

Universität Siegen

Fakultät III – Wirtschaftswissenschaften
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Exam "International Financial Markets"
Summer Semester 2017
(2ndExam Period)

Solution

Available time: 45 minutes

For your attention:

1. Please do **not** directly write your answers into this problem set. Use the set of solution pages.
 2. Please do **not** use **apencil**.
 3. Additional materials you may use for the exam: a non-programmable calculator.
 4. **ATTENTION:** The names for variables have the same meaning as in the lecture. Insofar as you also use the same symbols for the variables as we did in the lecture you will not have to define these any further.
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Question	1	2	3	4	5	Sum	Mark
Points achievable	8	10	9.5	12	5.5	45	
Points achieved							

Problem 1: Financial Decisions of Firms

- a) From which perspective does modern finance view the behaviour of firms?
[2 points]

Solution:

Effects on welfare of households
(1) (1)

- b) After choosing its type of business, a company is active in three fields of financial decision making. Briefly name and briefly explain one of these fields.
[6 points]

Solution:

- Capital budgeting: (2)

Making a plan for ...
... acquiring physical capital (or: buildings, factories,...)(2)
... training the people who will operate it (2)

- Capital structure decisions: (2)

Making a feasible financing plan for the whole firm (2)
Choosing the optimal financing mix (2)

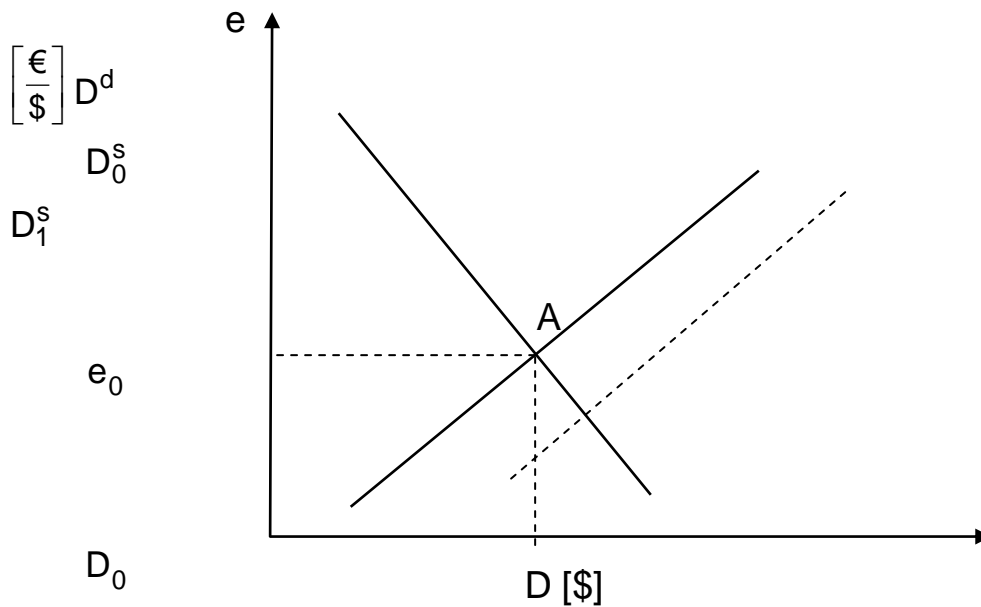
- Working capital management: (2)

Finance operating cash flow deficits (2)
Invest operating cash flows surpluses (2)

Maximum 6 points

Problem 2: Forex Market

The following graph shows the FX market in an exchange rate arrangement with a flexible exchange rate. The US dollar [\$] is the foreign currency and the euro [€] is the home currency.



a) Please name two sources of the supply (D^s) of the foreign currency. [2 points]

Solution: exports of goods, import of capital
 (0.5) (0.5) (0.5) (0.5)

b) Suppose the supply curve shifts from its initial position D_0^s to position D_1^s .

b₁ Does this shift represent a decrease or an increase in the supply of foreign exchange? [1 point]

Solution: increase
 (1)

b₂ Which market situation results at the original exchange rate level e_0 ? [2 points]

Solution: excess supply
 (1) (1)

b₃In a system of a flexible exchange rate, will there be an appreciation or a depreciation of the dollar? [2 points]

Solution: depreciation
(2)

b₄In a system of a fixed exchange rate, what will be the intervention by the European Central Bank if the target rate is e_0 ? [3 points]

Solution: purchase of dollars
(2) (1)

Problem 3: International Currency

- a) How can we characterize, in general terms, an international currency? [3.5 points]

Solution:

it is used by residents of a geopolitical area other than that in which it is issued
(0.5) (1) (1) (1)

(used by foreigners, or: by non-residents: 2.5)

Or: it performs the functions of money outside its area of issuance (3.5)

- b) In the following graph, please indicate three international uses by giving the names of the corresponding fields of the table A, B, ..., F. [6 points]

	<i>Private Use</i>	<i>Official Use</i>
<i>Store of Value</i>	A	D
<i>Unit of Account</i>	B	E
<i>Medium of Exchange</i>	C	F

A:

B:

C:

D:

E:

F:

Solution:

A: investment currency (or: financing currency) (2)

B: pricing currency (or: quotation currency) (2)

C: payment currency (or: vehicle currency) (2)

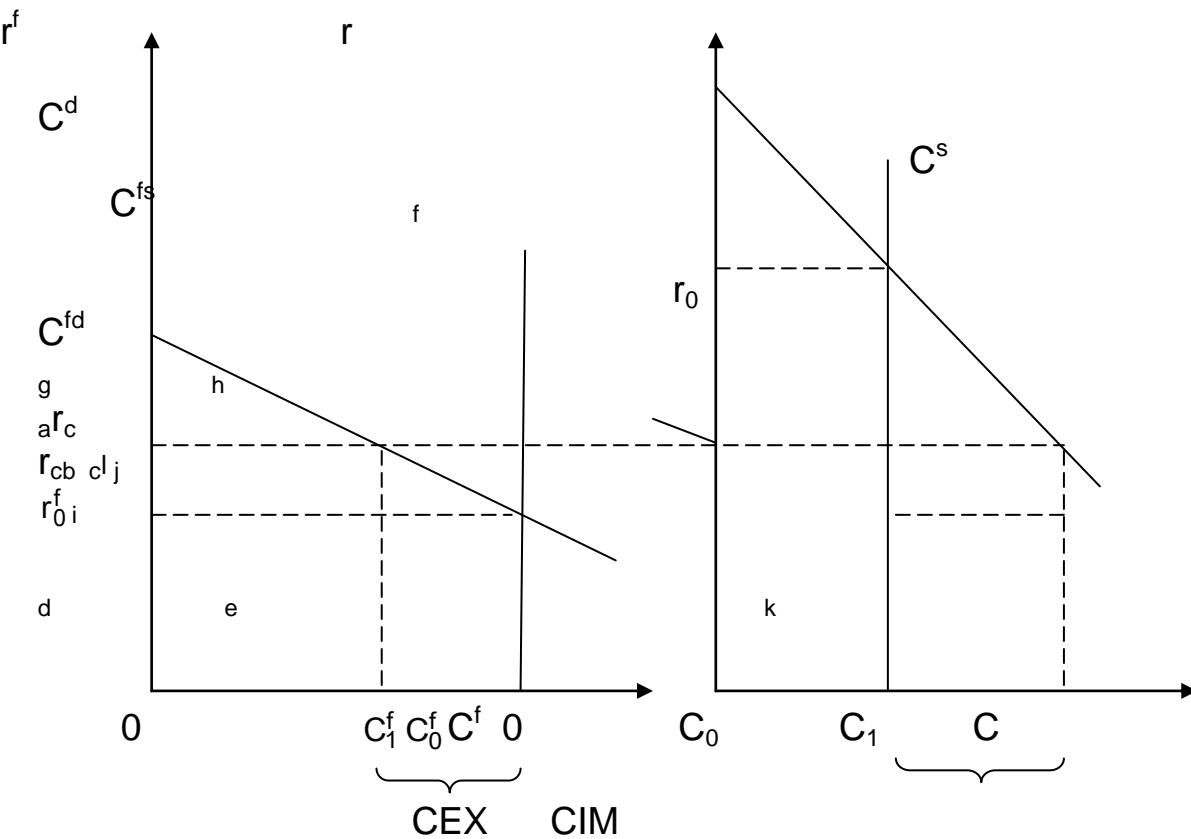
D: reserve currency (2)

E: pegging currency (2)

F: intervention currency (2)

Problem 4: Benefits of Financial Integration

The following graph shows the national financial markets of the domestic country (right-hand side) and of the foreign country (left-hand side). C^d and C^{fd} designate the domestic and foreign capital demand schedules, respectively, while C^s and C^{fs} are the supply curves. In autarky, the interest rate is r_0 in the home country and r_0^f abroad.



- a) Please show that financial integration is beneficial for each country as a whole by indicating the increases in national incomes. (Please do so by naming the corresponding fields below the capital demand curves.) [4 points]

Domestic country:

Foreign country:

Solution:

Domestic country: h (2)

Foreign country: l (2)

- b) Do workers in the capital-importing country suffer or benefit from financial integration? Please indicate the loss or benefit in the above graph by indicating the corresponding field(s) and carefully explain that result. [8 points]

Solution:

Benefit in the amounts g + h
 (1) (1) (1)

Explanation:
 increased capital raises marginal productivity of labour and thus labour income
 (0.5) (1) (0,5) (1) (1) (1)

Problem 5: Arbitrage in the Forex Market

We are given the following quotes between the US-dollar (\$), the Euro (€), and the Swiss Franc (Sfr):

Barclays Bank: 1.10 [\$/€]

Industrial Bank: 1.05 [Sfr/\$]

Midland Bank: 1.50 [Sfr/€]

- a) Is there an arbitrage opportunity? Please check by comparing quotes of the euro in terms of the US dollar [\$/€]. (Please give three digits.) [4.5 points]

Solution:

$$\frac{1.50 \left[\frac{\text{Sfr}}{\text{€}} \right]}{1.05 \left[\frac{\text{Sfr}}{\text{\$}} \right]} = 1.429 \left[\frac{\text{\$}}{\text{€}} \right] \quad (\text{dimensions not required in solution})$$

(1.5) (0.5)

There is an arbitrage opportunity. (1)

- b) If there is an arbitrage opportunity, should we buy or sell the euro at Barclay's? [1 point]

Solution: buy (1)