3/ Goods Market

Composition of GDP

→ goods market → aggregation (lumping together) of all the goods and services of producers + consumers

→ in the goods market → producers decide what + how much to produce + consumers on how much to consume

→ concerned with real things → goods market is also called the real market

Expenditure of the GDP

→ spending on goods and services produced inside the bodes of a country incl. exports excluding imports

→ differs from GDE (Gross Domestic Expenditure) which is the total value of spending within the border of an country including imports and excluding exports (since export spending take place outside the borders of the country)

4 Major spenders in the economy

Consumption * biggest spenders → households

→ final consumption expenditure by households

↳ refrigerators, movies, food etc

2.→ final consumption on expenditure by government. → not capital goods

↳ textbooks for schools, government services

↳ excluded are pmts (pensions, child grants, disability pmts) medicare SS.

→ gross capital formation

↳ spending by households, private firms, and government on residential + non residential capital goods

↳ Gross fixed capital

↳ Inventory investment

Investment ⇒ purchase of new capital goods (machines, buildings, houses

→ International sector → Imports (produced world used insid country)

→ exports (produced in country sold to world)

− ↳ exclude Import

+ ↳ include exports (used in another country)

GDE	Expenditure on GDP
+ imports	− imports
− exports	+ exports
Total value of spending in the country	Spending on goods + services produced on side of the country.

Imports → include final goods + services + intermediate + capital goods

Demand for Goods

$$Z = C + I + G + (X - Im)$$

(X: exports, Im: imports)

C. Consumption (disposable income) (Behavioral)

→ consumer spending → largest component of expenditure on GDP in SA

→ households responsible for consumer spending in the economy + a change in their spending behaviour will result in a change in demand for goods (output + income)

→ Consumer spending by households is determined by income.

∴ C = f(Y) + a positive relationship exists between income + consumption

↑ income → increase consumer spending but its less than the increase in income

Keynes: (1936) → fundamental psychological law, → we are entitled to depend with great confidence both a priori from our knowledge of human nature + from detailed facts of experience, → men are disposed to increase their consumption as income increases but not as much as the increase.

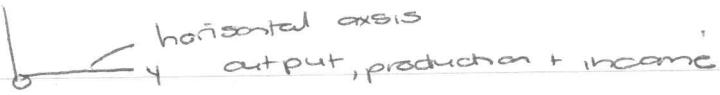
Y (income) increases causes a increase in C (consumer spending) + the marginal propensity to consume (c) determines by how much consumption increases for a given increase in income.

→ obtain income from selling services to production firms. → get rent, wages, interests + profits

→ higher the level of production employed, the higher the level of income of households + the higher the consumer spending in the economy will be.

→ What firms pay out ~~as~~ to factors of production as income (Y) is also equal to the value of Total Production (TP) + therefore income + output production are 2 sides of the same coin + will always be equal.

→ Variable is usually measured the horizontal Axis Y of a goods market diagram + the determination of the variable is what we are trying to explain

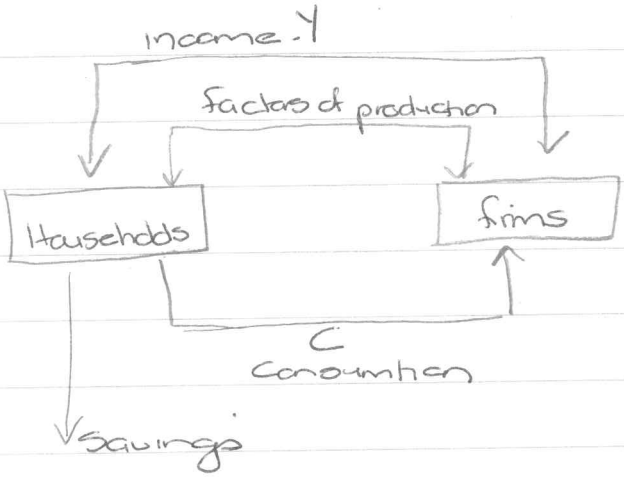


→ total production = total income

↳ relationship between total production, employment + unemployment

→ demand of goods determines the level of output + input as well as the level of employment + unemployment

→ households ~~the~~ do not spend all their income on consumption → the portion not spend is saved



→ Households receive an income from selling services of the factors of production to firms, who use these factors of production to produce goods + services

→ Households use this income to buy the goods + services that are produced, they do not spend all the income → remainder is saved.

Saving leads to interesting concept → level of production is @ R100 million → which represents the income received by households → households only spend a portion → eg 90% - leave @ 10%

shortfall + companies now have too much product / services
→ this leads to cutting back on production / services
→ production declines → income declines → consumer spending declines.
and so it carry's on ↓ downward spiral

→ To stop this:
Keynes → additional spending is needed to ensure sufficient demand for goods exists to ensure that total production of society is taken up.

→ relationship between consumption + savings
→ for same reason → households increase savings by cutting back on consumption
→ save more → consume less → consumption decreases → firms have excess product / services → cut back on production
→ decrease in consumer income → less savings.
∴ by saving more → households will have less savings.

$C = c_0 + cY_D$ Y = income
Y_D = Disposable income

Consumption function =
$C = c_0 + cY_D$

Disposable Taxes → consumer must first pay taxes (T) ∴

$$Y_D = Y - T$$

∴ induced consumption → its caused or is a result of a change in income

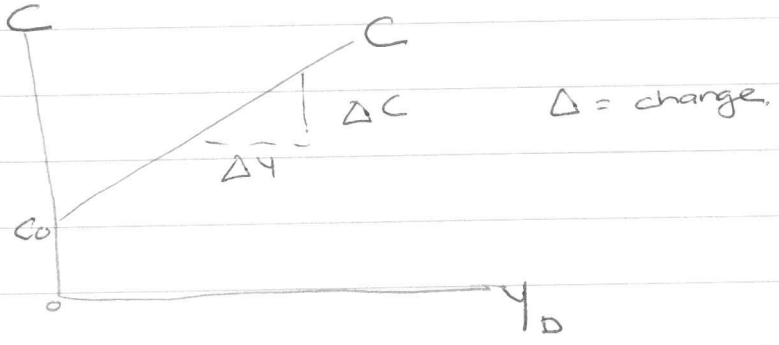
→ if taxes lowered - increase disposable income → increase spending but it is less than 1 → 1
it would be based on their marginal propensity to consume.

→ C_0 = autonomous consumption → not affected by the level of disposable income → interest rates, expectations, wealth, income distributions, access to credit, health etc.

$$C = \underbrace{C_0}_{\text{Autonomous}} + \overbrace{cY_D}^{\text{induced}}$$

Autonomous → consumption financed from sources other than income → inheritances, past savings, gifts, credit.

$$C = C_0 + cY_D$$



∴ Disposable income increases when tax rate decrease or level of production increases.

Investment

→ real investment ⇒ spending on adition to capital stock (machineey structures, inventories, inventories etc) with future profit

→ different from financial investments → financial investment does not directly create production capacity

→ Important

↳ creates production capasity + makes higher levels of production possible

↳ created a demand for consumer goods + services. → increased production → increase income → increased demand + spending

⇒ Keyneo → to ∝ justify any given amount of employment there must be an amount of current investment sufficient to absorb the access of total output over what the economy chooses to consume when enplayment is at a given level.

→ investment → requires a substantial capital outlay + planning → thought must be put into the desicion as to whether to invest or not.

→ if internal rate of return is higher than market rate, then it is profitable to undertake the investment.

→ Calculation of internal rate is complicated as it is uncertain what the future value will be.

→ take the uncertainty + the cost into account when making a decision

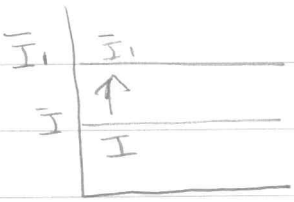
keynes: → if we speak frankly we have to admit that our basis for knowledge for estimating the yield for 10 years ----- amounts to very little and sometimes nothing.

→ Investment is autonomous variable → determined by exogenous variables such as interest rate, expectations, business confidence + regulations. → NOT related to level of output

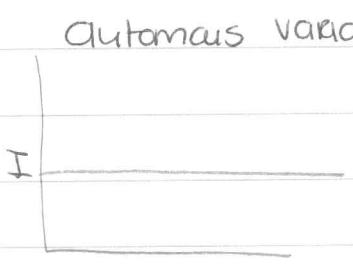
→ value of investment is NOT determined by the level of production. (endogenous)

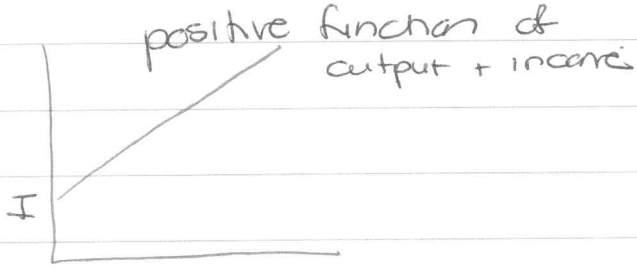
→ $I = \bar{I}$

→



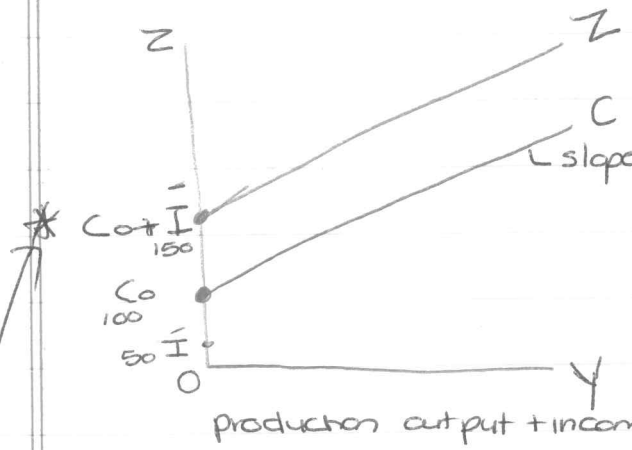
→ decision to invest or save a different decisions → no influence on each other.





→ exogenous variable is one we control / change.

Consumption plus investment



$Z = C + I$

Z = Demand for goods

C = Consumption

I = Investment

$\therefore C = 100 + 0.8 Y_D$

$I = 50$

$Co = 100$

* $\therefore$ Z cut point = 150

Government spending + Taxation $Z = C + I + G$

→ Government spending
→ Taxation
} exogenous variables / autonomous not influenced by output / input

→ Government spending → teachers, books etc.

→ Taxation influences disposable income + impacts disposable income for spending

→ ~~so~~ assume it is an autonomous variable.

$Y_D = Y - T$

→ Government spending + taxation ↑ 2 variables of the fiscal policy that can be used to influence the level of aggregate demand output + income of the economy

Fiscal policy => government's policy in respect of level + composition of government spending
→ budget
→ main policy variables is government spending & taxation

Budget → annual announcement of the government's fiscal policy changes.
→ reflection of political decisions about how much to spend, what to spend it on + how to finance spending.

Budget deficit → Governments total expenditure is more than its revenue
→ $(G+R)-T$

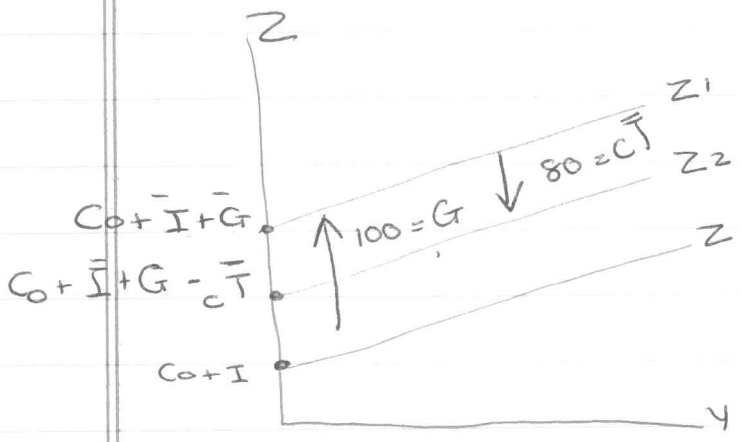
Budget surplus = governments spending less than its Revenue
$= T-(G+R)$

G = Goods + Services
R = transfer payments
T = Taxes

expansionary policy → used to stimulate the economy by increasing the demand for goods (aggregate demand)
→ Government spending has to be increased and/or Taxes has to be decreased.

Contractionary policy → "cool down" economic activity by decreasing the demand for goods (aggregate demand)
→ Government spending decreased → taxes increased.

Government spending + Taxation



Z = demand curve Y = Product (output) + Income

G = 100

T = taxation impacts on the vertical axis but by the marginal propensity

ex. slope C = 0.8

T = 100

∴ $c\bar{T}$ = 80 (100 × 0.8)

autonomous tax does NOT influence the slope of the demand curve

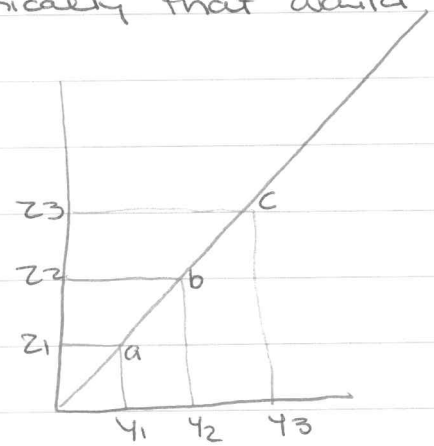
→ Government spending does influence the level of output
  → level of output + income does NOT influence government spending
  ∴ Government spending does NOT increase if total income Y increases

Determination of equilibrium output.

→ situation where all the forces of change are neutralised / balanced → situation that will be maintained in the absence of new forces (or changes in existing forces)

Equilibrium $Y = Z$

Graphically that would be a 45° line



a, b, c $Y = Z$

→ demand for goods consists of consumer spending C + Investment I + Government Spending G.

∴ Equilibrium is $Y = C + I + G$

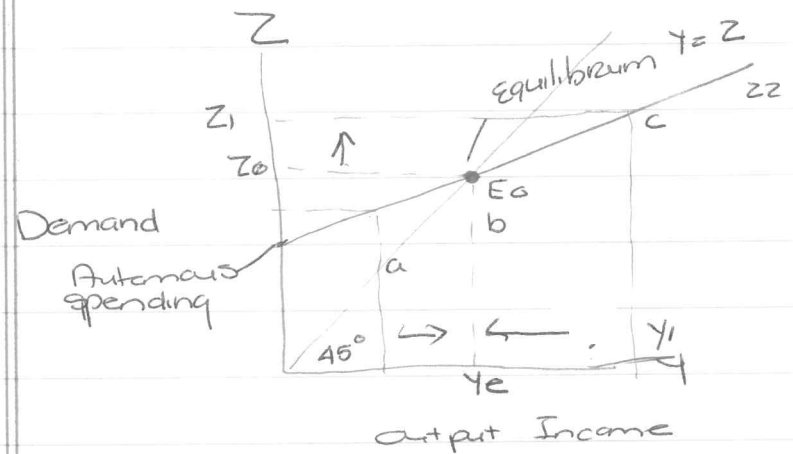
Consumer Spending = $C = C_0 + c(Y - T)$ + Investment + Government

∴ $Y = C_0 + c(Y - T) + \bar{I} + G$

If we Group by Autonomous + induced Spending

$$Y = \underbrace{(C_0 + I + G - cT)}_{\text{autonomous Spending}} + \overbrace{CY}^{\text{induced spending}}$$

NB that Y is found on both sides of the equation → means that while the demand for goods Z determines output + income Y, outcome + output Y in return influences Z through the effect it has on consumer spending by households



→ will not change spending unless increase / decrease income

→ Companies will remain constant unless demand increases / decreases

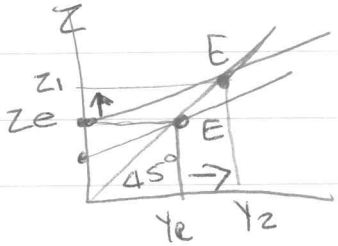
→ Government has done budget / taxation for the year

∴ if at a = companies will increase productivity to get to Ye / b equilibrium

if at c = companies will decrease production until they reach ye point b equilibrium

Increase in autonomous spending = $C_0 + \bar{I} + \bar{G} - c\bar{T}$

if Investment increases due to a favourable market Autonomous spending shifts upwards, causing a multiplier effect.



→ production increased + caused a shift → Right to Production output + income

Calculating Equilibrium

Demand for Goods = $Z = ((C_0 + \bar{I} + G - cT) + cY$

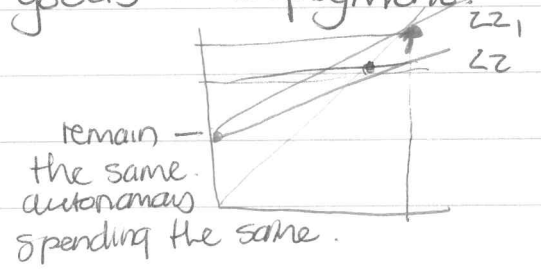
$$Y = \frac{1}{1-c}(C_0 + \bar{I} + G - cT)$$

excess supply → ↑ production of goods
demand less than supply ↓ production of goods
increase production ↑ increases consumer spending.

Equilibrium level of income + full employment.

Possible for the economy to be in equilibrium position with less than full employment
→ unemployment has no power to effect a change of equilibrium

→ reaching full employment changes in the variables that effect the autonomous spending and/or the marginal propensity to consume.
→ increase in autonomous spending ↑ demand of goods ↑ level of output + moves economy closer to full employment.
→ increase in marginal propensity ↑ consumer spending ↑ demand for goods ↑ employment.



increase in marginal propensity

∴ consumers spend more / demand more. ∴ the marginal propensity slope moves and a new equilibrium is sought.

Increase in investment

↳ autonomous spending

→ increase in investment ↑ demand

Multiplier effect

→ behaviour of households → increase their consumer spending when ever their income increases.

→ $\frac{1}{1-c}$

∴ if investment increases by 100 $c = 0.8$

Investment	Z (demand)	Y (income)	=C
100 ↑	100 ↑	100 ↑	80 ↑ (100 x .08)
80	80	80	64 ↑ (80 x 0.8)
			etc.

→ will not continue indefinitely as income decreases after each round of spending.

→ if households do not increase their consumer spending, when income increases there are no multiplier effect in the economy.

→ if marginal propensity to consume increases, the value of the multiplier increases

→ a larger multiplier indicates that an increase in autonomous spending has a bigger effect / impact.

→ Consumer spending is a positive function + as the income increases, so does the consumer spending.

→ Increase in investment spending increases the demand for goods + the level of output + income in the economy.

→ The multiplier indicates how much each R in additional spending (investment, Government) add to Total income / output.

→ only round to 1st decimal.

I ↑	Z ↑	Y ↑	C ↑	C = 0.80
100	100	100	80	
-	80	80	64	
-	64	64	51.2	
100	500	500	400	

∴ By increasing investment it is possible to reach full employment in theory.

→ closed economy - only source of investment (autonomous) spending is the government.

→ Goverment uses government taxes + spending to influence the level of output.

Fiscal policy

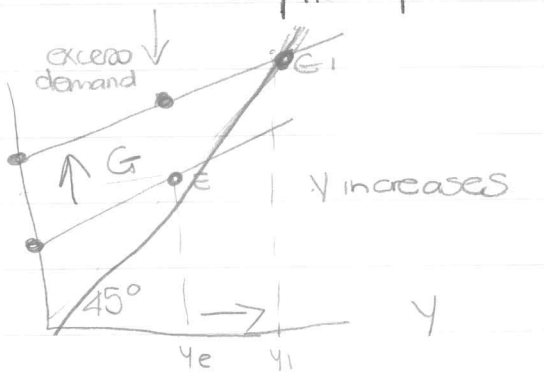
→ Government's policy in respect of the nature, level, composition of government spending, taxation + borrowing aimed at pursing particular economic goals.

→ main instrument is the budget :

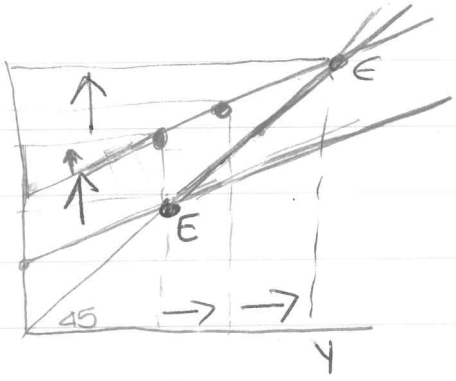
→ main policy variables are government spending + taxation

Expansionary → stimulate economy G↑ or/and T↓

↳ multiplier process.



Taxation T↓ → Y_D↑ → C↑ → Z↑ → Y↑



Unemployment declines - multiplier effect.

Contractionary → cool down ↓ demand Z

G↓ → Z↓ → Y↓ → C↓

Employment

Full employment → situation where all available resources (labor, capital, land + entrepreneurship) are used to produce goods + service + this is one of the macroeconomic objectives

→ unemployment rate → low level of unemployment is mainly caused by the normal frictions in the economy.

→ unemployment can only be solved by adressing its cause → if unemployment is because of lack of demand → increase in demand will have an effect

→ structural unemployment occurs when there is a mismatch between workers qualifications + job requirements / jobs disappears