# Employment Diffusion Index – One Way to Tell How Widespread Employment Increases or Declines Were
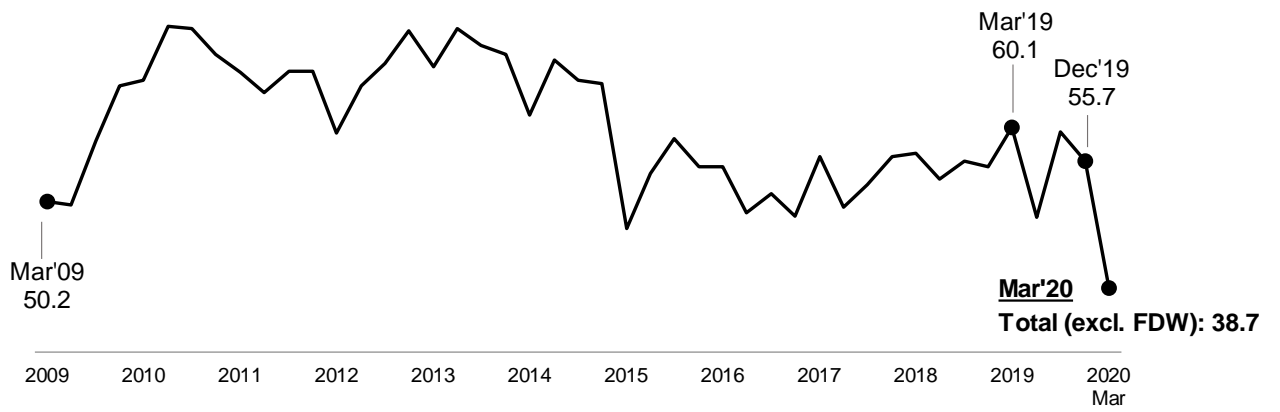
Current employment statistics report the magnitude of increases or declines in employment through a comparison of employment levels between quarters.

The Employment Diffusion Index (EDI) provides an indication of the breadth of employment change, which is important in assessing overall economic trends. It underscores additional information that is valuable in administering a more comprehensive analysis of quarterly employment change.  An increase in total employment caused by employment growth in just a few industries may be of a similar magnitude to that brought about by employment growth in many industries.  Yet a sharp overall employment increase/decline caused by increases/declines in only a few industries can bear very different economic and policy implications as one caused by more widespread changes.  It is therefore important to not only recognise the depth of employment change but also the breadth of it.

In the computation, 203 component industries at the 3-digit Singapore Standard Industrial Classification (SSIC) are each assigned a value, depending on whether employment decreased ("0"), remained unchanged ("50"), or increased ("100") over the quarter.  The EDI is derived by averaging these values. The index can range from 0 to 100.  This methodology is adapted from the US Bureau of Labor Statistics.

Reading the EDI is simple.  If it rises above ("50"), that means more industries increased employment during that period than decreased employment.  On the contrary, if it falls below 50, that simply means more industries decreased employment.  ("50") is the neutral point where the number of industries with employment expansion coincides with that reflecting employment contraction.  The further away this number is from ("50") (either above or below), the more widespread these employment increases, or contractions are.

In 1Q 2020, the EDI for total employment (excl. FDW) in Singapore registered a reading of 38.7 in March 2020, down from 55.7 in December 2019. This indicates there were more industries reflecting employment contraction than industries reflecting employment growth, suggesting that employment contraction (of which the majority was among foreigners) was fairly widespread in March 2020.

Mar'19
60.1

Dec'19
55.7

Mar'09
50.2

**Mar'20**
**Total (excl. FDW): 38.7**

2009   2010   2011   2012   2013   2014   2015   2016   2017   2018   2019   2020
                                                                            Mar

Source: Administrative Records and Labour Force Survey, Manpower Research & Statistics Department, MOM