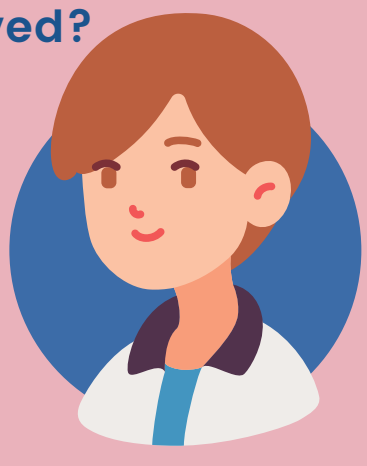
# Real and Nominal Growth Rates Explained

## What is the difference between real and nominal growth rates?

Using manufacturing output as an example, the real growth of manufacturing output is adjusted for price changes. It reflects changes in volume of goods produced by the manufacturing sector across the years. In contrast, the nominal growth of manufacturing output is not adjusted for price changes.

## How are real and nominal growth rates derived?

Let us look at the example below to derive the real and nominal growth of manufacturing output in a factory producing goods in Singapore.



**Illustration**

| Year | Goods Produced | |
|---|---|---|
| | Quantity ('000) | Price/Unit (S$) |
| 2019 | 8 | 15 |
| 2020 | 10 | 20 |

**Nominal Values**

| Year | Nominal Manufacturing Output ('000) |
|---|---|
| 2019 | 8 x $15 = $120 |
| 2020 | 10 x $20 = $200 |

**67%** Nominal Growth

The nominal manufacturing output values are computed using the current market prices in the respective year. It reflects changes due to quantity and price increases.

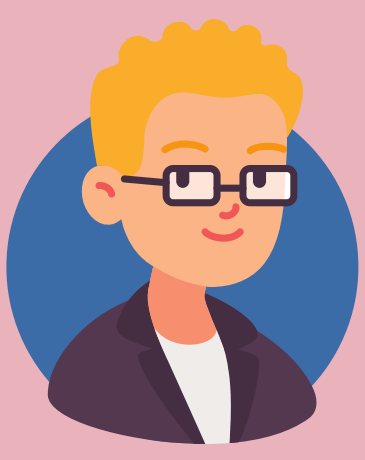
**Real Values**

| Year | Real Manufacturing Output ('000) |
|---|---|
| 2019 | 8 x $15 = $120 |
| 2020 | 10 x $15 = $150 |

**25%** Real Growth

The real manufacturing output values are computed based on 2019 prices. It reflects the changes in quantity of goods produced.

## Where do I find real and nominal growth rates of manufacturing output?



The Singapore Economic Development Board publishes both real and nominal growth rates of Singapore's manufacturing output.

| Growth Rates | Publication | Frequency |
|---|---|---|
| Real | Monthly Index of Industrial Production | Monthly |
| Nominal | Census of Manufacturing Activities | Yearly |