

Final Exam Review: **Macroeconomics**

Disclaimer: The review may help you prepare for the exam. The review is not comprehensive and the selected topics may not be representative of the exam. In fact, we do not know what will be on the exam. We try to make our answers complete, but we cannot guarantee their correctness. Use at your own risk and use good judgment.

We will NOT answer any questions about the essay topic. Please refer to Spring 1999 Final Exam essay for an example of a structured answer.

1. Remember to separate microeconomics and macroeconomics in your head. They both operate under different assumptions and describe different components of the economy. Microeconomics focuses more on the relationship between society, consumers, and producers. Macroeconomics looks at the big picture or the economy as a whole. Think of micro as the trees, and macro as the forest.
2. There are three big measures in macroeconomics: gross domestic product, unemployment, and inflation!
3. Real gross domestic product (Y) is another name for aggregate **income**. Gross domestic product is also another name for aggregate **output**. GDP is also another name for aggregate **expenditures**. I simultaneously refer to aggregate output, aggregate income, aggregate expenditures, and real gross domestic product when I use the word "output".

GDP, Unemployment, and Inflation

4. **$Y = C + I^A + G + NX$** **(always true)**
5. $I^A = I + H$, I = Planned Investment, H = Unplanned changes in inventory
6. GDP Accounting is not difficult if you remember a few rules of thumb:
 - a. Consumption is done by households
 - b. Investment spending is done by firms (and sometimes by households, if households buy new real estate)
 - c. Government spending is done by local, state, and federal governments, but the weird thing is that almost anything that the government purchases can be considered as government spending (even intermediate goods and services)
 - d. Foreign people buy our exports
 - e. Households, firms, and government buy imports
 - f. Count NEW goods and services (not used)
 - g. Count FINAL goods and services (not intermediate)
 - h. Count goods and services made in the specified period (not goods and services from previous years)
7. Every person in our economy fits into the following categories:
 - a. Employed
 - b. Unemployed
 - c. Out of the labor force
8. If someone is unemployed, then she must meet ALL three conditions:
 - a. Age 16+
 - b. Jobless
 - c. Looked for a job in the last 4 weeks
9. Inflation is the percentage change in price levels.
10. There are three methods to measure the price level: CPI, PPI, and GDP Deflator
11. $\text{Inflation} = (\text{CPI}^{\text{new}} - \text{CPI}^{\text{old}}) / \text{CPI}^{\text{old}}$
12. Inflation benefits borrowers and hurts lenders
13. There are **THREE BIG PROBLEMS** with CPI (Case&Fair):
 - a. Quality change and new product bias: the CPI does not immediately take into account either improvements in the quality of goods and services or the introduction of new products
 - b. Substitution bias: the CPI assumes that consumers purchase a constant mix of various goods and services despite changes in their relative prices (think about the law of downward sloping Demand)
 - c. Outlet substitution bias: the CPI does not adequately take into account that new discount stores offer lower prices (Walmart & Costco) and entice consumers away from traditional outlets (Albertsons & Safeway) that tend to be more fully represented in the CPI market basket

Keynesian Cross Model

Goods & Services Market

Closed-economy Version

14. Assume closed economies which mean no exports and no imports. This means that $NX=0$.
15. Planned Aggregate Expenditures = $PAE = C+I+G+NX$ [*remember that this is always true because this is a definition*]
16. Remember that "I" stands for planned investment spending.
17. $Y=PAE$ [*remember that this is true in equilibrium*]
18. Net taxes = Taxes - Transfer Payments = $T = TA-TR$
19. Disposable income = income after net taxes = $Y^d = Y-TA+TR = Y - T$
20. Autonomous consumption spending is consumption spending when aggregate income is zero. This is the idea that households need to spend and purchase goods and services even when aggregate income is zero.
21. Marginal propensity to consume = portion of one extra dollar of income that is consumed
22. Consumption Spending = $C = a + (b)(Y^d)$
23. $C = a + (mpc)(Y-TA+TR)$
24. Remember that households can choose to do two things with their aggregate income: consume or save.
25. There are three fiscal closed-economy multiplier effects (assume T is constant):
 - a. Government spending multiplier = $1/(1-mpc)$
 - b. Net Tax multiplier = $-mpc/(1-mpc)$
 - c. Balanced Budget multiplier = 1
26. There are three types of expansionary fiscal policies
 - a. Raise government spending (ΔG)
 - b. Lower net taxes (ΔT)
 - c. Raise both government spending and net taxes by the same amount
27. Budget deficit = $G - T$

Open-Economy Version

28. Assume the economy is open to trade which implies $NX>0$, $NX<0$, or $NX=0$.
29. Assume T is a constant.
30. Assume imports (IM) is proportional to domestic output (Y). In other words, the more income the economy has, the more the economy will import from foreign countries.
31. Marginal propensity to import (mpm) = the change in imports caused by \$1 change in income = $\Delta IM/\Delta Y$
32. **The multiplier effect is smaller in an open economy than in a closed economy because when government spending (or investment spending) increases and income and consumption rises, some of the extra consumption spending that results is on foreign products and not on domestically produced goods and services. (Case&Fair)**