Econ1102 macroeconomics 1 | session 2, 2010 assignment

Economics

ECON1102 MACROECONOMICS 1 | Session 2, 2010 Sample Final Exam Questions Short-Answer Questions The following are examples of the type of question that could be asked in Part B of the final exam. Question 1 (10 marks) Briefly explain the main factors that determine the demand for money. Use a model to show equilibrium in the money market and explain the effect of a financial innovation that leads to a fall in the demand for money. (4 marks) Factors that determine demand for money include: Nominal interest rate: Money demand is negatively related to i.

This is because higher interest rates yield higher returns on investments, and as a result, people want to invest more money (rather than hold it) when the interest rate it high. When the interest rate is low, people have less incentive to invest and hence hold more cash on hand. Real output or GDP: Money demand is positively related to Y. This is because- by the principle of the circular flow of income- output directly relates to households' income. With higher values of Y, households have higher income and hence can afford to consume more.

In order to consume more, people have to have more money on hand, and hence when Y increases, the demand for money also increases. Price Level or CPI: When the prices of everyday goods go up, in order for households to keep purchasing these goods, they need to have more money on hand. This is why money demand is positively related to the price level. Changes in technology: for example, the introduction of credit cards and ATM's have reduced the demand for money since people now can pay via credit card, or access the ATM quickly to retrieve money.

A fall in the demand for money as a result of financial innovation leads to a leftward shift in the money demand curve. This shift causes the interest level to drop; since money supply does not change (it is inelastic as we assume that the reserve bank can supply money at any level of interest rate). Outline the mechanisms used by the RBA to achieve its target for the overnight cash rate. (6 marks) Banks are required to hold exchange settlement accounts with the RBA that cannot be overdrawn (must remain in credit).

These accounts provide a means by which banks can have transactions with themselves, and also for making and receiving payments with the RBA and the federal government. The overnight cash market is used to borrow and lend money within 24h between the banks in order to manage their ESA's. Banks with too low reserves borrow money at a given interest rate called the overnight cash rate. Banks with too high reserves lend their money on the overnight cash market. By monitoring the conditions in the cash market, the reserve bank is able to tailor its purchases and sales of financial assets so as to achieve a particular target rate.

If the cash rate looks like it will be above the target, (as a result of shortage of cash in the system) the RBA would increase its purchases of financial assets (bonds) from the banks, so RBA credits the selling commercial banks' exchange settlement account. This means that more cash is available in the bank reserves. This increase in bank reserves encourages banks to lend money on the overnight cash market, and so the cash rate falls as there is greater supply for the cash.

If the cash rate looks like it will be below the target (as a result of excess cash in the market), the RBA would increase its sales of bonds to the banks. This means the fewer reserves are available to the banks, and hence banks have higher motivation to borrow funds. With a higher demand for the cash, the cash rate rises. The RBA rarely buys and sells government bonds outright, but through Repurchase Agreements. Here, purchases and sales of securities are only for a certain period (e. g. a week), after which the transaction is reversed.

The RBA will always (1) pay an interest rate on funds deposited by banks in their ESA's that is a fixed margin below the target cash rate; and (2) offer exchange settlement funds at a higher fixed margin than the target cash rate. There are two further mechanisms for which the RBA controls the overnight cash rate: The RBA pays interest in funds held in ESA accounts at a rate which is 0. 25% below its cash rate target. This acts as a lower bound for the cash rate, as banks will not be willing to lend in the market at a rate less than what they can receive with the RBA.

Banks can, at any time, borrow cash from the RBA at a rate that is 0. 25% above the target cash rate. This is an upper bound for the cash rate as banks will not be willing to borrow in the market at a higher rate than what can be provided by the RBA. Below this lower bound, banks have infinite demand for cash, since they can always earn more on their ESA funds. Question 2 (10 marks) Explain the concept of the average labour productivity. Why do economists consider growth in average labour productivity to be a key influence on long-run living standards? 2marks) Average labour productivity

is the amount of output, on average, that each worker produces. This is equal to y/N where y= total real output and N= number of employed workers. Identify three variables that may affect average labour productivity and briefly explain how they do so. (3 marks) Use the Solow-Swan model to explain the effects of a decrease in the population growth rate. Will a decrease in population growth lead to an increase in a country's per-capita income? Explain your answer. (Hint: Examine what happens in the steady-state and in the period of adjustment to the steady-state). 5 marks) Question 3 (10 marks) Draw a diagram showing the Aggregate Demand (AD) curve. Explain why the AD curve has a negative slope. Briefly discuss two variables that could cause the AD curve to shift. (2 marks) The aggregate demand curve is downward sloping mainly because of the influence of RBA: RBA is responsible for lowering and maintaining a stable rate of inflation. When the economy experiences expansionary output gaps, inflation goes up. The RBA hence raises the interest rate, which results in a reduction of actual output y.

If inflation is not high enough (recessionary gap) then the RBA lowers interest rates to induce more spending. This raises output (y). Hence, AD is downward sloping because high inflation corresponds to a lower output, and a lower inflation corresponds to a higher level of output. r= r ? +g? The two variables which cause a shift in the AD curve include Exogenous change in spending: as AD includes the effects of the PAE curve, increased spending raises equilibrium output at every level of inflation. Hence a rightward shift (vice versa for decrease in spending)

Exogenous changes in RBA’s policy reaction function: setting real interest rate higher at leach level of inflation means that equilibrium output is reduced at each level. This corresponds to a leftward shift in the AD curve. The country of Utopia is in a long-run equilibrium with an inflation rate of 10 percent per annum. In an effort to reduce the rate of inflation the central bank of Utopia adopts an inflation target of 2 percent. Use the AD-AS model to answer the following questions. Use a labelled diagram to show the initial long-run equilibrium for Utopia (1 mark)

With the aid of a diagram explain the process that could be used by the central bank of Utopia to reduce the inflation rate from the initial level of 10 percent to its target rate of 2 percent. (4 marks) In order to reduce the inflation rate, the RBA can tighten monetary policy by setting a higher interest rate. This is equivalent to an upward shift in the policy reaction function. This increase in interest rate will cause people to consume less, shown by a leftward shift in the AD curve. As a result, a new short run equilibrium output is set lower than potential output.

This causes a recessionary gap, which in turn, eventually causes inflation to decline and come to equilibrium at the point of intersection between SRAS’ and AD’. In the long run, the equilibrium is restored to the potential level of output (LRAS) but at a lower inflation rate. Discuss the relative costs and benefits of the disinflation process undertaken by the central bank of Utopia. (Hint: In your answer you should explain the benefits of having a lower long-run inflation rate)(3 marks) One cost of disinflation is that the RBA had to create a recession to induce a fall in inflation.

This recession causes lower output, higher interest rates, and higher unemployment in the short run, and hence leaves the economy worse off while the recessionary gap is in existence. The longer it takes for inflation to fall (i. e. the more inertial the inflation), the longer the inflation and the greater loss of output for the economy. The benefits are the gains to the economy that obtain from having a permanently lower rate of inflation. Bibliography Principles of Macroeconomics – 3rd edition Frank Bernanke Olekalns