## REPORTING OF QUARTERLY REAL GDP GROWTH RATES

There are three ways to calculate quarterly real GDP growth rates:

- 1. Year-on-year (yoy) growth rate this measures the percentage change in real GDP from the corresponding quarter in the previous year
- 2. Quarter-on-quarter seasonally-adjusted (qoq sa) growth rate this measures the percentage change in real GDP from the preceding quarter, and is calculated from seasonally-adjusted real GDP data
- 3. Quarter-on-quarter seasonally-adjusted annualised (qoq saa) growth rate this extrapolates the qoq sa growth rate in a quarter over the next three quarters to obtain the change in real GDP over a one-year period to facilitate comparisons with annual or yoy growth rates

The primary measure of quarterly real GDP growth reported by MTI in its press releases on GDP estimates is the yoy growth rate. Previously, MTI also provided the qoq saa growth rate as supplementary information in its press releases to better enable the identification of turning points in the economic cycle.

With effect from the advance GDP estimates for the third quarter of 2020 published on 14 October 2020, MTI will provide the qoq sa growth rate as supplementary information in its press releases on GDP estimates, instead of the qoq saa growth rate, for the purpose of identifying turning points.

MTI has switched to the reporting of qoq sa growth rate in its press releases as the qoq saa growth rate is prone to misinterpretation if it is cited without context (i.e., without explaining that it is an annualised rate that extrapolates the reference quarter's real GDP growth for three more quarters). In particular, the public may end up misconstruing the performance of the economy when there are large changes in real GDP from the previous quarter which are unlikely to continue over the next three quarters. For example, the qoq saa growth rate of -43.3 per cent in the second quarter of 2020 exaggerated the contraction in the economy by extrapolating the 13.2 per cent qoq sa decline in real GDP in the second quarter (largely caused by the Circuit Breaker) for three more quarters, even though the Circuit Breaker was unlikely to be repeated for another three quarters.

The Department of Statistics (DOS) will make all three GDP growth rates (i.e., yoy, qoq sa and qoq saa growth rates) available for downloading from DOS' website (<a href="www.singstat.gov.sg">www.singstat.gov.sg</a>) with effect from 14 October 2020.

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