ECON1002 Intro. Maco

Tutorial Week 2

1. Early Feedback Task

1.1 Purpose

- Alert students to their strengths and weaknesses
- indication of academic performance and suitability for the course
- Pre-census **(Week 3)**

1.2 Format

- Typically, multiple choice or other automatically marked quizzes including weekly pre or post-class quizzes.
- Result released **Monday on Week 4**

1.3 Content

- Example 2.4 to 2.6
- Concept Check 2.5
- Table 2.4

Will go through these if time allows.

2. Tutorial Questions

2.1. What is macroeconomics about? How is it different from microeconomics? Why might macroeconomics be relevant to businesses?

2.2 Consider the following data for two countries.

			Country A	Country B
C	**Household Consumption**		100	100
G	**Government Expenditure**		100	100
I	**Total Gross Fixed Capital Expenditure**		50	150
I	**Changes in Inventories**		50	-50
EX	**Exports**		20	20
IM	**Imports**		20	20

GDP Output

$$Y = C + G + I + \underbrace{EX - IM}_{NX \leftarrow \text{Net export}}$$

2.2.a Calculate GDP for both countries.

$$GDP_A = 100 + 100 + 50 + 50 + 20 - 20$$

$$= 200 + 100$$

$$= 300$$

2.2.b Comment on the usefulness of these figures for deciding which, if any, of these two countries is likely to be experiencing an economic recession

2.3 An economy produces three goods: cars, computers, and oranges. Quantities and prices per unit for years 2007, 2008 and 2009 are as follows:

	2007		2008		2009	
	Quantity	*Price*	*Quantity*	*Price*	*Quantity*	*Price*
Cars	10	$2,000	12	$3,000	11	$2,500
Computers	4	$1,000	6	$500	5	$750
Oranges	1000	$1	1000	$1	1000	$1

2.3.a What is nominal GDP in 2007, 2008 and in 2009? By what percentage does nominal GDP change from 2007 to 2008, and 2008 to 2009?

$$GDP_{2007} = 10 \cdot 2000 + 4 \cdot 1000 + 1000 \cdot 1$$

$$= 20000 + 4000 + 1000$$

$$= 25000$$

$$\Delta GDP_{2007-2008} = \frac{GDP_{2008} - GDP_{2007}}{GDP_{2007}}$$

$P_1 \cdot Q_1$	$P_2 \cdot Q_2$	$P_3 \cdot Q_3$	$P_1 \cdot Q_2$	$P_1 \cdot Q_3$
20,000	36,000	27,500	24,000	22,000
4,000	3,000	3,750	6,000	5,000
1,000	1,000	1,000	1,000	1,000
$GDP_{2007} = 25000$	$GDP_{2008} = 40000$	$GDP_{2009} = 32250$	$RGDP_{2008} = 31000$	$RGDP_{2009} = 28000$

2.3.b Using the prices for 2007 as the set of common prices, what is real GDP in 2007, 2008 and in 2009? By what percentage does real GDP change from 2007 to 2009 and 2008 to 2009?

$Q_{2007} = 100$. $Q_{2008} = 120$ $Q_{2009} = 140$

$P_{2007} = 1$ $P_{2008} = 1.2$ $P_{2009} = 1.4$

$N = 1$ $N = 1$ $N = 1$

$R_{2007} = 120$ $R_{2009} = 140$.

2.3.c Using the prices for 2008 as the set of common prices, what is real GDP in 2007 and in 2008? By what percentage does real GDP change from 2007 to 2008 and 2008 to 2009?

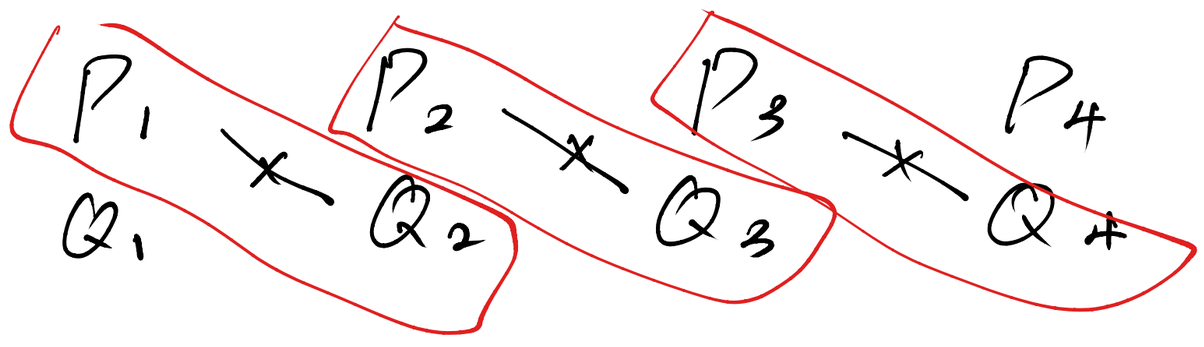
2.3.d Why are the two output growth rates constructed in (b) and (c) different? Which one is correct? Explain your answer

2.4 What are some of the problems associated with using GDP as a measure of economic welfare? Do you think economists are justified in their use of GDP as a measure of economic welfare? Explain.

2.5 Click on the following RBA site

2.5.a Towards the bottom of the page, look at data on “Output and Labour”. Use the GDP and income data, and using column B calculate the growth rate of real GDP between March 2018 and March 2019.

2.5.b What do you understand by the GDP in ‘chain volume measures’?



3. EFT Review

EXAMPLE 2.4 – THE HAIRDRESSER AND THEIR ASSISTANT

Your hairdresser charges $30 for a haircut. In turn, the hairdresser pays their assistant $6 per haircut in return for sharpening the scissors, sweeping the floor and other chores. For each haircut given, what is the total contribution of the hairdresser and their assistant, taken together, to GDP?

The answer to this problem is $30: the price, or market value, of the haircut. The haircut is counted in GDP because it is the final service: the one that actually has value to the final user. The services provided by the assistant have value only because they contribute to the production of the haircut; thus they are not counted in GDP.

EXAMPLE 2.5 – A GOOD THAT CAN BE EITHER INTERMEDIATE OR FINAL

What is an intermediate good?

Farmer Chin produces $100 worth of milk. She sells $40 worth of milk to her neighbours and uses the rest to feed her pigs, which she sells to her neighbours for $120. What is Farmer Chin's contribution to the GDP?

The final goods in this example are the $40 worth of milk and the $120 worth of pigs sold to the neighbours. Adding $40 and $120, we get $160, which is Farmer Chin's contribution to the GDP. Note that part of the milk Farmer Chin produced serves as an intermediate good and part as a final good. The $60 worth of milk that is fed to the pigs is an intermediate good and so it is not counted in GDP. The $40 worth of milk sold to the neighbours is a final good and so it is counted.

EXAMPLE 2.6 – THE SALE OF A HOUSE AND GDP

Does the sale of an existing home count in GDP?

A 20-year-old house is sold to a young family for $200 000. The family pays the real estate agent a 6 per cent commission, or $12 000. What is the contribution of this transaction to GDP?

Because the house was not produced during the current year, its value is not counted in this year's GDP. (The value of the house was included in the GDP 20 years earlier, the year the house was built.) In general, purchases and sales of existing assets, such as old houses or used cars, do not contribute to the current year's GDP. However, the $12 000 fee paid to the real estate agent represents the market value of the agent's services in helping the family find the house and make the purchase. Since those services were provided during the current year, the agent's fee is counted in current-year GDP.

CONCEPT CHECK 2.5

Suppose the production and prices of pizza and pasta in 2013 and 2018 are the same as those in **Table 2.4**, except that pizza production has tripled rather than doubled between 2013 and 2018. Find real GDP in 2018 and 2013, and calculate the growth in real output over the six-year period. (Continue to assume that 2013 is the base year.)

TABLE 2.4 Prices and quantities in 2013 and 2018

	QUANTITY OF PIZZAS	PRICE OF PIZZAS	QUANTITY OF PASTA	PRICE OF PASTA	NOMINAL GDP
2013	10	$10	15	$5	$175
2018	20	$12	30	$6	$420