Important Facts For Prelims (29th April 2019)

Compounded Annual Growth Rate (CAGR)

- The CAGR is the yearly **smoothened growth rate of an investment after a given interval.** This is **different from the average annual growth rate** that investment might have seen over the two years. E.g.:
    - An investment of ₹1,000 is made in 2014, which then grew 200% in the first year to ₹3,000 in 2015, but then corrected to ₹1,500 in the second year.
    - In this case, the average annual growth rate would be 75%, which is the average of 200% growth in the first year and a 50% contraction in the second.
    - However, a 75% annual growth rate would have yielded a return of ₹3,062.5 at the end of the second year, which is not what happened.
    - **To arrive at a more realistic growth rate to explain what happened, the compound annual growth rate, which basically smoothes out the average growth per year over the period under consideration.**
    - So, in this example, the CAGR would be 22.47%. This number shows how much ₹1,000 would have to grow every year to reach ₹1,500 by the end of the second year.
- Calculating CAGR requires three pieces of information: the **start value of the investment**, **end value,** and the **number of periods** under consideration.
- CAGR provides a **more accurate rate of growth** that can help investors arrive at a more informed decision about their investment.
- However, **CAGR does not reflect investment risk.** It does **not provide information about how the investment has performed** within that time period.