Intro Macro - Sheflin

Essential Questions - Intro Macroeconomics

11/24/2018

*(**NOTE**, we have not covered some of these topics yet, but will by the end of the semester- please do not post questions on the material not yet covered, until it is covered)*

Many/most Final Exam multiple-choice questions will deal with these issues (as did the assignments and HW in one form or another). If you can answer these in words, you should have no trouble with the multiple choice questions on the final. If you cannot, look up the answers (textbook, Wikipedia, google, etc) and if still having trouble, post on the **FINAL EXAM RELATED** chat room, or ask in the **Q&A** or both. See the **REVIEW GUIDE** for more information and suggestions on how to study.

I have provided explanations in *italics* for some of the questions.

NOTE the topics are listed in reverse order – from most recently covered back to the beginning of the semester – which is the order in which you should study the material.

THE FINANCIAL CRISIS, GREAT RECESSION AND RECOVERY ETC

1. What's a Speculative Asset Bubble?
2. What were Tulip Mania, the South Seas Bubble, the Dot com bubble, the 21st century housing bubble (subprime crisis)
3. What role did the following play in the crisis?
    a. leverage,
    b. securitization and derivatives-mbs, cdos, cds,
    c. funding mismatch,
    d. shadow banking sector,
    e. deregulation,
    f. too big to fail/moral hazard,
    g. wealth effect
    h. animal spirits, deleveraging, fire sales
    i. systemic risk
4. What monetary policy actions were taken to deal with the crisis (conventional and unconventional)? *Early on, expansionary conventional policy – reduction of fed funds rate to 0, reduction of discount rate, increased purchase of government securities (open market operations). Later, several rounds of quantitative easing – purchases of longer term government and mortgage backed securities to lower long-term interest rates, expanded lender of last resort role to banks and many non-bank financial institutions and entities including Bear Stearns, AIG, etc. Also considerable 'forward guidance' – explanations to market participants about their future actions, so as to shape expectations.*
5. What fiscal policy actions? *Under President Bush and Treasury Secretary Paulson, the TARP 'spending' program which provided loans and other support to major banks and later to GM*

and others. Under Obama, ARRA – American Recovery and Reinvestment Act – a mixture of tax cuts and government spending programs to boost aggregate demand.

6. What were some of the major consequences of the crisis- economic, political, social, financial?
7. What is Dodd-Frank? The Volcker Rule?
8. What is/are: a SIFI (systemically important financial institution)? The Financial Stability Oversight Council? The Consumer Financial Protection Bureau?

MACRO CONTROVERSIES AND ISSUES.

1. What are some key points of each of the following?
    a. *Classical Macro – focus on LR aggregate supply, economy self-adjusting in long-run (full employment-Say's Law), money supply affects prices and inflation only, interest rates determined by saving and investment (supply and demand for loanable funds)*
    b. Keynesian Economics – *focus on SR and aggregate demand; economy not self-adjusting; periods of recession, unemployment etc; increase aggregate demand to deal with this, thru fiscal policy primarily; money supply affects agg D and everything else in the SR but may not be effective in recession/depression if in a liquidity trap*
    c. Supply-side Economics-*in **SR**, tax cuts and other incentive programs can shift aggregate **Supply** and this increase output, income, etc without inflation and without government spending*
    d. Monetarism –*Milton Friedman, SR – Money has the largest impact on aggregate demand and thus output, recession, etc. in LR, basically classical*
    e. Rational Expectations *hypothesis that people make optimal (but not always correct) economic forecasts and thus leads to an essentially classical outcome, with monetary and fiscal policy having little or no impact.*
2. What is a government budget deficit? The national debt?
3. What harm do Long-run Government Budget Deficits cause? *crowding out* of *possibly more productive private sector investment and thus slower growth, increased foreign obligations*
4. What is the Full-employment (Structural Deficit)? *A hypothetical measure of what the deficit would be if the economy were at full-employment and hence if there was no counter-cyclical spending involved* Why is it likely worse than the ordinary deficit *suggest the government may be over spending even though the economy is at full employment, i.e. with no cyclical justification*
5. What is meant by Trickle-down economics
6. What are government entitlement programs and what LR issues do they raise?
7. What is the largest source of federal government revenue? Largest spending item?

INTERNATIONAL MACRO

1. Why are some benefits of international trade? Some of its harms?
2. What is the basic idea of comparative advantage? *Countries specializing in goods and services they have a relative advantage in producing (produce at a lower opportunity cost) and trading for the rest, wind up with more of everything than if they tried to produce everything*
3. How do exports and imports affect the macroeconomy in the SR?
4. What impact does an open economy (trade) have on the effectiveness of monetary policy? *Strengthens monetary policies impact on aggregate demnand – i.e., makes it more effective due to the effect of interest rate changes on exports and imports and this aggregate demand* On fiscal policy? *Reduces the impact of fiscal policy on aggregate demand due to a form of crowding out*

5. What are the determinants of exchange rates in the short-run? In the long-run?
6. What is purchasing power parity theory?
7. Why do we have a current account deficit, and what does it imply?
8. Why do we have a capital/financial account surplus and what does it imply?
9. What is the 'twin deficit problem'? The 'tri-lemma'?
10. What are the advantages of floating exchange rates? Fixed exchange rates?
11. How does a strong currency affect the domestic economy?
12. What issues does China's pegged or managed exchange rate system present?
13. Why was the yuan undervalued in China in the past?
14. What was Bretton Woods?
15. How did the gold standard affect exchange rates? Balance of payments?

UNEMPLOYMENT, WAGES AND LR INFLATION

1. What does it take to be counted as unemployed?
2. How do we define the unemployment rate? The Labor Force participation rate?
3. What is hidden unemployment, discouraged workers?
4. What are three causes or types of unemployment?
5. What is Okun's law?
6. Define the natural rate of unemployment (NAIRU). Why does it matter?
7. What's the relation between wages, prices and productivity? *W/P=MP or W=PxMP and %change W = % change P + % change MP*
8. According to marginal productivity theory, what is a key determinant of the real wage (in theory)?
9. Who were the Luddites (very simply) and why do they matter now?
10. Why is the LR Phillip's curve vertical and what does it imply for policy?

PRICES AND INFLATION

1. Define inflation. *Sustained increase in general level of prices*
2. What's the difference between inflation and an increase in prices? *Inflation is ongoing, versus a one-time or short-term increase in prices*
3. How do we measure the level of prices (what indices-CPI, Implicit GDP deflator)?
4. What are some drawbacks or limitations of the traditional (fixed weight, base period) CPI? *Fails to account for substitution from goods whose prices are increasing to cheaper goods; difficult to measure impact of new or improved goods or services.*
5. How do we measure inflation? *%change in a price index*
6. What's the core cpi? The chain-weighted cpi?
7. What can cause inflation in the short-run?
8. What can cause inflation in the long-run?
9. What harm does anticipated inflation cause? *menu and shoe leather costs*
10. What harm does unanticipated inflation cause?
11. What is deflation and what harm does it cause?
12. Which is considered more dangerous, inflation or deflation?
13. What is hyperinflation? What causes it? What are the consequences? What's the cure?
14. What's the short-run Phillip's curve? What policy does it imply?
15. What causes the short-run Phillip's curve to shift up?

16. What's the long-run Phillip's curve? What's the implication of the slope of the long-run Phillip's curve.
17. What's the relation between Fed credibility and inflation? Between inflation expectations and inflation? Between unemployment and inflation?

ECONOMIC GROWTH

1. What was the long-run average rate of growth in U.S. real GDP in the past? *3%* Real GDP per capita? *2%*
2. What is it expected to be in the future? *2% or less real GDP, 1.5% or less per capita*
3. How does long-run U.S. growth generally compare with Europe? Asia? Africa?
4. What is productivity? Why does it matter to economic growth?
5. What is the role of technology in economic growth?
6. What is the suggested role of each of the following in economic growth:
   - Political structure, property rights, human capital, capital, savings, education, natural resources, industrial policy, population growth, research and development, taxes, free trade, trickle down economics, government budget deficits
7. How do you calculate growth rates? *%change in real gdp (or real gdp per capita) = (Xtoday-Xlast year)/Xlastyear   where X=real GDP or per capita real gdp*
8. What is the rule of 72? (Or 70)? *72/interest or growth rate = # of years to double* How do you use it? *Given interest or growth rate solve for years to double or given years to double, solve for annual interest or growth rate*
9. How does an increase in saving affect the economy in the long run? (short-run?)
10. Explain the idea (1 sentence) of each of the following theories of economic growth:
    a) Classical/Malthusian, *little or no growth, subsistence wages (just enough to live on); no improvement in standard of living all due to limited capital growth, little technological progress, little human capital improvements and diminishing returns*
    b) Neo-Classical – Solow Model *although increased saving and thus investment can lead to periods of growth, in the long-run due to depreciation and diminishing returns, economy eventually hits a steady state with no growth UNLESS there is technological and human capital improvements*
    c) Endogenous or New Growth Theory *focus on determinants of and policies for technological improvements and gains in human capital*
    d) Creative Destruction *Schumpeterian idea that new ideas, procedures, technology destroy old industries (which is good) and create new ones*
11. What's wrong with Malthus' law? (Why hasn't it held for developed countries?)
12. Why is it still relevant?
13. What is capital? Human capital
14. What role does capital play in the macroeconomy in the SR? *(we increase capital by investment which impacts agg D in the SR*) LR? (*more capital contributes to economic growth)*
15. What is interest?
16. What is secular stagnation idea?
17. How do you calculate compound growth rates? *Rule of 72, or* $FV=PV(1+g)^t$
18. How and why do we discount future $ values? *Interest;* $PV=FV/(1+g)^t$
19. What affects the present value of a future amount*? Interest, years till it is received*
20. How are real and financial capital related? *Financial capital (money) is used to purchase real (physical) capital – machines etc.*
21. How does an increase in capital affect labor? *Raises marginal product of labor and thus wages but may substitute for labor and reduce employment in an industry*

LONG –RUN CLASSICAL MODEL (each of the following refers to the Classical Model)

1. What determines output? *K,L, tech – i.e. factors of production which determine potential output = S*
2. What determines prices and inflation? *Ms*
3. What determines interest rates? *Supply and Demand for loanable funds (Savings and Investment)*
4. What is loanable funds theory? *Saving*
5. What is Say's law?
6. What is the quantity theory? What does it imply about output ad prices in the LR?
7. What is the natural rate of unemployment (NAIRU)?
8. What is the relation between the nominal and real interest rates and inflation? *Fisher's equation int real = int nominal -inflation*
9. What causes inflation in the long-run? *Too rapid growth in the Ms*
10. What role does saving play in the long-run? (*allows for increased investment)*
11. What role does investment play in the long-run? *(increases economic growth)*
12. What causes unemployment in the long-run? *(structural, frictional)*
13. What is crowding out? *Gup->i up ->I down*
14. How does fiscal policy affect the economy in the long-run? *Not needed since always at full employment output and bad since it crowds out productive investment*
15. How does monetary policy affect the economy in the long-run? *Inflation impact only*
16. What is the long-run Phillips curve and what does it imply? What makes the *short-run* curve shift to the right?
17. What role do inflationary expectations play in inflation and the Phillips curve? *Actual inflation depends on labor market tightness (unemployment rate, inversely) and expectations of inflation (and supply shocks which we will ignore). The long-run Phillips curve is vertical because higher inflation (perhaps due to lower unemployment in the short-run) leads to expectations of increased inflation and this shifts the SR Phillips curve up along the vertical long-run curve.*
18. What is meant by rational expectations? What does it imply about fiscal and monetary policy? *Argument that economic agents make 'optimal' economic forecasts – not systematically too high or low. Suggests that policy will be ineffective since people will correctly forecast its consequences and act to offset them.*

SHORT RUN KEYNESIAN MODEL AND FISCAL POLICY (all of the following refer to the Keynesian model and the short-run only)

1. What determines aggregate prices and output?
2. What determines interest rates?
3. What are the components of aggregate demand?
4. What are the key determinants of Consumption? Saving? Investment? Government Expenditures? Exports? Imports?
5. What are the condition(s) for short-run macro equilibrium? *Agg Demand = output or Aggregate Demand = Aggregate Supply or no unintended inventory accumulation*
6. What is the role of inventories (what makes them go up or down and what does each signify)?
7. What factors shift the aggregate demand curve? The aggregate supply curve? *Factors that impact costs of production, especially wages*
8. How does the stock market affect the economy? *Wealth effect; role in financial investment*

9. What are the 'types' of unemployment? *Cyclical, structural, frictional (ignore seasonal if you know it)*
10. What is inflation and what causes it in the short-run?
11. What is the short-run Phillips curve and why is it important? *graph*
12. What causes business cycles, and what are they? *Shifts/shocks in agg D and/or agg S; sr repeating, irregular fluctuations in economic conditions – output etc.*
13. How does monetary policy impact the economy in the short-run?
14. Which is the shorter and which the longer lag in monetary policy?
15. How does fiscal policy impact the economy?
16. What is the impact of a government budget deficit in the SR?
17. What is the government spending multiplier?
18. Which is the shorter and which the longer lag in fiscal policy?
19. What is the idea of the political business cycle? *Tw parts to it: 1. some fiscal/monetary policies may be undertaken for political rather than economic reasons (to get reelected) and 2. Voters are more likely to vote for the incumbent party if economic conditions (unemployment and inflation) in the year leading up to the election are good/improving (they have short memories – don't count the previous 3 years much)*
20. What is a consumption function? The mpc? the multiplier?
21. Calculate the Government Expenditure multiplier.
22. In the simplest case, which is larger, the government expenditure or the tax multiplier?
23. What is the paradox of thrift and what does it imply?
24. What is the wealth effect and why does it matter?
25. What is the relation between saving and consumption? *S=Y-C*
26. What is the effect of an increase in saving in the short run? *S up -> C down -> D down -> y down*
27. What is the effect of an increase in investment in the short-run? *I up -> agg D up -> Y up*
28. What did Keynes mean by animal spirits and how does it matter?

MONEY, THE FED AND SR MONETARY POLICY

1. What is Money? Wealth? Income? How are they different?
2. Define M1. Roughly, what's in M2 that is not in M1?
3. What are the three functions of money?
4. Why are the advantages of an economy using money rather than barter?
5. What is barter and what are the shortcomings of barter?
6. What is the Fed? Describe its structure. Why does the Fed have the structure it does (12 banks, etc). What is the FOMC?
7. Explain in words how a Fed open market purchase increases the money supply *Fed buys bonds on the open market from bond dealers, it credits the reserves of the dealer's bank who credits the dealers checking account, raising M1. Bank lends out some of the excess reserves, raisng deposits and M1 further*
8. What is the central operating target of the Fed? (*answer – the fed funds rate*)
9. What is the primary 'traditional' policy tool of the Fed? (*answer: open market operations)*
10. What are the ultimate goals of the Fed - The dual mandate?
11. What are the new policy tools and approaches the Fed is employing as part of its 'Exit Strategy'? *paying IOER – interest on excess reserves and setting the rate on ONRRP – overnight reverse repurchase agreements – temporary sale of bonds*; *This allows the Fed to control and raise SR interest rates and avoid the banks overspending their huge excess reserves too quickly*
12. What is the Taylor Rule?

13. What is inflation targeting?
14. What is the liquidity trap and why does it matter, sometimes?
15. Is the Fed Independent? Why? How? (more on the Fed below)
16. What is quantitative easing? How did/does it work?
17. What were some elements of the unconventional monetary policy employed during the financial crisis? *quantitative easing and forward guidance*
18. Why is Fed credibility important? *Influence expectations of inflation which strongly influence actual inflation*
19. What was the Fed's unconventional policy during the financial crisis of 2007-?
20. What is the Fed's 'exit strategy'
21. What is bitcoin? The blockchain?

CIRCULAR FLOW, NATIONAL INCOME ACCOUNTING AND OTHER MEASUREMENTS

1. 2 Important points of the Circular flow model *spending generates income, focus on leakages (S) and Injections (I), equivalence of $ and real flows*
2. 3 Ways to calculate GDP (*Value Added is one*)
3. What is the relation between Gross and Net Investment and Depreciation
4. Definition of Real and Nominal GDP *real measures 'quantity' of output, nominal the $ spent on it.*
5. How do you calculate real GDP from nominal? *Real gdp = nominal gdp/(p/100)*
6. What is meant by deflating nominal gdp?
7. How do we measure/calculate Unemployment, Labor Force, Employment
8. What are Discouraged Workers and Hidden Unemployment
9. What is the CPI? What is it used for?
10. How is the CPI calculated, very roughly (in a sentence)?
11. What are shortcomings of the CPI?
12. Why do economists prefer the chained CPI? *Doesn't suffer from the substitution problem – accounts for changes in the market basket as prices change*
13. What is the GDP deflator?
14. What is meant by chained ($2005) GDP? *Just a better way to calculate real gdp*
15. What is meant by seasonally adjusted data? *Statistical adjustment to remove predictable, recurring within year fluctuations to allow one to observe underlying trends in the data.*
16. What are some shortcomings of GDP as measure of economic activity and well-being?

INVESTMENT RELATED

1. What is the *economic* role of the financial system – what useful purpose does it serve for the overall economy? *Channels resources from savers to investment in plant and equipment leading to a more efficient economy*
2. What are stocks (equity)? *Ownership shares of corporations*
3. What is the major reason people buy stock? *Hope of capital gains, dividends, and in some cases corporate influence/control through voting rights*
4. Why do firms issue stock? *Raise financial capital*
5. What is leverage, liquidity, buying on margin, selling short?
6. What are the roles of dividends and the risk-adjusted discount rate in determining the fundamental price of a stock *Stock Price=Dividends / (risk adjusted discount rate-dividend growth rate*?
7. What is a speculative bubble?
8. How does stock compare to bonds as an investment? *Stock – higher return, higher risk*
9. How and why should you invest in stocks? *Buy and hold for long-run; higher returns than other financial assets*

10. What is the advantage of diversification? *Reduced risk with the same return*
11. What is the efficient markets hypothesis, and how does it relate to random walks? *Information incorporated rapidly into securities prices and thus no unexploited profit opportunities (securities priced 'correctly') and since all information available today reflected in price, only new information will change price – that is prices change unpredictably (follow random walk* What does it suggest for your personal investing? *Don't try to predict or beat the market, rather buy the market – index stock mutual fund*
12. What are Bonds? Bond Ratings, Junk Bonds, Treasury Bonds, Corporate Bonds, Muni/S&L Bonds?
13. What are Mutual Funds? Money market mutual funds?
14. What is a hedge fund? An ETF?
15. What is a stock index mutual fund, and why should you likely use it for long-run investing?
16. What is a 401k? What should be in it? An IRA?
17. What are derivatives?
18. What's an option? A futures contract? A call option?
19. What is the Black-Scholes formula and why does it matter? *Breakthrough approach/formula used to value options contracts 9derivative) – led to wide use of math in financial economics and explosion of financial engineering, quant finance, etc.*
20. What's an IPO?
21. What are primary and secondary financial markets?
22. What are financial intermediaries?

BACKGROUND AND MICRO ISSUES

1. How do economists measure the value of anything?
2. What determines the price and quantity of any good or service? *graph*
3. **What is opportunity cost and why is there no free lunch?**
4. **What does the invisible hand mean, and why does it suggest laissez-faire?**
5. What are the three questions answered by any economic system and how are they answered under a market-based system
6. What is the difference between capitalism, socialism, communism
7. **What is the definition of Microeconomics? Macroeconomics? Economics?**
8. What are the arguments for and against increases in minimum wages? Price floors and ceilings?
9.

OTHER

1. What caused the great depression? The 2007-09 recession?
2. What is the Black-Scholes formula and why does it matter? *Breakthrough approach/formula used to value options contracts 9derivative) – led to wide use of math in financial economics and explosion of financial engineering, quant finance, etc.*
3. Who was Adam Smith? Milton Friedman? Malthus? Schumpeter? Keynes? Adam Smith?

FORMULAS AND CALCULATIONS ^ means raise to a power

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Consumption=a+b Income    mpc = b
government expenditure multiplier   1/(1-mpc)
equilibrium y = (1/1-mpc)x(a+I+G+X-M)
PV=FV/(1+i)^n
FV=PV*(1+i)^n
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72/i=years to double
i nominal = ireal + expected inflation
i nominal=i risk free+ risk premium
Money Supply=1/rr x Reserves
Real GDP = nominal GDP/(P/100)
UR=U/LF   LF=U+E
%change(XY)=%changeX + %changeY
Discounted Dividends Model Sp=D(1+g)/(r-g) where Sp=stock price, D=current dividends, g = expected growth rate of dividends and r=risk adjusted interest rate = the 'bank' interest rate + an extra amount to represent the riskiness of the stock