

Supervision 3:
Unemployment and Money Supply

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Short Questions

1. What happens to money supply if
 - (a) People decide to keep more cash in their wallet instead of their current accounts?
 - (b) If the government introduces a law that imposes a high reserve deposit ratio?
 - (c) There are fears of bank runs?

2. Find the annual Balance Sheets of the following financial groups, at end of 2013 (easily available on the web): Goldman Sachs, Morgan Stanley, Citigroup, Royal Bank of Scotland Group, Lloyds Banking Group.
 - (a) Calculate their leverage ratios. Which institution is more leveraged?
 - (b) By how much percentage should the value of their assets decline in order to bankrupt these institutions?

3. Which of these are money? What are their differences?
 - (a) Currency
 - (b) Cheques
 - (c) Deposits in current accounts
 - (d) Credit cards
 - (e) Bitcoins

Long Questions

1. Consider the following variation of the Solow growth model. The production function is $Y = F(K, E) = K^{1/2}E^{1/2}$, where E represents the total number of employed workers. The saving rate s , is 20 percent and the depreciation rate δ , is 5 percent. There is no population growth, nor technological progress. Furthermore, suppose that the job separation rate s , is 1 percent and the job finding rate f , is 4 percent.

- (a) Compute the steady state capital per employed worker k^* and the steady state output per employed worker y^* .
 - (b) If the labour force L in this economy is 50 people, what are the steady state unemployment rate and the steady state unemployment level? What are the steady state levels of output Y^* and capital K^* ?
 - (c) Suppose that the government implements a policy that increases the job finding rate. What is the effect of such a policy on the steady states of capital per employed worker, level of capital and unemployment rate?
2. In October 2012, the unemployment rates in selected European countries were: Austria 4.5%, Denmark 7.7%, France 10.4%, Germany 5.4%, Greece 26.8%, Italy 11.2%, Norway 3.1%, Spain 26.0%, United Kingdom 7.8% (source: Eurostat). What reasons may be behind such large variation in the unemployment rates across Europe? What characteristics could be generating the high and persistent unemployment in many European economies? (Essay – 1000 words max)