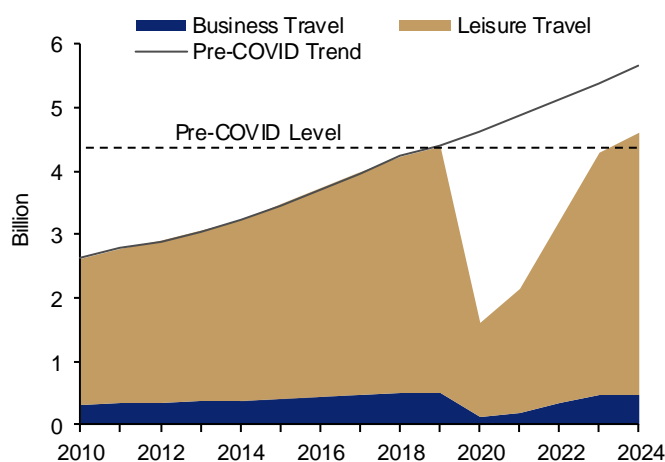
Accordingly, air passenger traffic in Singapore is also expected to reach Q4 2019 levels only by end-2024. While leisure travel is expected to be boosted by pent-up demand, business travel is projected to take a longer time to recover and may see a structural decline, as video calls and collaboration tools that enable remote working replace some onsite meetings and conferences. Referencing the projected growth rates for business and leisure travel from the

⁷ There has been some consolidation within the global airline industry in the past year. For example, Korean Air announced plans to acquire its rival Asiana Airlines in November 2020, while several carriers such as AirAsia and Tigerair closed some subsidiaries (AirAsia Japan and Tigerair Australia) to focus on core operations. Meanwhile, Singapore Airlines retired 26 older aircraft in Q4 2020, and has announced plans to run a smaller fleet in the coming years.

US Travel Association, and assuming that Singapore's global market share remains unchanged from 2019, air passenger arrivals into Singapore for business purposes may stay slightly below pre-COVID levels in end-2024, while leisure travel regains 2019 levels in 2024.

Chart 2.19 Global air passenger traffic is not expected to return to pre-COVID trends

Global passenger departures



Source: IATA, US Travel Association, Statista, World Bank and EPG, MAS estimates

The resilience in business investment augurs well for continued productivity improvements

At the aggregate level, business investment has not been significantly affected by the pandemic. Private equipment investment, which largely comprises machinery, software and intellectual property products, fell by less than 10% from Q4 2019 to Q2 2020, less than the decline in private consumption (**Table 2.1**). Firms' capital expenditure was likely supported in part by the widespread adoption of telecommuting as well as the acceleration of digitalisation and automation of processes. By Q4 last year, private equipment investment had already fully regained its pre-crisis level, unlike in previous downturns when the initial hit was substantially more severe and the recovery more protracted (**Chart 2.20**). The rapid recovery suggests that the pandemic may even accelerate Singapore's productivity performance over the longer term, rather than derailing it. In comparison, the fall in private structures investment (mainly buildings), as well as public gross fixed capital formation, was more severe in this downturn. The sharper decline was largely due to labour supply constraints arising from the virus outbreak in foreign worker dormitories, which had hindered construction activity.

Table 2.1 Private equipment investment, government consumption and net exports performed better than other expenditure components

Expenditure components of real GDP

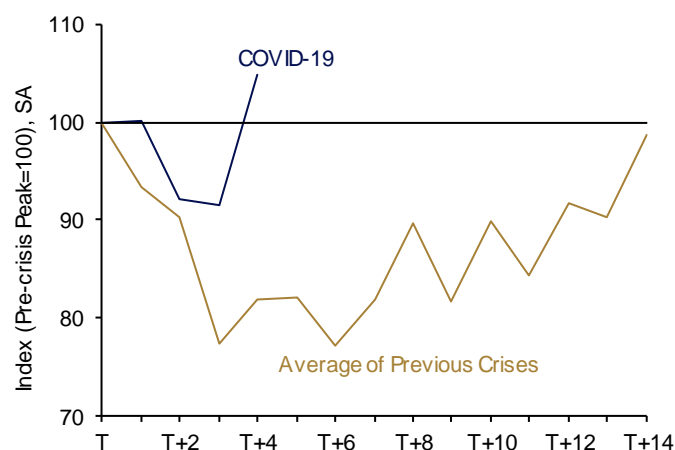
Component (share of 2020 GDP)	Index (Q4 2019=100), SA	
	Q2 2020	Q4 2020
Private Consumption (33.0%)	70.8	88.7
Government Consumption (12.4%)	111.9	110.2
Residential Building Investment (Private and Public) (2.8%)	41.8	92.4
Private Structures Investment (2.2%)	47.1	81.0
Private Equipment Investment (13.3%)	92.0	104.9
Public Structures Investment (2.2%)	57.0	68.3
Public Equipment Investment (0.9%)	105.7	96.0
Net Exports (31.9%)	108.8	110.5

Source: DOS and EPG, MAS estimates

Note: Shares in GDP do not sum up to 100% as changes in inventories and statistical discrepancy are not shown in the table. Structures investment refers to non-residential buildings and other construction & works.

Chart 2.20 Private equipment investment has rebounded faster during COVID-19 compared to previous recessions

Private equipment investment



Source: DOS and MAS, EPG estimates

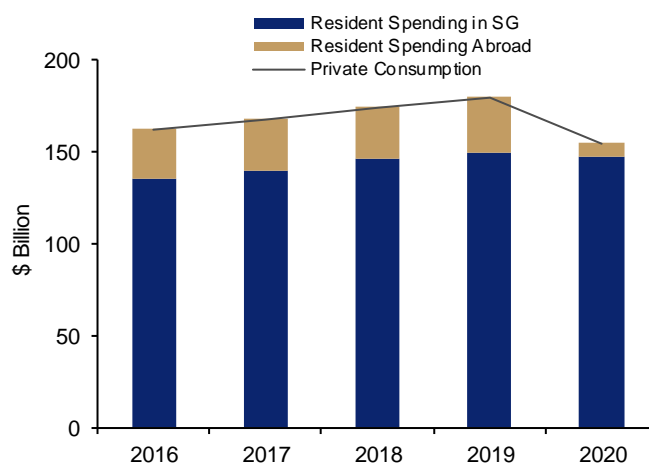
Note: T= Q4 2019 for COVID-19 and peak VA quarter for the previous recessions: AFC (Q3 1997), IT Downturn (Q3 2000) and 2008–09 Recession (Q1 2008).

Substantial fiscal support has helped Singapore avert a deeper recession that could have led to longer-term economic harm. Government consumption contributed positively to the GDP outturn in 2020. With the rise in unemployment mitigated by the government's cost-saving measures for businesses, private consumption picked up from its trough in Q2 2020. The level of resident spending in Singapore in 2020 as a whole was similar to that in 2019 (Chart 2.21). There was likely some substitution from resident spending abroad to spending

in Singapore due to travel restrictions. However, private consumption overall remained below the pre-pandemic level, as residents also increased their savings, with resident non-financial deposits rising in 2020 (Please refer to Chapter 4 for more details).

Chart 2.21 Resident spending locally in 2020 was similar to that in the previous year

Breakdown of resident spending



Source: DOS and EPG, MAS estimates

It remains important to build economic resilience and raise Singapore's productive capacity over the longer term

The crisis has brought to the fore the importance of building economic resilience. This includes resilience against future changes in the economic landscape that are to a large degree unforeseeable, so that the economy can remain competitive over the longer term. Businesses will need to stay nimble and cognisant of opportunities in the flow of activity and resources, so as to expand into new markets, diversify their supply chains and make them more flexible, and strengthen their capabilities by leveraging on digital technologies. The government can support workers' efforts to stay competitive through measures to facilitate worker reallocation, and by providing resources for upskilling and retraining. In this regard, the government has set up the Emerging Stronger Taskforce to "future-proof" Singaporean businesses and livelihoods in the evolving global economy and generate new sources of growth, by accelerating digital transformation and innovation, as well as strengthening environmental and social sustainability.⁸ Ultimately, the aim is to raise Singapore's productive capacity and secure its growth prospects over the longer term.

⁸ MTI (2020), "The Emerging Stronger Taskforce Offers a Glimpse into a Future Economy that is Connected and Sustainable", November 19.