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**Department of Economics** 

Examination paper for SØK 2009 International Macroeconomics

Examination date: 08.05.2024

Examination time (from-to): 09:00-13:00

**Permitted examination support material:** C (only calculator and official formulary, no handwritten sheets or notes)

Academic contact during examination: Inga Heiland

Phone: 46590973

Academic contact present at the exam location: NO

#### OTHER INFORMATION

Get an overview of the question set before you start answering the questions.

#### Instructions

- you can answer in Norwegian or in English
- when using graphs, make sure you label all the curves and all the axes
- keep your verbal answers as short as possible, but answer in complete sentences
- if you use the following notation or other notation that corresponds to the lecture or the book, you don't need to define the variables in your graphs or explanations

Money market equilibrium:

$$M^s = PL(R, Y)$$

Foreign exchange market equilibrium:

$$R = R^* + \frac{E^e - E}{E}$$

Goods market equilibrium:

$$Y = C(Y - T) + G + I + CA(EP^*/P, Y - T)$$

**Read the questions carefully** and make your own assumptions. If a question is unclear/vague, make your own assumptions and specify them in your answer. The academic person is only contacted in case of errors or insufficiencies in the question set. Address an invigilator if you suspect errors or insufficiencies. Write down the question in advance.

**Hand drawings:** To answer tasks **[1,2,3]** you may want to use the drawing tablet for calculations/drawings. Instead of the drawing tablet you can also draw on paper. Please note that you must stick to one of drawing modes (either tablet or paper) throughout the exam.

**File upload:** 15 minutes are added for file upload. The time is included in the time shown at the top left of the test, and the time is reserved for file upload.

**Weighting:** The number of points you can earn per question is given in brackets. The total number of points is 90.

**Notifications:** If there is a need to send a message to the candidates during the exam (e.g. if there is an error in the question set), this will be done by sending a notification in Inspera. A dialogue box will appear. You can re-read the notification by clicking the bell icon in the top right-hand corner of the screen.

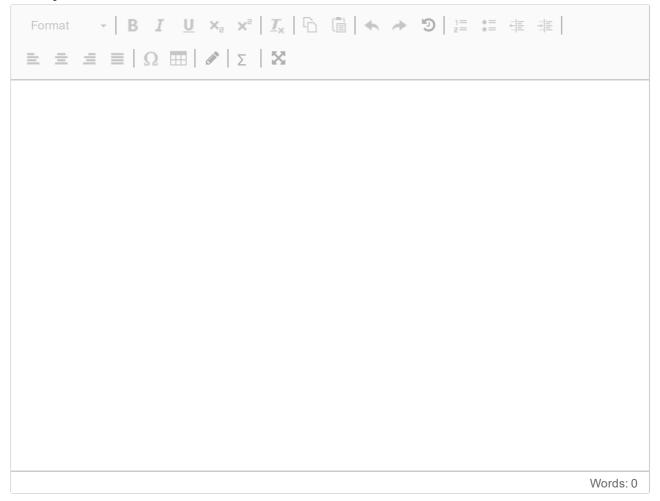
**Withdrawing from the exam:** If you become ill or wish to submit a blank test/withdraw from the exam for another reason, go to the menu in the top right-hand corner and click "Submit blank". This cannot be undone, even if the test is still open.

**Access to your answers:** After the exam, you can find your answers in the archive in Inspera. Be aware that it may take a working day until any hand-written material is available in the archive.

# Joint equilibrium in the money market and foreign exchange market [30]

- a) Explain how the equilibrium exchange rate is determined by the joint short-run equilibrium in the domestic money market and the foreign exchange market.
- b) How does contractionary monetary policy (that is, a decrease in the money supply) affect the exchange rate?
- c) Suppose private agents find out that a new central bank governor will be hired next year who is planning to put a more expansionary monetary policy in place. Do you expect any changes in the current exchange rate in response to this information?

## Fill in your answer here



Maximum marks: 30

## Stabilisation policies [50]

Consider now the joint equilibrium in the goods market and asset markets (AA-DD model), where the exchange rate and the interest rate are determined together with output.

a) Explain how we find the equilibrium output and the equilibrium exchange rate in the AA-DD model.

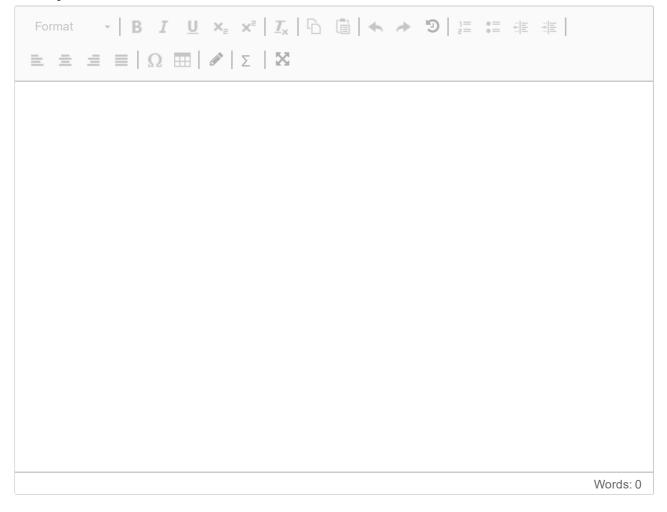
Now suppose the foreign price level \$P^\ast\$ falls.

- b1) Explain why this shock pushes the domestic country into a recession. (Hint: in the AA-DD model, this shock shifts the DD curve.)
- b2) Would you recommend fiscal policy or monetary policy if policymakers and central bankers want to restore full employment?

Now suppose the initial shock is a positive shock to the demand for money driven by a stronger preference for liquidity.

- c1) Explain why this shock also pushes the domestic country into a recession. (Hint: in the AA-DD model, this shock shifts the AA curve.)
- c2) Would you recommend fiscal policy or monetary policy if policymakers and central bankers want to restore full employment?

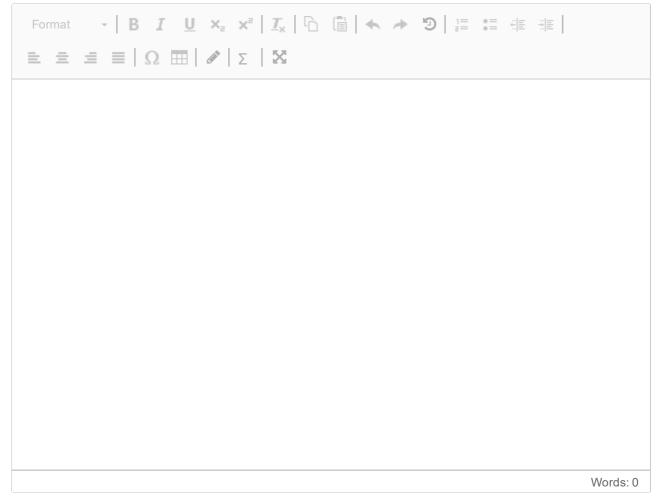
### Fill in your answer here



## <sup>3</sup> Open-economy monetary trilemma [10]

Explain why an open economy cannot achieve exchange rate stability, monetary policy autonomy, and free capital flows at the same time.

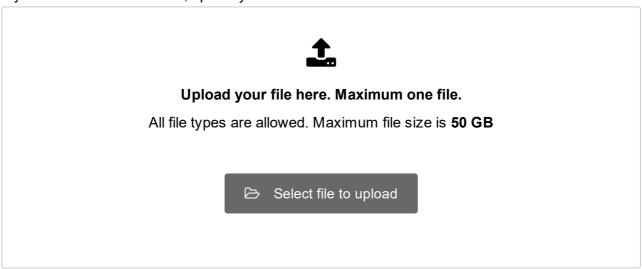
## Fill in your answer here



Maximum marks: 10

# <sup>4</sup> File upload

If you used the table to draw, upload your file here:



Maximum marks: 10