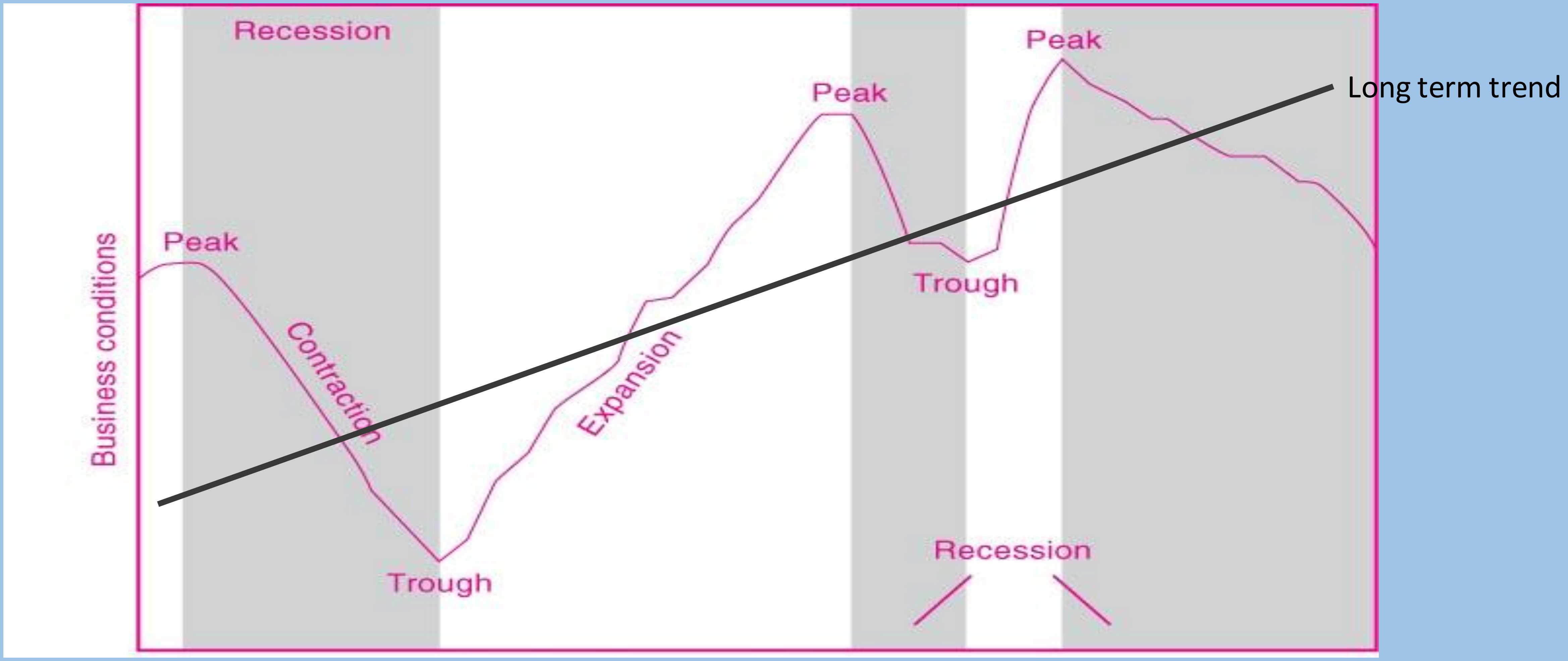
Business Cycles, Aggregate Demand and Supply

- **Business Cycles (BCs)**
  - BCs refer to the regular periodic fluctuations in production, income and employment. These can be of durations between about 2 to 10 years.
  - BCs have been a regular characteristic of market economies, though the patterns of cycles are irregular. No two business cycles are perfect replica of each other, but can be similar.

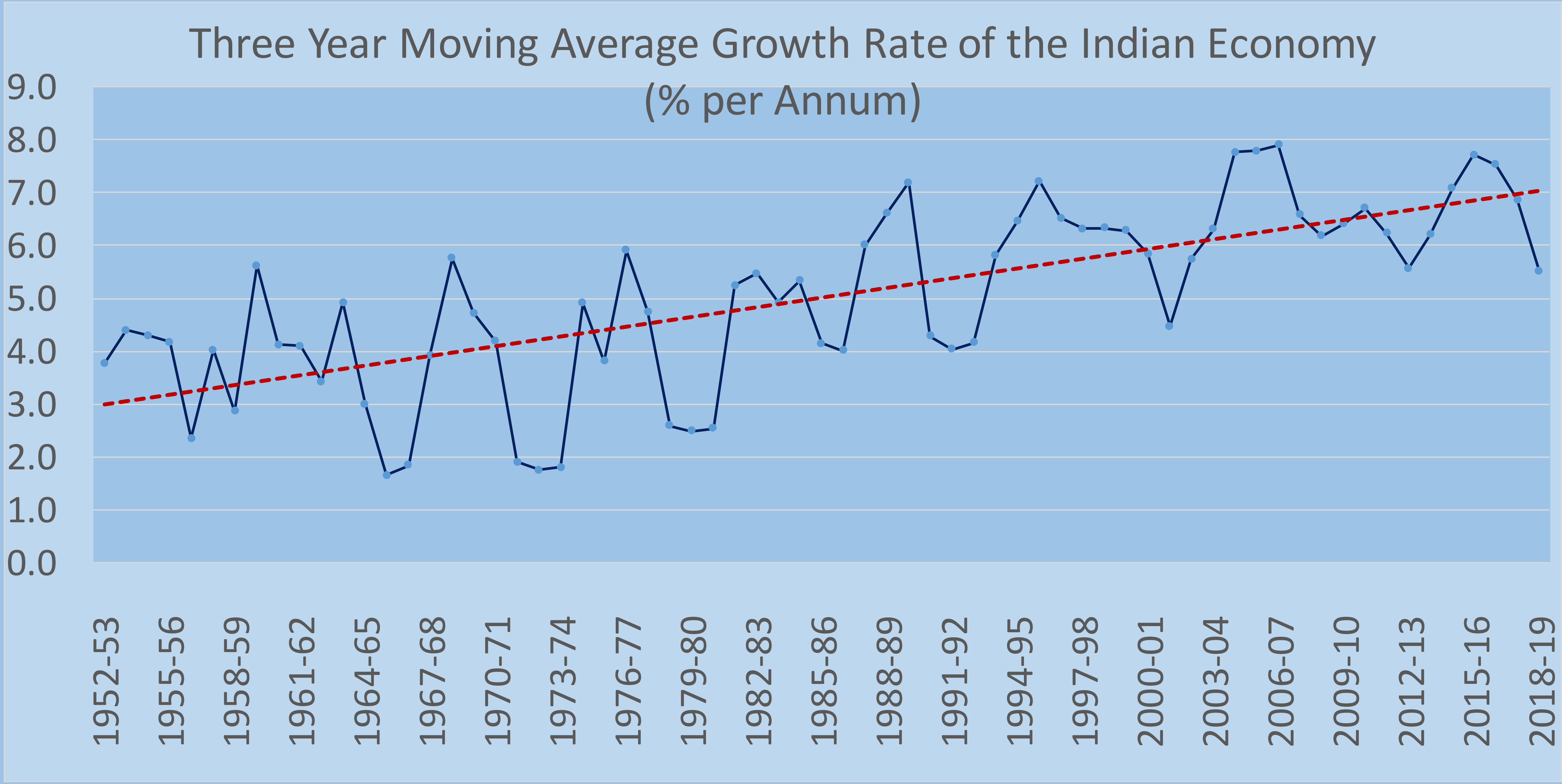
Business Cycles

- General expansion or contraction in all the sectors simultaneously.
- Economic progress is uneven and not smooth, i.e., marked by business cycles
- Phases of BCs: recession (downturn) and expansion (upturn)
- Turning points of BCs: peaks and troughs

Graphical depiction of BCs



Source: Samuelson and Nordhaus, Economics, 19th Edition



Source: Based on the data from Handbook of Statistics on the Indian Economy, RBI

Causes of BCs:

- Shifts in aggregate demand due to changes in money supply

- Multiplier-accelerator model
- Investment Multiplier = $\Delta Y/\Delta I$ & Accelerator = $\Delta I/\Delta Y$

- Political factors: Pre-elections generally lead to higher spending and hence upturn in economic activity

Aggregate Demand (AD)

AD: The total amount that different sectors in the economy willingly spend in a given period.

AD = Total spending on goods and services $Y = C + I + G + X - M$

C: Expenditure by households

I: Expenditure by Firms

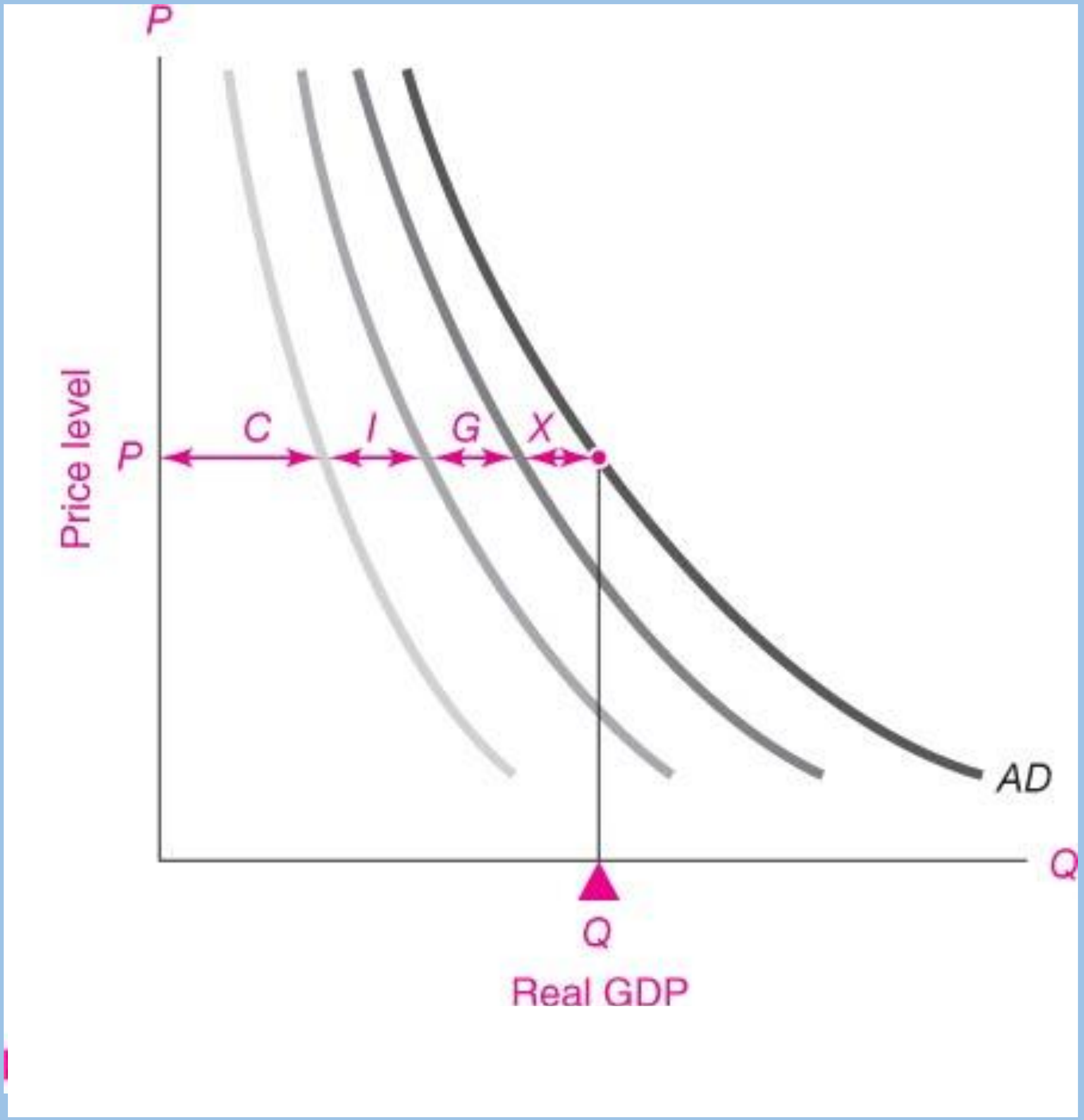
G: Expenditure by Govt

X-M: Net expenditure by rest of the world.

AD depends on the ‘general’ level of prices, as well as on monetary policy, fiscal policy and other factors.

Aggregate Demand (AD)

- Aggregate Demand (AD) is the total or aggregate quantity of output that is willingly bought at a given level of prices, other things remaining the same.
- Components of AD:
- C (Yd) + I + G + X – M (Yd)
- C and M are induced (by income) variables affecting Aggregate Demand
- I, G, X are autonomous (given) variables affecting Aggregate Demand
- AD depends both on policy variables and on exogenous variables which are not determined by the dynamics of the economic system.



Source: Samuelson and Nordhaus, Economics, 19th Edition

Policy Determinants of Aggregate Demand

Policy	Effects on Aggregate Demand
Monetary policy (money supply, interest rates, reserve ratios, etc)	Increase in money supply tends to reduce interest rates and induces higher levels of investment and consumption of durable goods. In an open economy, monetary policy also affects the net exports (X-M) through exchange rate changes.
Fiscal policy (Tax rates, expenditure)	Increase in government expenditure directly increases total expenditure; tax reductions or increases in transfers raise disposable income and induce higher consumption. Tax incentives, such as, an tax concessions on investment in solar equipment can induce higher spending.

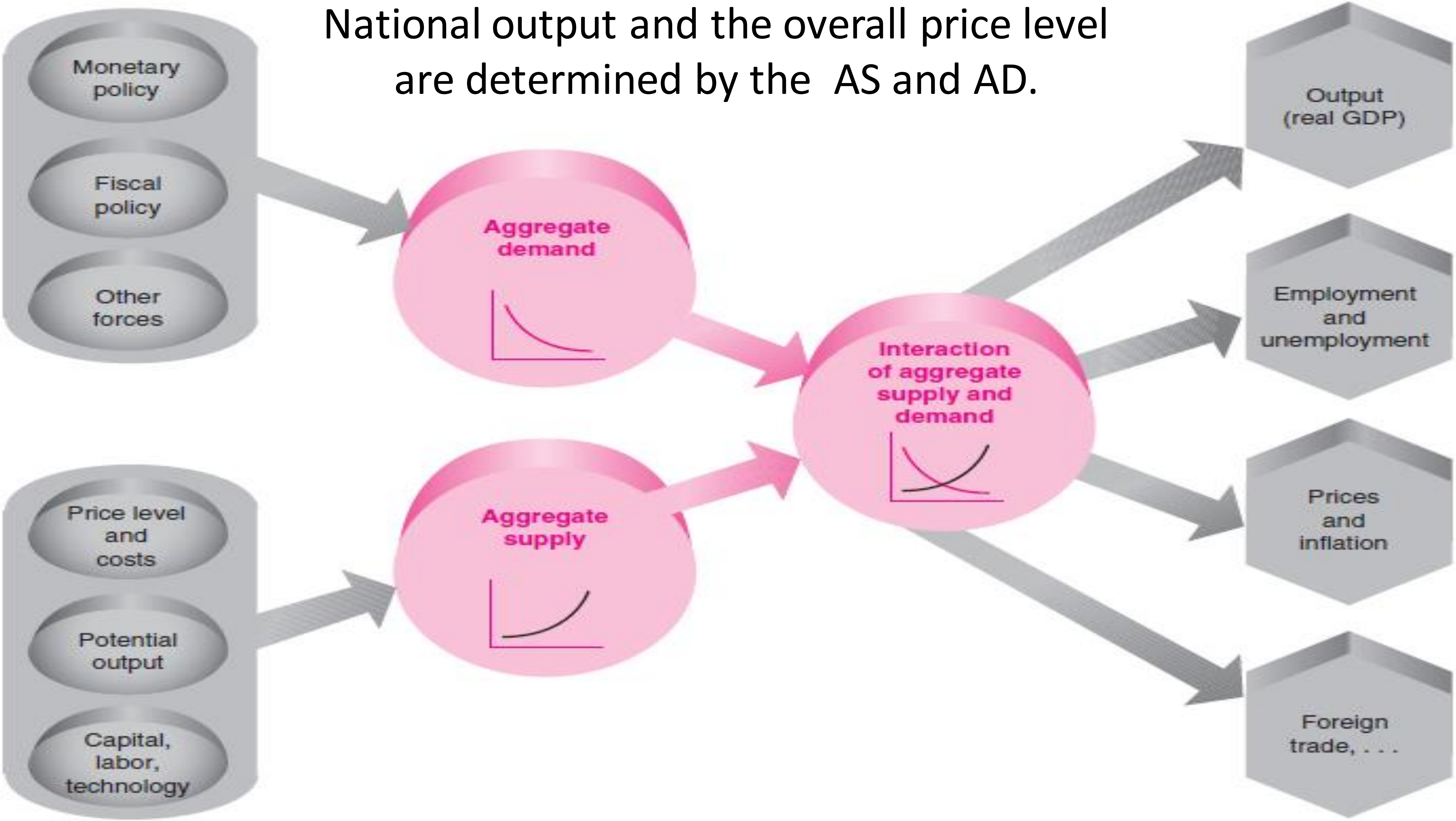
Exogenous Determinants of Aggregate Demand	
Foreign output	Output growth abroad leads to an increase in net exports.
Asset values	Rise in stock market increases household wealth and thereby increases consumption; also, higher stock prices lower the cost of capital and thereby increase business investment
Advances in technology	Technological advances can open up new opportunities for business investment. Important examples have been the railroad, the automobile, and computers.
Other	Defeat of a socialist government stimulates foreign investment; peace breaks out, with an increase in world oil production, and lowers oil prices; good weather leads to lower food prices

Aggregate Supply (AS)

- AS refers to the total quantity of goods and services that a country's businesses are willingly produce and sell during a given period of time.
- AS depends upon the 'general' level of price level (movement variable), the productive capacity of the economy/potential output and the level of costs (shift factors).
- Potential output is determined by the availability of inputs/resources/ factors of production and the state of technology. Generally regarded as the maximum level of output that an economy can sustain without generating inflationary pressure (Okun, 1962). This definition is particularly prevalent among monetary policy makers

Equilibrium Output and Price Level

National output and the overall price level are determined by the AS and AD.



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