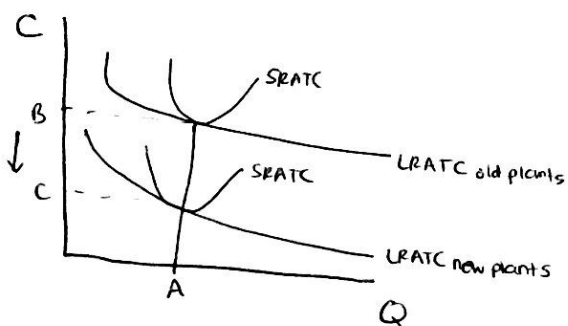


- efficiency $\rightarrow$ combination of two firms lead to lower C than they can achieve as separate firms
- integration undertaken more to fulfil ambitions of managers rather than achieving efficiency
- managers who have taken over another firm gain prestige and $\uparrow$ income as company size and market share $\uparrow$.

Firms and technological change:

- 1) More Q produced with same input
 - 2) existing Q undergo improvements in quality
 - 3) new products become available
- enhances production/consumption possibilities by $\uparrow$ productivity of capital $\rightarrow$ improves quality of life compared to previous generations.
 - invention: new idea that can be patented
 - innovation: putting of an invention into commercial use. Process of converting ideas into better ways of doing business or into new ^{improved} product
 - innovation $\rightarrow \downarrow C \rightarrow$ new products, processes and production techniques
 $\downarrow$
~~established~~ in dynamic efficiency
_{has to be}
 - technical progress embodied in a new capital equipment, human skills or new intermediate products
 $\therefore$ there are limits to speed of changes as new equipment comes on stream only at rate of gross investment
 - innovation takes time to become the norm in all industries especially if they require high levels investment



- BC unit saving costs
- new plants able to earn profits and built immediately $\rightarrow$ Shift industry S curve right $\rightarrow P \downarrow$
- firms that have not invested in new plant find it hard to compete as their C will be higher than firms with innovation
- Some industries experience virtually constant technical change where new innovation continually $\downarrow C$.
- firms in such industries experience short life cycles of their products. Explanation of high Prices: shorter life cycles, firms recoup as much of their initial investment C as rapidly before imitators enter and $\downarrow P$. Original innovators will discontinue producing and concentrate on newer ^{technology} products. Less known firms concentrate on older models until no longer profitable and discontinued.