11. The Cost Curves

A cost curve is a graph of the **costs of producing a good** as a function of the **amount of that good produced.** Firms will always aim to minimise costs per unit while maximising profits (revenue *less* costs)

The Marginal Cost Curve

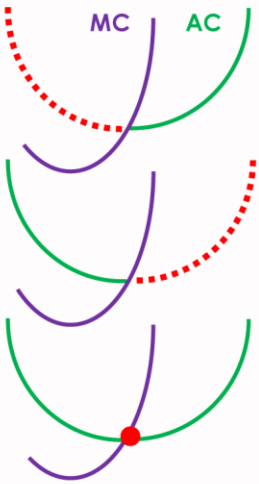
(Think of firms cost of producing apples…)

TinyApple Inc makes only 5 apples

- Each of the 5 apples costs €1 each to produce so the average cost (AC) = **€1**
- The firm decides to make one more apple (marginal cost **MC** = the cost of that *extra* apple)
- The extra/marginal cost is **80c**

80c < €1 so **MC < AC**

- Now, 6 apples are produced costing €1, €1, €1, €1, €1 and 80c…average **97c each**

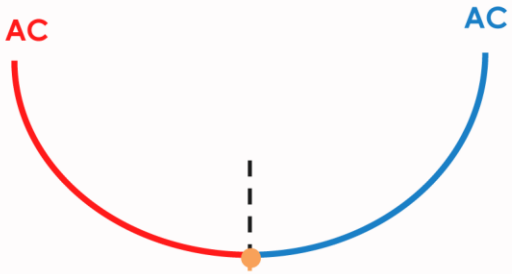


If **MC<AC**…then **AC** is **FALLING**

If **MC>AC**…then **AC** is **RISING**

If **MC=AC**…then **AC** is **at its lowest point**

The Average Cost Curve



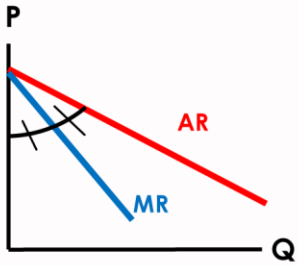
Downward sloping
1. Better spread of fixed assets
2. Specialisation of labour

Upward sloping

Diseconomies of scale

MES: Minimum Efficient Scale
Scale of production where internal **Economies of Scale (EOS)** are fully exploited

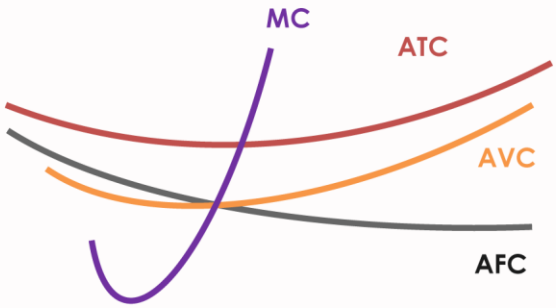
The Revenue Curves



AR: As Q↑, income per unit falls and cost per unit rises. **AR↓**

MR: Like AC, AR is **falling** when MR<AR **(MR** is twice as steep as **AR)**

More Cost Curves



MC — The cost of producing that extra unit

AFC — Spread of ***fixed*** assets per unit of production. **Fixed assets** = buildings *or* equipment . You pay rent or maintenance on these which doesn't change as the company ↑ (unless you buy more of them)
As Q produced↑ AFC per unit↓

AVC — Spread of ***variable*** assets per unit of production**. Variable assets =** overheads, labour costs or raw materials**.** These change as production grows. **As Q produced ↑, AVC falls ↓ (at first), then rises ↑)**

ATC — Total average cost (**fixed +variable**)