

### Problem Set 4

Due *in lecture* on Monday, May 1st. Be sure to put your name on your problem set. Put “boxes” around your answers to the algebraic questions.

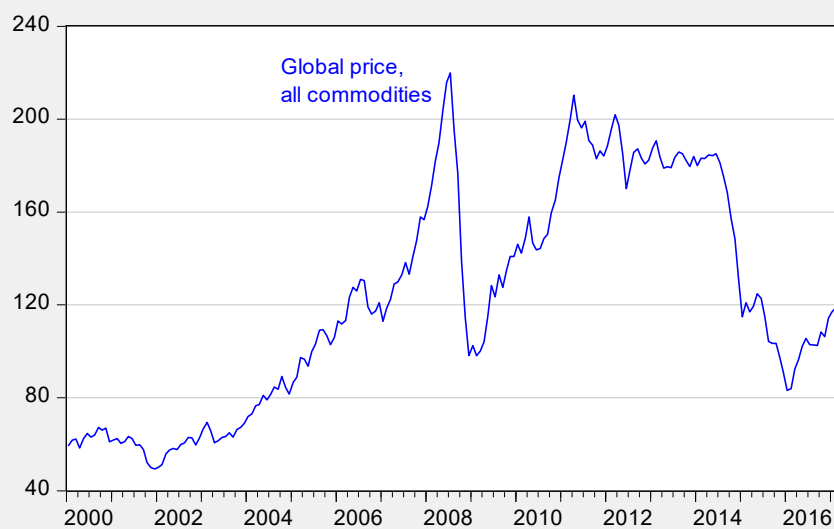
1. Consider a small open economy with a fixed exchange rate, and *imperfect capital mobility*.

1.1 Suppose the US interest rate rises. Interpret the impact on the economy using an IS-LM-BP=0 graph; assume the central bank sterilizes.

1.2 Should the government devalue the currency or raise interest rates? Explain your answer using IS-LM-BP=0 graphs, and *explicitly indicating the goals of policy underpinning your answer*.

1.3 How does your answer change if the country (firms, the government) has a big outstanding debt borrowed in US dollars?

2. Since mid-2014, commodity prices have collapsed.



Global price of all commodities, in US Dollars, 2015=100. Source: IMF.

Consider the same economy as in Problem 1. Suppose the drop in prices of commodities – which primarily developing and emerging market economies export – can be interpreted as a big reduction in autonomous exports.

2.1 Illustrate the impact using an IS-LM-BP=0 diagram.

2.2 Show two ways in which how a country suffering such a shock can respond. Assume the policy authorities do not wish to experience a recession.