

keynotes-midterm.pdf



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Introducción a la Macroeconomía



1º Grado en Economía



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quieres trabajar en Wuolah???

tú puedes ayudarnos a llevar **WUOLAH**
al siguiente nivel (o alguien que conozcas)

TE
BUSCAMOS



sin ánimo de lucro, chequea esto:



Hacemos fácil lo más complicado

Pregúntanos 689 71 67 71

Tema 1.

Net exports → Exp - imports

$$GDP = C + I + G + (X - \Pi) \rightarrow \text{Production de 1 país (1 economy)}$$

$$\text{Non GDP} = Q_x \cdot P_x \quad (x = \text{de ese año})$$

$$\text{REAL GDP} = Q_x \cdot P_{base}$$

POTENTIAL GDP (max amount of REAL GDP that can be produced, considerando que los production factors constant → NOT INFLATION PRODUCED)

Depreciation → "se desinflan los precios y con mismo \$ compras más"

Inflation → "se inflan los precios y con mismo \$ compras menos"

$$\text{PARA MEDIRLA} \rightarrow \text{GDP DEFULATOR: } \frac{\text{Non GDP}}{\text{real GDP}} \cdot 100 \rightarrow \text{NOTA ABASO}$$

$$\text{PARA CALCULARLA} \rightarrow IR = \frac{\text{New CPI} - \text{Old CPI}}{\text{Old CPI}} \cdot 100$$

$$CPI = \frac{\sum Q \cdot P_x}{\sum Q \cdot P_{base}} \cdot 100 \quad (\text{valor del basket})$$

(x es ese año, BASE es base year)

↳ Labour no es parte del CPI

★ core inflation = inflation PERO excludes food and energy.

★ NOTA → también se puede medir la inflación del consumo, usando el nominal y real Personal Consumption Expenditure.

$$PCE \text{DEFULATOR} = \frac{\text{Non PCE}}{\text{Real PCE}} \cdot 100$$

$$\text{Unemployment rate} = \frac{\text{unemployment}}{\text{labour force}} \cdot 100$$

↳ pob que quiere y busca job

$$\text{Labor force participation} = \frac{\text{labour force}}{\text{working age pop}} \cdot 100$$

$$\text{Employment to population ratio} = \frac{\text{employed}}{\text{working age pop}} \cdot 100$$

EXERCISES: Labour force 153'7 million; Employment 139'1 m.
working age population 237'9 m

$$\text{a) Unemployment rate} = \frac{14'6}{153'7} \cdot 100 = 9'5\%$$

$$\text{Unemployment} = 153'7 - 139'1 = 14'6 \text{ m}$$

$$b) \text{Labour force participation} = \frac{193'7}{237'9} \cdot 100 \\ = 64'6\%$$

$$c) \text{Employment to pop. ratio} = \frac{139'1}{237'9} \cdot 100 = 58'5\%$$

Unemployment types

- no lo pregunta (no contar)
1. Seasonal (esquier, sacerdotes)
 2. Cyclical (recessions or peaks of industries)
 3. Structural (cambio de los skills needed)
 4. Natural (cuando el cyclical y seasonal no existen)
 5. Frictional (entredas y salidas normales)

Full employment → Natural unemployment rate equals the
unemployment rate.

REAL GDP = POT GDP

Tema 3

► Types of exchange rate system : bank

1. Flexible / Floating → no GOV. or FED interventions. Market forces set equil.
2. Fixed → GOV. AND FED establish a fix rate by selling or buying currencies when the market moves.
3. Crawling peg → GOV. AND FED establish a fix interval.

EXCH. RATE ↑ → ↑ supply and ↓ demand (less exports)

EXCH. RATE ↓ → ↑ demand and ↓ supply (less imports)

NOMINAL EXCH RATE = amount of one currency in terms of another (1\$ = 1€)

$$\text{REAL EXCH RATE} = \frac{\text{Exch rate} \cdot P}{P^*} \quad \left. \begin{array}{l} P = \text{price basket country A} \\ P^* = \text{price basket country B} \end{array} \right\}$$

"1 currency A equals to x currency B" → currency A → P
→ currency B → P*

A dynamic, low-angle photograph of two young people running towards the right against a solid teal background. Both individuals are captured mid-stride, leaning forward. They are both holding yellow ColaCao cans to their mouths, suggesting they are drinking from them while running. The person on the left wears a white striped t-shirt and blue jeans. The person on the right wears a teal t-shirt and maroon pants. The overall composition conveys a sense of motion and energy.

#ESTASREADYCOLACAO

ColaCao®

Exercise: $1 \text{ €} = 1'12 \text{ $}$

HICP (basket) $\rightarrow 104'33 \text{ €} = 105'45 \text{ $}$

$$\text{REX RATE} = \frac{1'12 \cdot 104'33}{105'45} = 1'11 \text{ $}$$

BALANCE OF PAYMENTS (BOP)

3 ACCOUNTS

1. Current acc $\rightarrow (X - \Pi) + Y + T_r \rightarrow$ transfers
2. Cap and financial $\rightarrow I_f - I_d$ (foreign investment - domestic investment)
3. Official settlement \rightarrow holding of foreign currency

Planta divide en Current, Capital and Financial (suman todos = 0)

TAREA 4

THEORY :

$$\begin{aligned} C &= 1000 + 0'75(Y_d) & (Y - T) \\ T &= 1000 \\ \bar{G} &= 2500 & I = 830 \end{aligned} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} \text{DATA}$$

C = consumption

T = taxes

G = gov. spending

I = investment

1. GDP Equilibrium is = that Y equilibrium (income)

Formula:

$$Y = C + I + G \quad \rightarrow \text{in a closed economy (e.g. no hay exports)}$$

2. National Savings, Public Savings, Private Savings:

Formulas:

$$S_{NAT}: Y - C - G = I + (X - \Pi) \quad \rightarrow S_{NAT} - I = NX \text{ (net exports)}$$

$$S_{PUB}: T - G$$

$$S_{PRIV}: Y - T - C$$

Nuestros profesores se ciñen a los contenidos de la uni, y lo que es más importante, van al grano.

3. Linear consumption function

FORMULAS:

$$C = C_0 + C_1 Y_d$$

C_0 is independent to income (autonomous spending)
 C_1 is prop to consume

$$Y_d \text{ (disposable income)} = Y - T + Tr = Y - T$$

4. Marginal propensity

FORMULAS:

$$\text{MPC}_{\text{Consume}} (c_1) = \frac{\Delta C}{\Delta Y_d} = \frac{dC}{dY_d}$$

$0 < c_1 < 1$

$$\text{MPS}_{\text{Saving}} (s_1) = \frac{\Delta S}{\Delta Y_d}$$

$0 < s_1 < 1$

$$C_1 + S_1 = 1$$

EXERCISE :

$$S_{\text{Pub}} = 1550 - 21340 = -790$$

$$S_{\text{Priv}} = 890$$

$$\text{Fixed Capital Formation + Inventories} = \bar{I} = 950 + 600$$

a) $S_{\text{Pub}} = -790$

b) Domestic Investment = 1550

c) Deficit or surplus = Savings (NAI) - Investments = 100 - 1550
 $= -1450$ deficit in net exports

$$\text{NAI Savings} = 890 - 790 = 100$$

3. Equilibrium output:

$$Z = C + I + G \rightarrow Z = C_0 + C_1(Y - T) + I + G \rightarrow$$

→ como la demand tiene q equal the production (en el equilibrium) asig $Z = Y$ (q no hay inventories) →

$$\rightarrow Y = C_0 + C_1(Y - T) + I + G \rightarrow Y = C_0 + C_1Y - CT + I + G \rightarrow$$

$$\rightarrow Y - C_1Y = C_0 - CT + I + G \rightarrow Y(1 - C_1) = C_0 - CT + I + G \rightarrow$$

$$\rightarrow Y = \frac{1}{1 - C_1} \cdot (C_0 - CT + I + G)$$

multiplicar

autonomous consumption

► **NOTA IMPORTANTE:** estamos hablando de output / production es Y , misma letra que income. Esto es xq , como la demand Z depends on income ($\alpha Y, \beta E, \gamma Y, \delta Z$), decimos que Z (demand) = Y (income). PERO ADERÁS, en este caso, we are assuming that demand is equal to production (cz we are in an equilibrium with no inventories), so we use letter Y for output.

EXERCISES

DATA :

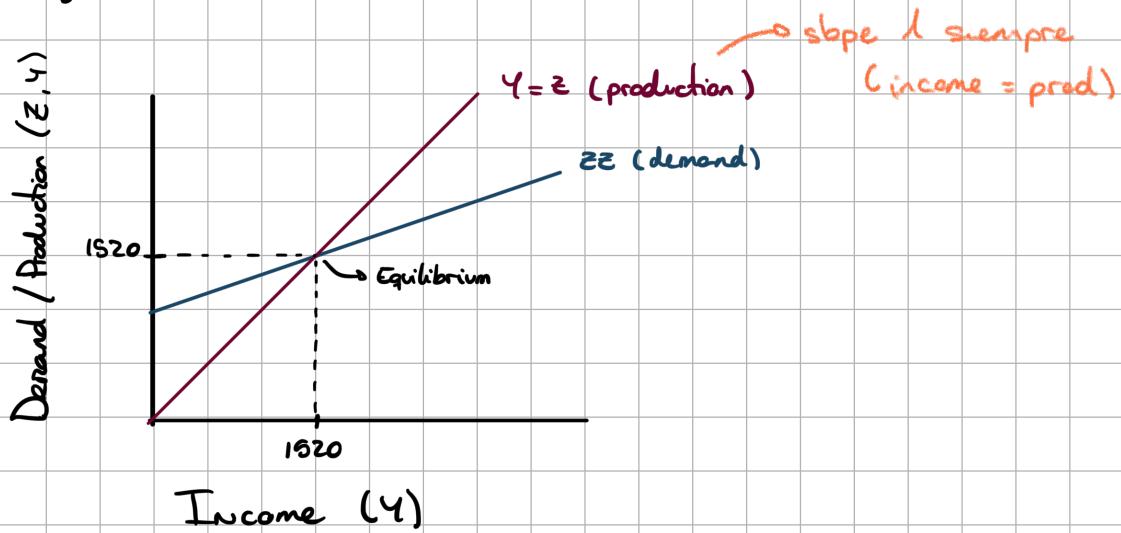
$$C = 500 + 0.5Yd$$

$$I = 100 \quad T = 80 \quad G = 200$$

a) Goods market equilibrium :

$$\begin{aligned} GDP = C + I + G &= Y \rightarrow Y = 500 + 0.5(Y - 80) + 100 + 200 \\ \rightarrow Y &= 800 + 0.5Y - 40 \rightarrow 0.5Y = 760 \rightarrow Y = 1520 \end{aligned}$$

b) Make a graph



c) Private and Public Saving :

$$S_{\text{PUB}} = T - G = 80 - 200 = -120$$

$$\begin{aligned} S_{\text{PRIV}} &= Y - T - C = 1520 - 80 - (500 + 0.5(Y - 80)) = \\ &= 1520 - 80 - 500 - 0.5 \cdot (1520 - 80) = 220 \end{aligned}$$

d) $MPC = c_1 = 0.8$ *→ sacarlo de la fórmula de C*
→ for every extra unit of income, the propensity is to consume 0.8.

$$MPS = s_1 = 1 - c_1 = 0.2 \rightarrow \text{for every extra unit of income, the propensity is to save 0.2.}$$