Public Affairs 854 Menzie D. Chinn
Spring 2013 Social Sciences 7418
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Problem Set 4

Due in Lecture on Monday, May 6th. $\boxed{\text{"}Box-in\text{"}}$ your answers to the algebraic questions.

1. <u>Flexible price monetary model of exchange rates</u>. Assume $\lambda=5$.

1.1 If the money supply increases by 3% today, and stays 3% higher than it was expected to be, in all future periods, what happens to the nominal exchange rate and nominal interest rate today, and into the future?

1.2 If the money supply expected in period t+i falls by Δm, for i>2 relative to what it was previously expected to be (and is expected to remain lower for all the future thereafter), what would immediately happen to the exchange rate *today*?

1.3 Suppose the fundamentals grow by 2% per annum. Suppose the growth rate ***de***creases by 3%. What happens to the exchange rate, if anything, the instant the growth rate changes?

2. <u>Sticky price monetary model of exchange rates</u>.

2.1 Explain what happens if the monetary authority in US increases the money supply by 3 percent. In your answer, indicate the time paths of *M*, *P*, *M/P*, *r*-*r**, *s*. Use graphs.

2.2 Suppose θ equals infinity. Redo 2.1.

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