

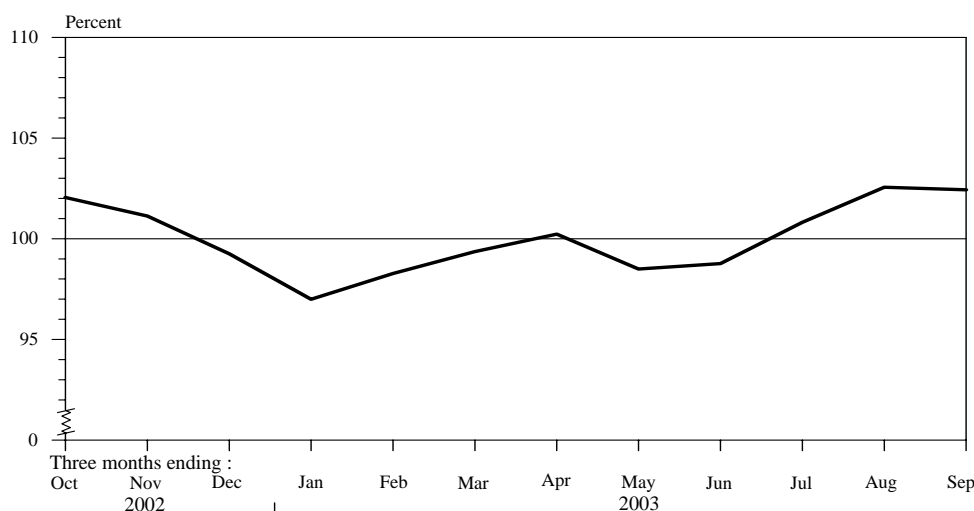
## Box 5.1

### Seasonal adjustment to the unemployment rate

Past data series shows that the unemployment figures tend to be influenced by seasonal variations over the course of a year, such as increased business activity and thus labour demand around the Christmas and Lunar New Year Holidays, relative slack in business activity and thus labour demand in the latter part of the first quarter, entry of a new batch of fresh graduates and school leavers into the labour force during the summer months, etc.

In order to make the underlying trend of the unemployment rate more discernible, the data series on unemployment rate is seasonally adjusted using the widely adopted X-11 ARIMA method to remove the effect of seasonal variations. Application of this method to the Hong Kong data basically involves first, the derivation of seasonal factors for adjusting the employment and unemployment figures, based on the respective data series over the past five complete years. Then, the seasonally adjusted employment and unemployment figures are added together to give the seasonally adjusted labour force. Finally, the seasonally adjusted unemployment rate is derived by dividing the seasonally adjusted number of unemployed persons by the seasonally adjusted labour force.

Seasonal factor used for adjusting the unemployment rate



Note : When the seasonal factor exceeds 100%, there will be downward effect on the unemployment rate after seasonal adjustment, and vice-versa.

While the published unemployment rate is seasonally adjusted as such, the published figures on labour force, employed persons and unemployed persons are not seasonally adjusted, so as to directly reveal the actual numbers in the respective categories within the population of Hong Kong.