Exam International Macroeconomics

Fall Term 2015 (Second Exam)

Instructions: You have **75 minutes** to complete the exam. This is a **closed book** exam. You are allowed to you use a non-programmable calculator and an english-german dictionary. The maximum number of points you can get is **70 points**.

Name:

Student ID number:

Exercise 1: (20 Points)

a) For this exercise use the stylized balance of payments as given below:

Table 1: Balance of Payments

	Credit (+)	Debit (-)
Current Account		
Goods Trade		
Trade in Services		
Investment Income		
Labor Income		
Unilateral Transfers		
Financial Account		
Direct Investment		
Portfolio Investment		
Other Investment		
Capital in Bank Accounts		
Bank Loans		
Official Reserves		

For each of the following events show how it enters the balance of payments of Switzerland, if it does.

a.1) The Swiss central bank decreases its currency reserves by selling Euro against CHF. The people who sell the CHF (and buy Euro) are foreigners who had bank accounts (in CHF) in Switzerland.

Credit: *Debit:*

a.2) A Swiss pension fund receives interest payments on foreign government debt they own. They use the money to buy more foreign government debt.

Credit: *Debit:*

a.3) An employee who works in Switzerland and lives in Germany receives his year-end bonus payment. He donates the money to a museum in Switzerland.

Credit: *Debit:*

a.4) A French bank gives a loan to an entrepeneur in Switzerland. The entrepreneur uses the money to import machines from France.

Credit: *Debit:*

b) A large part of the Greek government debt is held by foreigners. If Greece defaults on its government debt, how does this affect the balance of payments of Greece? How does it affect the net international investment position (NIIP) of Greece?

c) In recent years, Switzerland ran current account surpluses and at the same time experienced (net) capital inflows. How is this possible?

Exercise 2: (20 Points)

The following graph shows the exchange rate between CHF and USD. The exchange rate is given as CHF per USD. The exchange rate at July 1st 2013 was 0.95 CHF per USD. At July 1st 2014 it was at 0.89 CHF per USD. You can use the approximative formulas for all calculations.

a) Was there an appreciation or depreciation of the CHF vis-à-vis the USD between July 1st 2013 and July 1st 2014? By how many percentage points?

b) The exchange rate between CHF and Euro at July 1st 2013 was at 1.22 CHF per Euro. What was the exchange rate between Euro and USD, expressed in Euro per USD?

c) The interest rate on CHF at July 1st 2013 was at 0.5% while on USD it was at 2.5% (for bonds with maturity in 1 year). If covered interest rate parity holds, what was the 1-year forward rate between USD and CHF at July 1st 2013, expressed in CHF per USD?

d) Which currency exhibited the higher effective ex-post return for a Swiss investor, between July 1st 2013 and July 1st 2014? (Explain)

e) The inflation rate in Switzerland between July 1st 2013 and July 1st 2014 was at -1%. If relative purchasing power parity holds, what should have been the inflation rate in the USA?

f) If relative purchasing power parity holds, which country had the higher real interest rate between July 1st 2013 and July 1st 2014? (Explain)

A U.S. firm makes a contract at July 2013 to sell tractors to Switzerland for 5 million CHF, with payment and delivery at July 2014. At July 2013, they buy a put option on CHF with a strike price of 0.9 CHF per USD.

g) Explain what the option is and why the American firm bought it.

h) The option cost the firm 50'000 USD. Had they known the exchange rate at July 2014 in advance, would they have bought the option? Explain your answer.

Exercise 3: (15 Points)

The domestic country is a small open economy. Draw an IS-LM-BP diagram and show the effect of a sudden decrease in the demand for an important export good of the country. Do the analysis for both a fixed and a flexible exchange rate. Carefully explain what happens and how the new equilibrium is reached. As in the lecture, we assume perfect capital mobility and perfect asset substitutability.

a) Fixed exchange rate

b) Flexible exchange rate

Exercise 4: (15 Points)

a.1) Suppose the central bank of country A depreciates the currency in order to stimulate exports. Is it possible that the trade balance of country A worsens during the currency contract period? If yes, how? If no, explain.

a.2) Will the trade balance improve after the currency contract period? Explain.

b.1) Studies have shown that the pass-through of exchange rate changes of the USD to domestic prices in the U.S. has declined. Explain what is meant by this.

b.2) Explain how "pricing-to-market" by foreign firms exporting to the U.S. may explain the decline in the pass-through of exchange rate changes.