

**ECON 324**  
**International Monetary Relations**  
**Exam II**

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Spring 2017



**DON'T  
PANIC**

**Name** (print neatly and clearly):

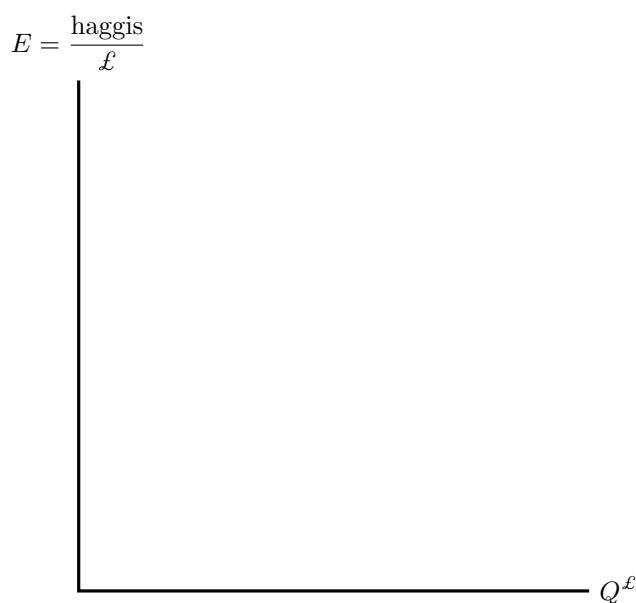
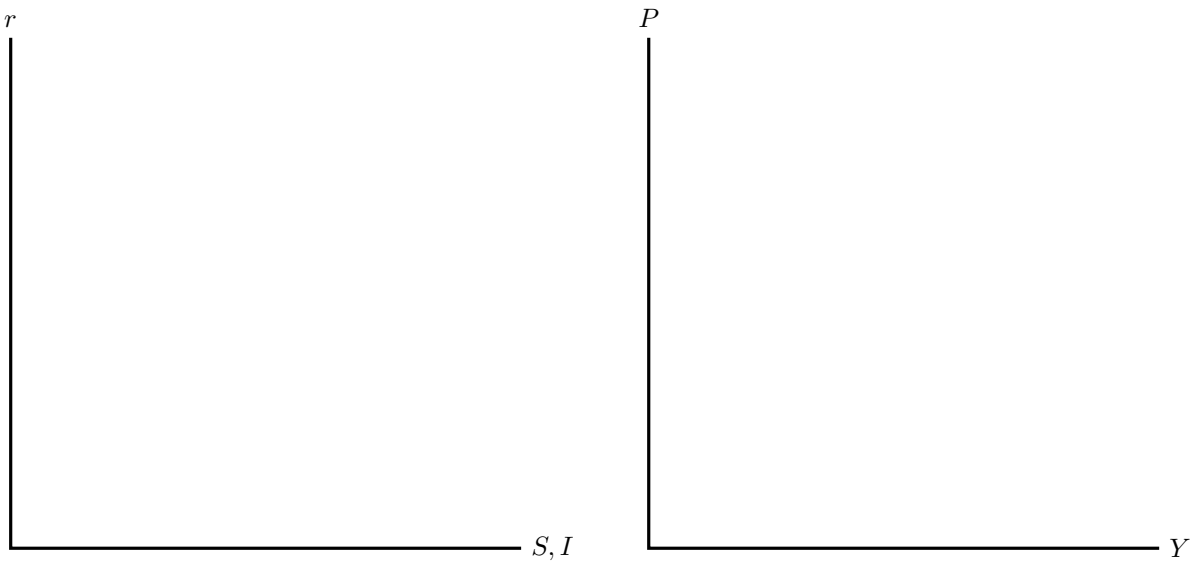
General Instructions

1. Special Take Home Instructions
  - **Due: Thursday 27<sup>th</sup> March 2017 by 3:00 p.m. [in person]**
  - You are NOT allowed to use another human brain in any capacity.
  - You are NOT allowed to use any source other than your in-class notes, textbook, problem sets, and lecture slides; i.e., no internet.
2. Read and follow all instructions/directions carefully.
3. Make sure your exam consists of 9 pages, not including the cover page.
4. An inability to follow instructions/directions will result in points being deducted.
5. The only device allowed is a simple calculator; i.e., anything that can store or retrieve information (including a graphing calculator) is NOT allowed.
6. ~~Use of books, notes, another person, and/or aid of any kind is absolutely NOT allowed.~~ [See number one.]
7. Answer all questions in blue or black ink only; i.e., no pencils or colored inks. The only exception: graphs may be drawn in pencil. Note: use a guide of some sort (e.g., a ruler) for all graphs.
8. Do not use white out or similar products, but neatly cross/scratch out anything you do not want graded.
9. Write, mark, and draw your answers neatly and clearly. If your answer is illegible (i.e., difficult to read in the least), then it will not be graded. It is your job to clearly communicate.
10. Label all graphs fully and completely; i.e., axes, intersections, curves, etc.
11. Support your answers as thoroughly as possible; i.e., graphically, conceptually, and mathematically. Note: this may not be feasible for all questions asked. State and define any concept utilized and list and name any equation used. In other words, show all of your work.
12. For the True/False/Uncertain questions clearly indicate your choice by writing either “True”, “False”, or “Uncertain” underneath the respective question.
13. Unless explicitly instructed otherwise, all questions require a justification to receive credit.
14. Answer all questions using positive economic reasoning.

Original Score (%)	
Adjustment (%)	
Actual Score (%)	

1. As a result of Brexit, the United Kingdom's separation from the European Union, assume Scotland successfully holds its own independence referendum thereby separating itself from the U.K. Scotland is, given the scenario, a small open economy with a trade surplus. Assume the money supply is defined as  $M1$ , there are perfect capital markets, Scottish and foreign "bonds" are perfect substitutes, the nominal wage is fixed, the price level sticky, and  $NFP = NUT = 0$ . The Bank of Scotland, the central bank, maintains an undervalued peg of the currency, the haggis, to the British pound without sterilizing.

Use the open loanable funds (goods) market, foreign exchange rate market, and AS-AD model to show graphically, *ceteris paribus*, what effects, if any, an increase in expected future income (e.g., resulting from an oil discovery) would have on Scotland's: (i) output/income; (ii) the real world interest rate; (iii) nominal exchange rate; (iv) money supply; (v) quantity of saving; (vi) quantity of investment; (vii) domestic interest rate; (viii) net exports; (ix) government expenditure; and (x) price level in the short-run. State explicitly what happens to each of the variables; i.e., increase, decrease, unchanged, or ambiguous. Carefully explain your (positive economic) reasoning.



**Economic Analysis**

2. *The Economist*<sup>1</sup> reported the European Central Bank (ECB) began its quantitative easing program in March of 2015.
- (a) What is quantitative easing (QE)? How does QE differ from typical monetary policy? What complication are policymakers attempting to circumvent? Explain.
- (b) A later article in *The Financial Times*<sup>2</sup> discussing the effectiveness of the ECB's QE program reports "[a]nnual eurozone inflation is currently 0.2 per cent and has consistently undershot the ECB's target". What monetary policy complication can potentially explain the ineffectiveness of QE on Eurozone's inflation/deflation rate?

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<sup>1</sup>*The Economist*, "Getting the Machines Revving", 9 March 2015

<sup>2</sup>*The Financial Times*, "IMF Urges ECB to Use Firepower Aggressively", by Peter Spiegel and Claire Jones, 27 July 2015

3. Use the information given in the table above to answer the following questions:

	U.S. Dollar Price of One Euro	U.S. CPI	Eurozone CPI	Price of Oil (WTI)
March 2014	1.3828	235.978	100.23	\$100.80
January 2016	1.0855	238.106	98.72	\$31.68

(a) Has the euro appreciated or depreciated relative to the U.S. dollar? Explain.

(b) Is the U.S. experiencing inflationary or deflationary pressure? How about the eurozone? Explain.

- (c) According to relative purchasing power parity, is the U.S. dollar expected to appreciate, depreciate, or remain unchanged? Explain.

- (d) True, False, or Uncertain: a decrease in the price of oil, *ceteris paribus*, lowers core CPI U.S. inflation more than CPI U.S. inflation. Explain.

4. An article in the *Wall Street Journal*<sup>3</sup> discussing the improving outlook for the U.K. economy states “[r]ecovery here will probably last longer than in the U.S. because there isn’t a huge budget deficit to pressure interest rates higher.”. Comment using positive economic reasoning.

5. As an answer to a question regarding inflation and interest rates, a former student argued “[i]t makes sense to borrow during times of high inflation because you can repay the loan in cheaper dollars.”. Comment using positive economic reasoning.

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<sup>3</sup>*Wall Street Journal*, “U.K. Comeback”, by Putka and Winkler, 27 August 1984



6. The Central Bank of Azerbaijan (CBA) has almost exclusively pegged the manat, Azerbaijan's currency, to the U.S. dollar throughout its history. On Monday 21<sup>st</sup> December 2015 the CBA announced the manat would be "determined by demand and supply on the forex [foreign exchange] market".

(a) In April of 2013, the CBA chairman Elman Rustamov stated "[t]hanks to sterilization, the manat rate is maintained that leads to the growth of the country's foreign exchange reserves".

i. What is sterilization? What purpose does it serve? Explain.

ii. Given the quote, is the manat an undervalued or overvalued peg? Explain.

- (b) An article in the *Financial Times*<sup>4</sup> reported soon after abandoning its dollar peg, the manat depreciated “by almost a third” (32.3%).
- i. How would this impact Azerbaijanis net wealth (assets minus liabilities) in manat? Explain.

- ii. True, False, or Uncertain: Azerbaijanis with assets in dollars but liabilities in manat would be worse-off in terms of net wealth compared to those in (i.). Explain.

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<sup>4</sup>*Financial Times*, “Azerbaijani Manat Collapses After Government Abandons Dollar Peg”, by Farchy, 21 December 2015