Matrikel-Nr. ________________________

Final Exam in the Course "International Economics and Trade (Master IM)"
Summer Term 2016

This exam is designed for 60 minutes. You can reach a maximum of 60 points even though the numbers of points for all problems add up to 65. Therefore, you have some leeway in choosing with which problems you gather your points. Note, however, that it will hardly be possible to complete all problems in the time given. For some guidance on how extensive you should answer questions, you may use as a rule of thumb: "One minute per point".

*At present the United Kingdom's economy is very much in the spotlight because of the Brexit-referendum. The term Brexit is short for **Br**itish **exit** from the European Union. If not stated otherwise, graphs and data in this exam are taken from two reports of the International Monetary Fund (IMF) that were written prior to the vote to leave the European Union (EU) on June 23rd, 2016 but published after that date:*

- *IMF: United Kingdom, IMF STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION, July 7th, 2016*
- *IMF: United Kingdom, Selected Issues, June 1st, 2016*

Should you not have followed the discussion after the British vote to exit the EU, you will find some basic information at the end of the exam. If you are roughly familiar with the theme you do not need to read this.

Problem 1 _____ **of 15 points**

Basic ideas:

a) Characterize two major assumptions behind the Ricardo-model of international trade! 4 Points
b) What are the possible causes of international trade in the 2x2x2-standard model of trade theory? 4 Points
c) Would you expect multinational enterprises to develop in a either a Ricardo or a standard model of trade? 3 Points
d) Would the Brexit decision have an impact on trade flows between the United Kingdom (UK) and continental Europe in a pure Ricardo or 2x2x2-model? 4 Points

Problem 2 _____ **of 18 points**

Today, globalization has many faces beyond the expansion of trade in goods.

a) Name and explain two other (economic) indicators that could be used as measures of some of the aspect of globalization! 6 Points
b) Also, a major shift in the composition of international trade in goods has taken place. Describe two aspects of this development! 6 Points
c) What is so special about the EU in the context of globalization, that for the British being "out" is seen as such a big deal? 6 Points

Problem 3 _____ **of 15 points**

London is a world city and an international or even global financial centre with a very high density of the financial services industry and headquarters of multinational firms. Parallel to urban growth the city has seen a process of industrial agglomeration.

a) Many firms from outside Europe have located their global or regional headquarters in London. Which internationalization motives do you suspect behind this? 4 Points
b) What has enabled multinational firms to locate or relocate headquarters away from the locations of other corporate functions and why is this leading to a clustering in London? 6 Points
c) Which impact will the Brexit likely have on these location patterns concerning London and why? 5 Points

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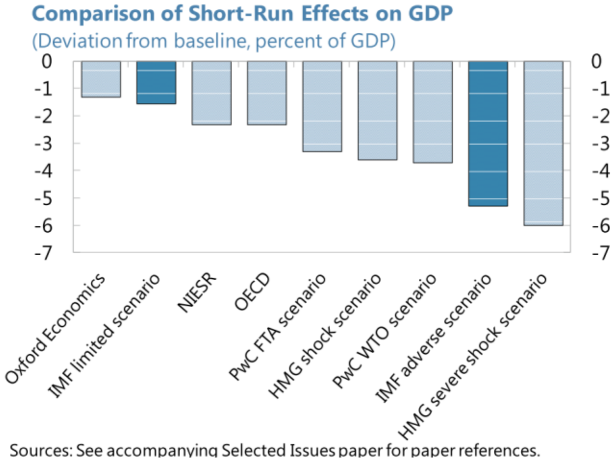
Problem 4 _____ **of 8 points**

The chart below illustrates prognosis of various economic research institutions on the possible short term implication of the Brexit-decision. Each of the columns shows a forecast deviation of GDP in per cent from a baseline without Brexit.

a) Would you use real or nominal GDP in the graph? In your answer, please also explain the difference between the two GDP concepts. 4 Points

b) The forecasts in the graph show that the Brexit is expected to reduce GDP. Which **expenditure** components of GDP are likely to be affected strongest by the withdrawal from the EU? *(Table 2 shows only the baseline against which the Brexit effects are measured in the graph.)* 4 Points



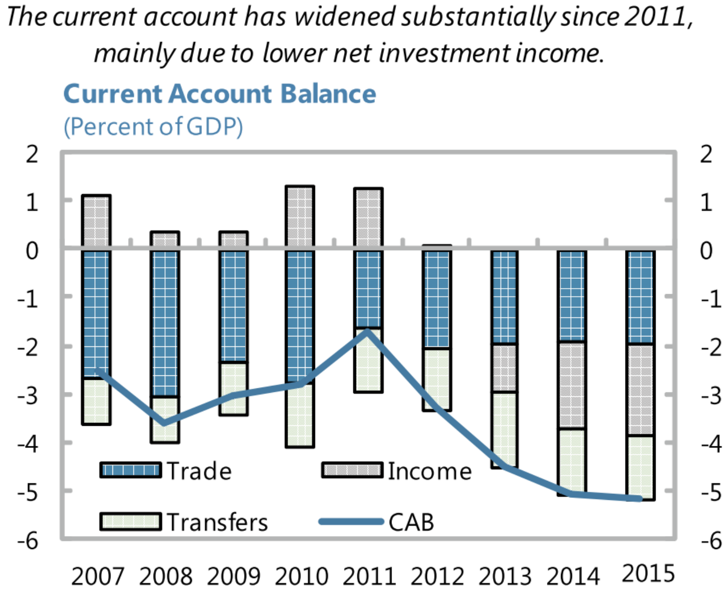
Problem 5 _____ **of 9 points**

The current account balance for the United Kingdom (UK) is depicted in the graph below as a line and the columns show the balances in the sub-accounts (p. 33 of the IMF report).

a) What does the graph tell you about the relation between savings and investment in the UK? 3 Points

b) Which sub-accounts are the driving forces behind the current account and how does the development since 2011 change the size of GDP (Gross Domestic Product) in relation to GNP (Gross National Product)? 3 Points

c) Does the development of the current account over the last years change the country risk of a German exporter to the UK? 3 Points



CAB – Current Account Balance;
Trade – Balance on trade in goods and services;
Income (primary) – Balance on factor income of residents received from the rest of the world (wages, capital income, subsidies) and factor income paid to the rest of the world
Transfers – (Secondary income) Balance of unrequited transfers from and to non-residents

Table 2. United Kingdom: Medium-Term Scenario, 2012–20
(Percentage change, unless otherwise indicated)

	2012	2013	2014	2015	2016	2017	2018	2019	2020
					Projections				
Real GDP	1.2	2.2	2.9	2.3	1.9	2.2	2.2	2.1	2.1
Q4/Q4 1/	1.0	2.8	2.8	2.1	1.9	2.2	2.2	2.1	2.1
Real domestic demand	2.3	2.6	3.2	2.8	1.9	2.1	2.1	2.1	2.2
Private consumption	1.8	1.9	2.5	2.7	2.2	2.2	2.2	2.2	2.2
Government consumption	1.8	0.5	2.5	1.5	0.0	0.6	0.5	0.2	0.7
Fixed investment	1.5	2.6	7.3	4.1	2.6	3.7	3.6	3.7	4.1
Public	-6.8	-5.1	5.8	0.5	-2.0	1.7	-0.4	-0.2	6.7
Residential	-2.9	5.7	11.7	3.9	3.3	3.3	4.0	4.0	4.0
Business	5.1	2.3	4.7	5.2	2.9	4.7	5.0	5.0	4.0
Stocks 2/	0.4	0.7	0.2	-0.2	0.4	0.0	0.0	0.0	0.0
External balance 2/	-0.7	-0.5	-0.4	-0.5	-0.1	0.0	0.0	0.0	-0.1
Exports of Goods and Services	0.7	1.2	1.2	5.1	4.1	4.2	3.8	3.9	3.9
Imports of Goods and Services	2.9	2.8	2.4	6.3	3.9	3.7	3.5	3.6	4.0
Current account 3/	-3.3	-4.5	-5.1	-5.2	-5.2	-5.0	-4.9	-4.6	-4.7
CPI Inflation, period average	2.8	2.6	1.5	0.1	0.8	1.9	2.0	2.0	2.0
CPI Inflation, end period	2.7	2.0	0.9	0.1	1.3	1.9	2.0	2.0	2.0
GDP deflator, period average	1.6	2.0	1.8	0.3	1.6	1.7	1.8	1.9	2.0
Output gap 4/	-2.3	-1.7	-0.7	-0.2	-0.2	0.0	0.0	0.0	0.0
Potential output	1.5	1.5	1.8	1.9	1.8	2.0	2.2	2.2	2.1
Employment and productivity									
Employment	1.1	1.2	2.3	1.5	1.3	0.6	0.6	0.5	0.5
Unemployment rate 5/	8.0	7.6	6.2	5.4	5.0	5.0	5.1	5.3	5.3
Productivity 6/	0.1	1.0	0.6	0.8	0.6	1.6	1.6	1.6	1.6
Memorandum items:									
Private final domestic demand	2.1	2.3	3.4	3.1	2.4	2.5	2.6	2.6	2.5
Household saving rate 7/	8.8	6.3	5.4	4.3	4.7	4.6	4.4	4.3	4.3
Private saving rate	17.4	14.9	15.0	13.3	13.3	12.8	12.5	11.8	11.6
Credit to the private sector	-0.2	0.9	1.5	2.0	3.0	4.0	4.0	4.1	4.2

Sources: Office for National Statistics; and IMF staff estimates.
1/ Percentage change in quarterly real GDP in the fourth quarter on four quarters earlier.
2/ Contribution to the growth of GDP.
3/ In percent of GDP.
4/ In percent of potential GDP.
5/ In percent of labor force, period average; based on the Labor Force Survey.
6/ Whole economy, per worker.
7/ In percent of total household available resources.

<u>What does the EU provide to the UK?</u>

1. EU membership provides access to the European single market. *UK membership of the EU ensures zero tariffs on exports to and imports from the rest of the EU. The EU is also a customs union, which implies lower administrative costs of trade, such as from applying rules of origin, value -added taxes, and physical checks. (The EU imposes a common external tariff on all goods entering the union … .) More significantly, EU membership provides access to the European single market. The single market is more than a free trade agreement (FTA) or customs union —the intent is a zone in which there are no barriers to the movement of goods, services, capital, and people.* ***For the UK in particular, the emphasis on services is crucial****, as services account for four -fifths of UK GDP and two -fifths of UK exports.*

2. EU membership also provides FTAs with many other countries. *The EU has trade agreements in force with 60 other economies, whose combined GDP is 2 ½ times that of the UK. The EU also has prospective agreements under negotiation with a further 67 economies, including Brazil, Canada, India,* *Japan, and the US, with the aim of not only removing tariffs, but — more importantly— opening up markets in services, investment, and public procurement. These markets are 10½ times the size of UK GDP.*

3. Membership provides UK -based firms with a "passport", which is particularly important for the financial sector. *Firms operating in the UK have the right— known as the passport —to provide business services in the rest of the EEA. The passport is relevant for many firms, but particularly for the financial sector. For financial firms, the essence of the passport is the mutual recognition of prudential standards. The passport means that financial firms based in the UK can simply set up branches or offer services across borders directly —for example, an internationally - owned financial firm can set up a headquarters in the UK to serve as a base from which to offer services across Europe. Without a passport, such a firm would have to meet the varying requirements of regulator s in each country in which it wanted to offer services . The firm would likely have to set up other subsidiaries, which is costly, as subsidiaries require separate capital structures and management.*

What does the EU require from the UK?

4. Domestic laws of member states like the UK are subject to the principles of the single market. *The European single market is founded on the "four freedoms" of movement of goods, services, capital, and people. Single market rules are intended to make selling goods and services to the 500 million residents of the EU easier and less costly for the UK and other EU members — the UK and other EU members therefore have to follow harmonized standards. Consequently, domestic laws and regulations that would impede the free movement of those inputs and outputs are, in general, incompatible with the objective of a well-functioning single market. Hence, some domestic laws have to be aligned with the principles of the single market. This also provides protection: the UK can seek to have laws and rules in other countries that would discriminate against UK firms overturned— in particular, EU state aid rules provide a framework for preventing firms from using government support to gain advantage over competitors. Over time, a number of directives and regulations have been added to better harmonize social, employment, health and safety, and environmental policies across national borders.*

5. The UK has negotiated a range of exemptions from EU directives.

- *The UK is carved out of the commitment of other member states to work toward "ever closer union". There is no obligation to join the euro, there will be no discrimination against the UK because it is outside the euro area, and UK taxpayers will not be asked to pay for bail -outs of euro area economies.*
- *The UK is outside the Schengen border -free area. As of February 2016, agreement was reached providing, inter alia, concessions on benefits (e.g., a limit on access to in -work benefits by newly - arrived EU workers, and lower rates for child support) (see HM Government, 2016 b).*

How the advantages of EU-membership can be maintained after the formal exit from the EU is currently very much uncertain. The process for withdrawing from the EU would be lengthy. Establishing a new arrangement would be complicated and it is unclear, what relationship the UK could have with the EU after an exit. The IMF illustrate this uncertainty with regard to future trade relations: