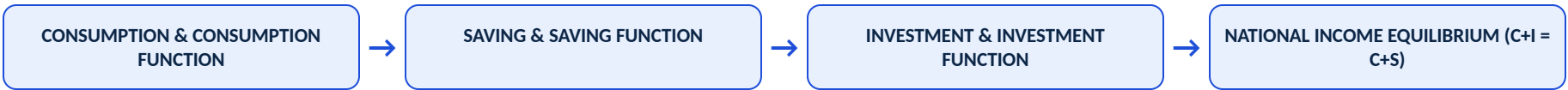


1 CHAPTER ROADMAP



Theme: Keynes' theory of income and employment rests on Consumption, Saving and Investment. Households don't consume all their income – the unspent part is saved; firms then convert this pool of saving into investment, and national income equilibrium is reached where $C+I = C+S$.

2 KEY DEFINITIONS

Consumption The fraction of disposable income that households spend on consumer goods.	Autonomous Consumption (Co) Minimum consumption one must incur regardless of income (basic needs, financed by past savings/borrowing if income is zero).
Induced Consumption (cY) Portion of consumption that directly depends on one's income level.	Saving That part of income which is not consumed yet – "postponed consumption" of households or businesses.
Investment Expenditure by households or firms on CAPITAL GOODS (new buildings, plant, machinery) – must be a quantitative addition to capital stock.	Autonomous Investment Investment unaffected by changes in national income; often government-led welfare spending (infrastructure, schools, hospitals).
Induced Investment Investment that varies directly with the level of national income.	Marginal Efficiency of Capital (MEC) The discount rate that makes the present value of an asset's expected yield equal to its supply price – i.e. the expected rate of return on investment.

3 PSYCHOLOGICAL LAW OF CONSUMPTION (KEYNES)

"People increase their consumption as their income increases, but not by as much as their income increases."

THREE PROPOSITIONS

- Aggregate consumption rises with income, but by LESS than the rise in income
- Whatever is not spent on consumption is SAVED
- Rising income leads to BOTH increased consumption AND increased saving

4 CONSUMPTION FUNCTION

CONSUMPTION FUNCTION

$C = f(Y)$ or $C = C_o + cY$

C_o = autonomous consumption (exogenous) | cY = induced consumption (endogenous) | c = MPC = slope of the function

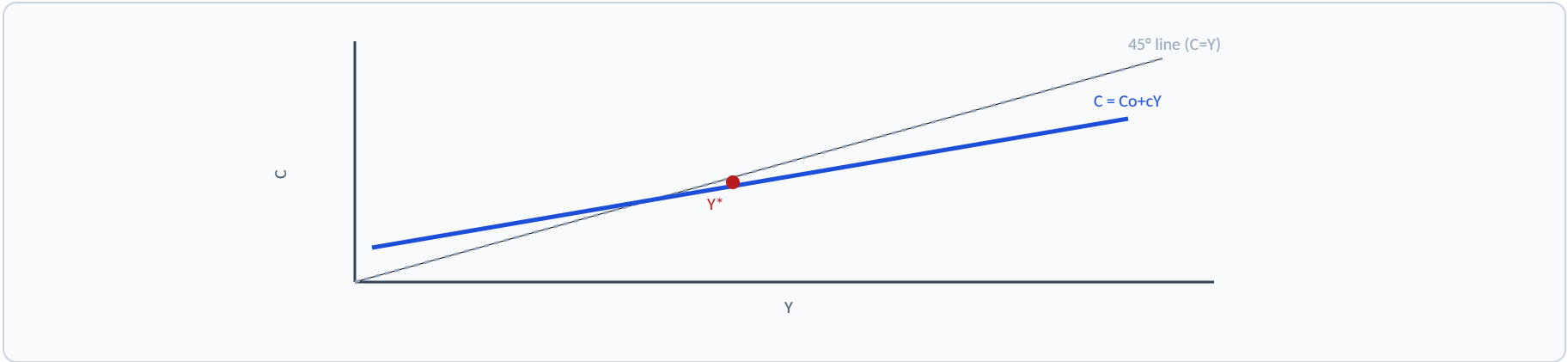
MARGINAL & AVERAGE PROPENSITY TO CONSUME

$MPC = \Delta C \div \Delta Y$ | $APC = C \div Y$

By Keynes' law: $0 < MPC < 1$ (consumption rises with income, but less than proportionately)

Income (Y)	C_o	$C=C_o+cY$	MPC	APC
0	50	50	-	0
100	50	100	0.5	1
200	50	150	0.5	0.75
300	50	200	0.5	0.67
500	50	300	0.5	0.60

Note: APC keeps FALLING as income rises even though MPC stays constant at 0.5 – because autonomous consumption C_o is spread over a growing income base.



Below Y^* , consumption > income (dissaving); beyond Y^* , consumption < income (saving begins).

5 DETERMINANTS / SHIFTS OF CONSUMPTION FUNCTION

Real income ↑	→	Consumption ↑
More equal wealth distribution	→	Consumption ↑ (poor have higher MPC)
Prices expected to rise	→	Consumption ↑ now (buy before price rise)
Low-income households taxed more	→	Consumption ↓
Interest rates ↑	→	Disposable income ↓ (higher repayments) → Consumption ↓

6 SAVING FUNCTION

SAVING FUNCTION

$S = f(Y)$ or $S = -S_o + sY$ (also: $Y = C+S$ so $S = Y-C$)

-S_o = dissaving at zero income (equals autonomous consumption) | s = MPS = slope of the saving function

MARGINAL & AVERAGE PROPENSITY TO SAVE

$MPS = \Delta S \div \Delta Y$ | $APS = S \div Y$

Saving is DIRECTLY proportional to income

7 MPC + MPS = 1 - DERIVATION

$Y = C + S \rightarrow \Delta Y = \Delta C + \Delta S \rightarrow$ Divide both sides by ΔY : $\Delta Y/\Delta Y = \Delta C/\Delta Y + \Delta S/\Delta Y \rightarrow 1 = MPC + MPS$

Since $0 < MPC < 1$, it follows that $0 < MPS < 1$. **Worked example:** Income rises Rs.10,000; Rs.7,000 consumed, Rs.3,000 saved $\Rightarrow MPC=0.7$, $MPS=0.3$, and $0.7+0.3=1$.

Income (Y)	Consumption	Saving	MPS	APS
0	50	-50	-	-
100	100	0	0.5	0
200	150	50	0.5	0.25
300	200	100	0.5	0.33
500	300	200	0.5	0.4

At zero income, saving is negative (-50) – this dissaving exactly equals autonomous consumption, financed from past savings or borrowing. Saving turns positive once income passes Y* (the break-even point on the consumption graph).

8 DETERMINANTS OF SAVING

OBJECTIVE FACTORS

- Level of income (direct relation)
- Net wealth ↓ → more saving inclination
- Interest rate ↑ → saving ↑
- Political stability & property security ↑ saving
- Developed banking system ↑ saving
- High indirect taxes ↓ saving

SUBJECTIVE MOTIVATIONS (KEYNES)

- Provide for future needs
- Build reserve against contingencies
- Fund business projects/expansion
- Financial prudence in debt repayment

9 INVESTMENT FUNCTION

INVESTMENT FUNCTION

I = f(Y) or I = I_o + mY

I_o = autonomous investment | mY = induced investment | m = marginal propensity to invest

Real investment test: only spending that adds NEW capital goods counts. Buying an OLD/existing asset (e.g. a used workshop) is just a transfer of ownership – the buyer's "investment" exactly offsets the seller's disinvestment, so there is NO net addition to the country's capital stock.

10 AUTONOMOUS VS INDUCED INVESTMENT

	Autonomous Investment	Induced Investment
Relation to income	UNAFFECTED by change in national income	DIRECTLY depends on national income
Curve shape	Horizontal (flat) investment curve	Positively sloped (upward) investment curve
Typical driver	Government welfare spending (infrastructure, schools, hospitals)	Private-sector response to rising income/demand
Shift cause	Exogenous factors (e.g. public development programs)	Interest rates, social factors, etc.

Autonomous Investment (flat)



Investment stays at Rs.100m regardless of income – independent of Y.

Induced Investment (upward-sloping)



Investment rises from Rs.10m to Rs.50m as income rises Rs.100m→500m.

11 DETERMINANTS OF INVESTMENT (KEYNES' TWO CORE FACTORS)

MARGINAL EFFICIENCY OF CAPITAL (MEC)

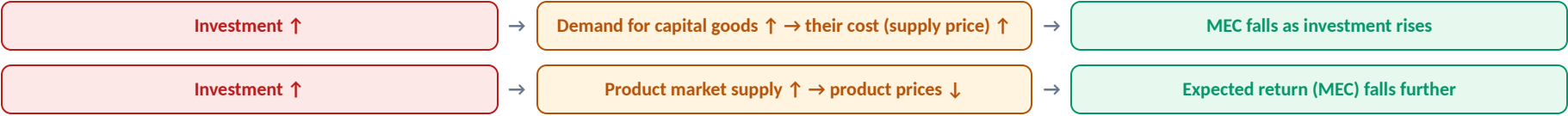
- Expected rate of return on a new investment
- Downward-sloping MEC curve: inverse relation between MEC and level of investment

MARKET RATE OF INTEREST

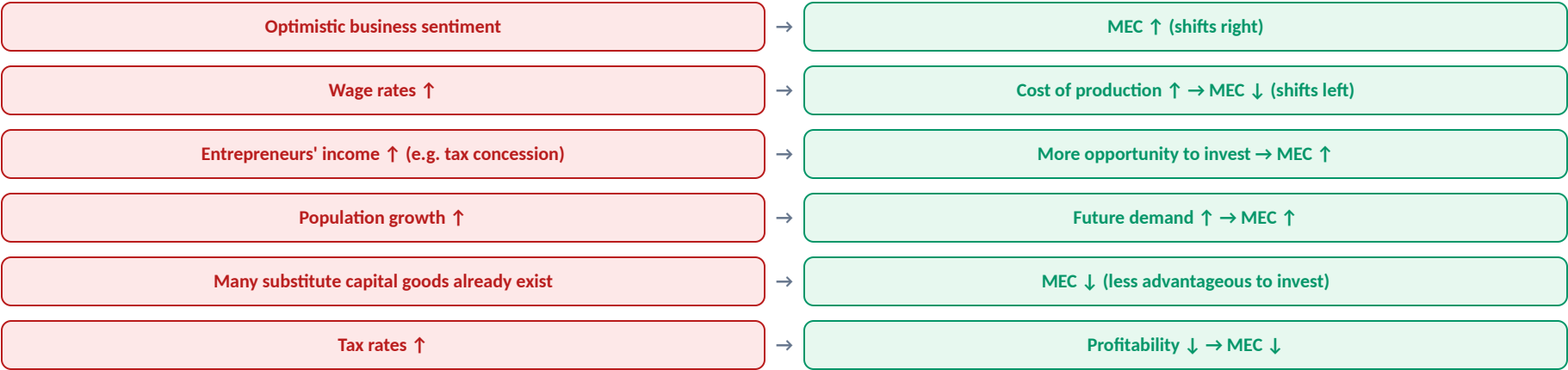
- Cost of borrowed funds (% of principal)
- Assumed constant in the short run – so MEC drives investment decisions

Investment rule: a rational investor proceeds only when MEC > Market Rate of Interest. Example: Zain expects 6% return, interest is 4% → profitable (invests). If interest rises to 8% > 6% MEC → investment becomes a LOSS → he withdraws/deposits funds instead.

12 WHY MEC CURVE SLOPES DOWNWARD



13 FACTORS SHIFTING THE MEC SCHEDULE



PRC-3 – ECONOMICS | Chapter 6: Consumption, Saving and Investment

14 GOVERNMENT MEANS OF INFLUENCING INVESTMENT

CONTROL INTEREST RATES

- Low rates encourage investment; rising rates discourage it

DIRECT ENCOURAGEMENT

- Investment grants, lower cost of doing business, tax incentives, rule of law

STIMULATE CONFIDENCE

- Stable, consistent economic policy (avoid sudden changes)

ENCOURAGE TECHNOLOGY

- Finance R&D, invest in education

INFLUENCE CONSUMPTION

- Control money supply/credit → affects consumer spending & (via accelerator) investment

GOVERNMENT SPENDING

- Infrastructure spending creates demand that stimulates private investment

15 EXAM PATTERNS & MCQ QUICK CLUES

" $C = C_o + cY$, given a slope value"

→ Slope = MPC (marginal propensity to consume)

"Income zero, but spending is positive"

→ Autonomous consumption / dissaving

"Investment curve is horizontal / flat"

→ Autonomous investment

" $MEC > \text{market rate of interest}$ "

→ Investment is profitable – proceed

" $MPC + MPS = ?$ "

→ Always equals 1

"Buying an old/used capital asset"

→ NOT real investment (no net addition to capital stock)

⚠ ECONOMICS EXAM TRAPS

Trap: Confusing MPC (change in consumption/change in income) with APC (total consumption/total income) – APC falls with income even while MPC stays constant.

Trap: Treating purchase of a SECOND-HAND/used asset as real investment – it is merely a transfer of ownership, not new capital formation.

Trap: Mixing up autonomous investment (flat curve, income-independent) with autonomous consumption (income-independent spending floor) – both are "autonomous" but apply to different functions.

Trap: Forgetting MEC is a downward-sloping curve – a common error is drawing it upward sloping like a normal supply curve.

Trap: Assuming MPC/MPS can be outside 0 and 1 – by Keynes' law both must lie strictly between 0 and 1.

16 COMPLETE CHAPTER DECISION TREE

QUESTION GIVEN → Consumption, Saving, or Investment question? → Identify given values ($C_o/S_o/I_o$, $c/s/m$, Y) → Select relevant formula ($C=C_o+cY$ / $S=-S_o+sY$ / $I=I_o+mY$) → Calculate MPC/APC or MPS/APS or compare MEC vs interest rate → Check $MPC+MPS=1$ if relevant → Interpret & select final answer

PRC-3 ECONOMICS – CHAPTER 6 IN 60 SECONDS

- **Consumption function:** $C = C_o + cY$; $MPC = \Delta C / \Delta Y$; $APC = C / Y$.
- **Keynes' law:** consumption rises with income, but less than proportionately ($0 < MPC < 1$).
- **Saving function:** $S = -S_o + sY$; $MPS = \Delta S / \Delta Y$; $APS = S / Y$.
- **$MPC + MPS = 1$** always (since $Y = C + S$).
- **Investment function:** $I = I_o + mY$.
- **Autonomous investment:** flat curve, income-independent. **Induced investment:** upward-sloping, income-dependent.
- **Real investment** = new capital goods only; buying used assets is NOT investment.
- **Investment determinants:** MEC (downward-sloping) and market interest rate.
- **Invest only if $MEC > \text{interest rate}$.**
- **Govt. tools:** interest rates, grants/tax incentives, confidence, R&D, credit control, public spending.

17 CHAPTER MEMORY MAP

Consumption Function

MPC & APC

Psychological Law

Saving Function

MPS & APS

$MPC+MPS=1$

Investment Function

Autonomous vs Induced Investment

MEC & Interest Rate

MEC Shift Factors

Govt. Influence on Investment