Intro. Macroeconomics

ECON1002

Tutorial[1] 13

1. Herbert Xin | wei.xin@sydney.edu.au

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Plan of Today

– Concept review
– Tutorial question
– Last tutorial

Concept Review

1. Current account
2. Capital account
3. Balance of payment
4. Twin deficits

Current account (CAB)

> Records all transactions in a year on exchange of goods and services.

- Payment inflow $\rightarrow$ Credit $(+)$
  - *Purchases of AUD in FX market, i.e. purchasing AUS goods/services.*
- Payment outflow $\rightarrow$ Debit $(-)$

	DEBIT	CREDIT
Merchandise trade	Domestic purchase of a Japanese car	Sale of wheat to Russia
Services	Domestic buyer pays freight costs on imports	Overseas buyer pays freight costs on exports
Income	Domestic company pays a foreign employee	Foreign company pays a domestic employee
Transfers	Domestic relative sends a cash gift to overseas resident	Overseas relative sends a cash gift to domestic resident

Capital Account (KAB)

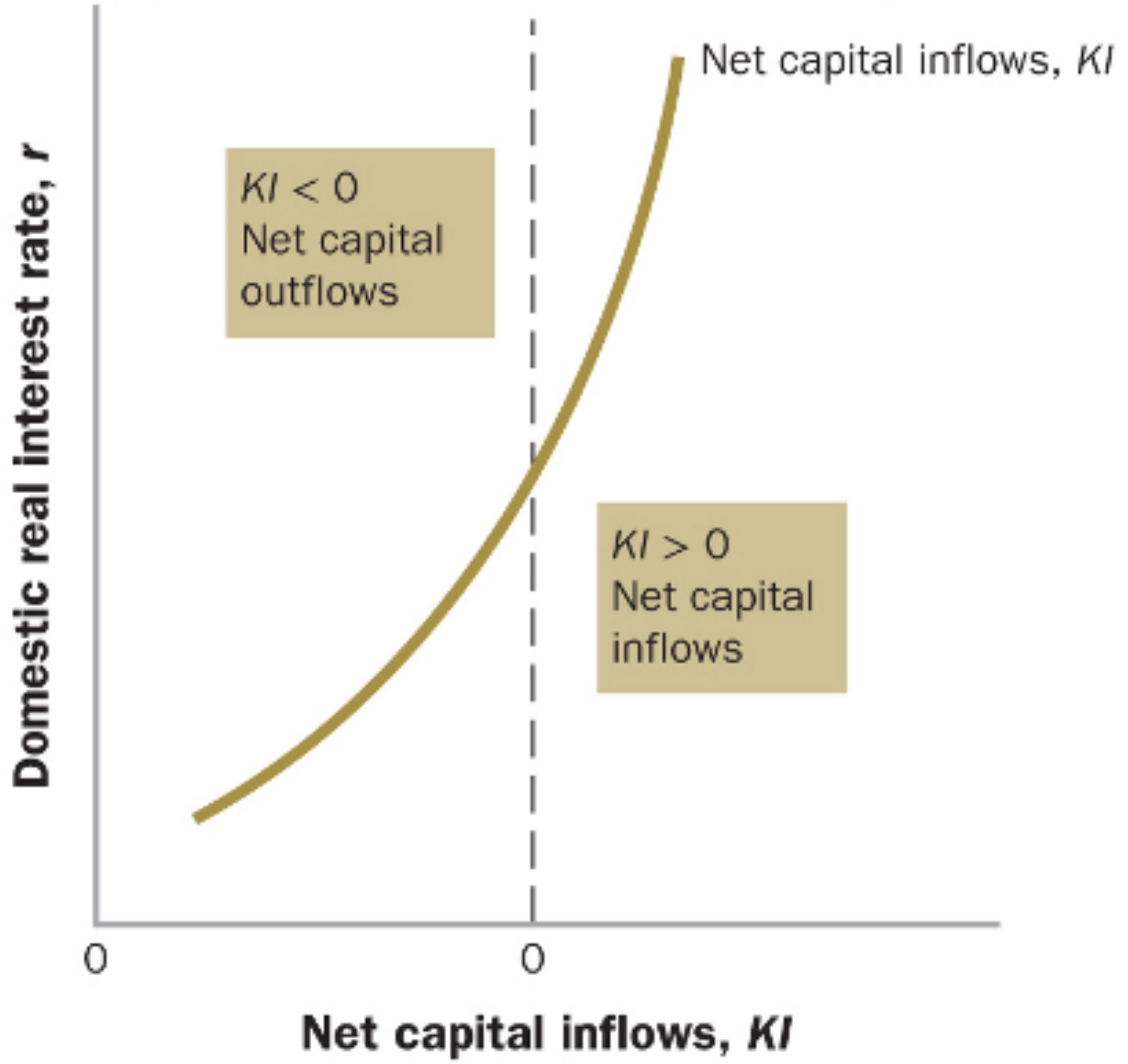
Transactions in a year on asset transfers.

- Capital inflow $\rightarrow$ Credit $(+)$
- Capital outflow $\rightarrow$ Debit $(-)$

Affected by **interest rates** and **perceived risks**

Effect of interest rate

– Higher interest rates lead to more capital inflows
– Lower interest rates lead to more capital outflows



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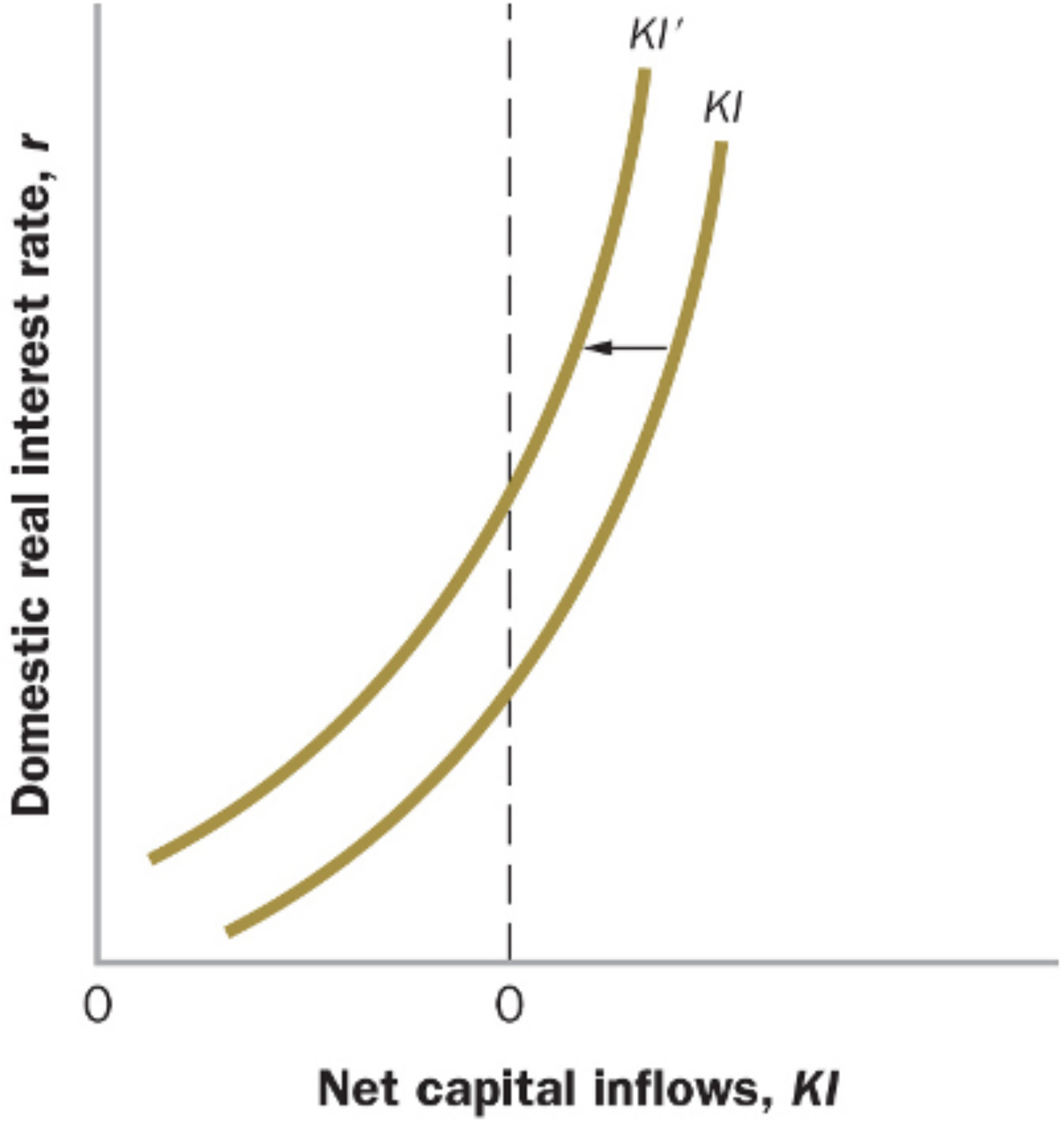


Effect of risk

Increased perceived risk can lower capital inflow given the same interest rate

That is, a **leftward shift** of the KI curve

Balance of Payments

> Balance of payments is simply the summation of capital account (KAB) and current account (CAB)

$$BP = CAB + KAB$$

Excess supply of currency $\rightarrow BP < 0$

- **Why?** Excess supply $\rightarrow$ more import than export, or/and, more capital outflow than inflows $\rightarrow CAB < 0, KAB < 0$

Excess demand of currency $\rightarrow BP > 0$

Floating exchange rate

Floating exchange rate means the exchange rate is **free to move** around.

– At excess demand, currencies appreciate
– At excess supply, currencies depreciate

Then **after market adjustment**

$$BP = 0 \implies CAB = -KAB$$

i.e. capital and current account offset each other.

Twin Deficits

$$T - G < 0 \implies NX < 0$$

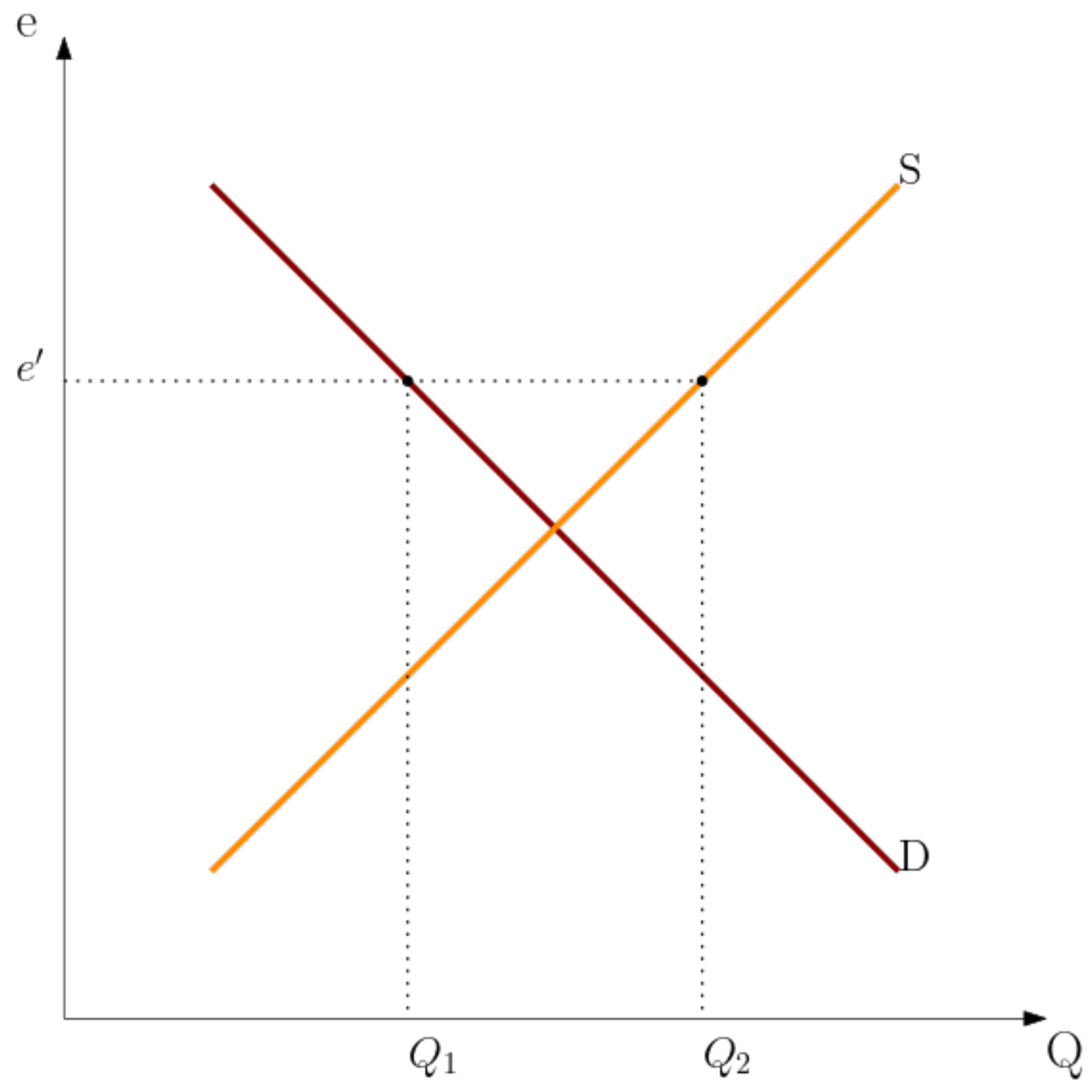
In words, government budget deficit $\implies$ trade deficit.

– **Why?** Excess government spending decreases saving, which increases the need for foreign capital.

Tutorial Questions

1. Use a demand and supply diagram to illustrate the effects of a speculative attack on an overvalued exchange rate.

What will speculator do?



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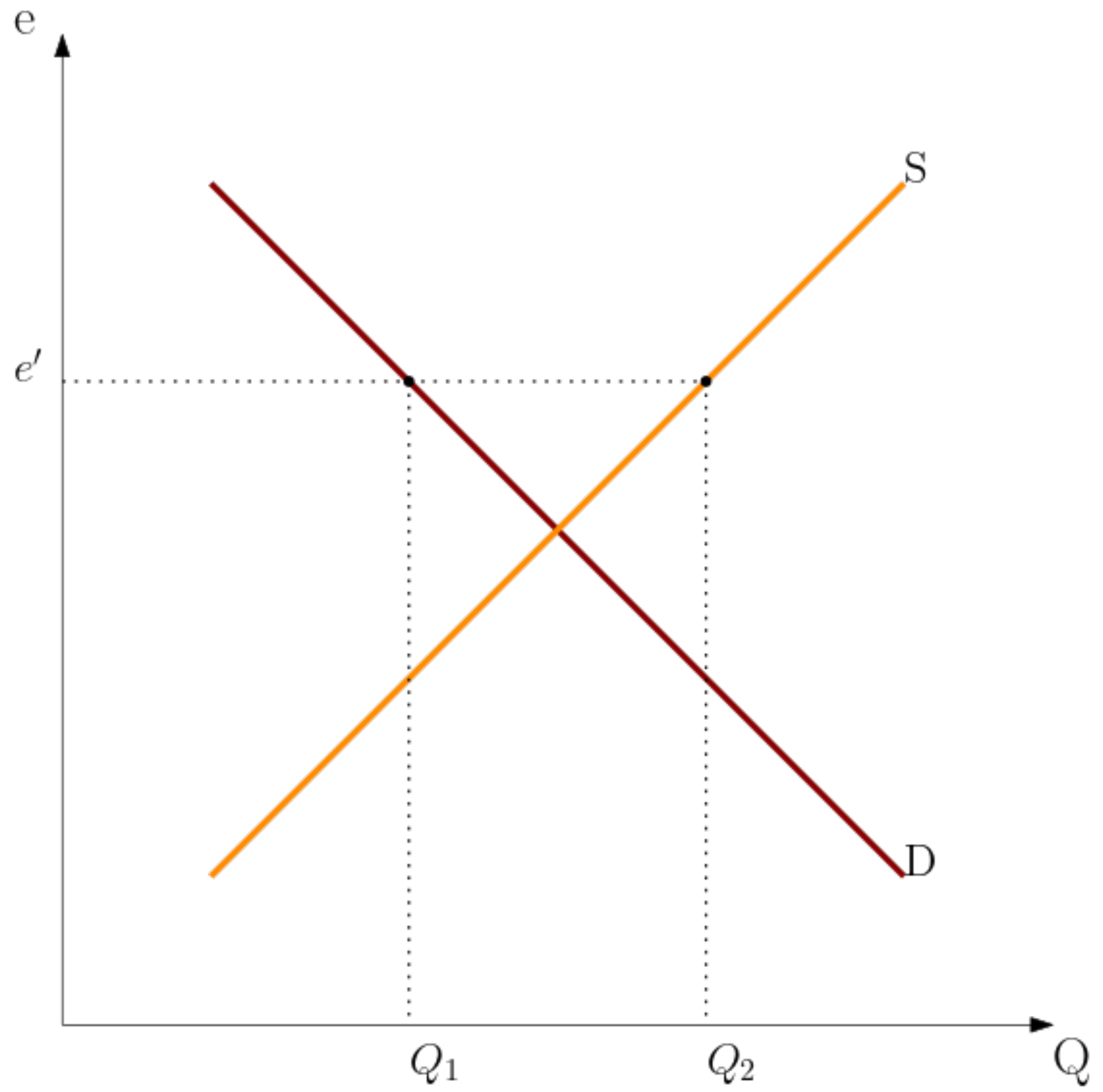
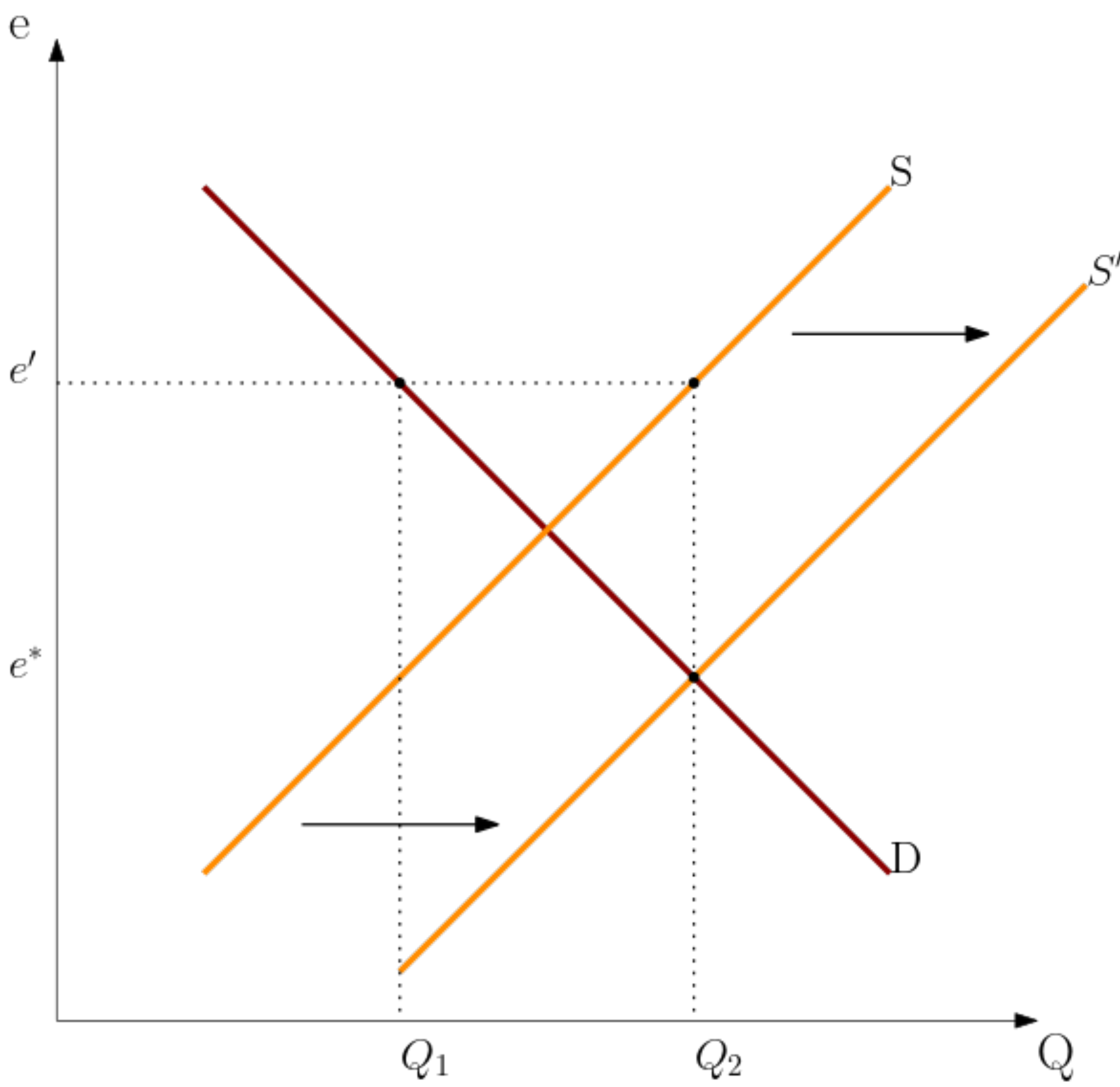
What will speculator do?

– Sell the currency while the value is high

How would that change the equilibrium?





e
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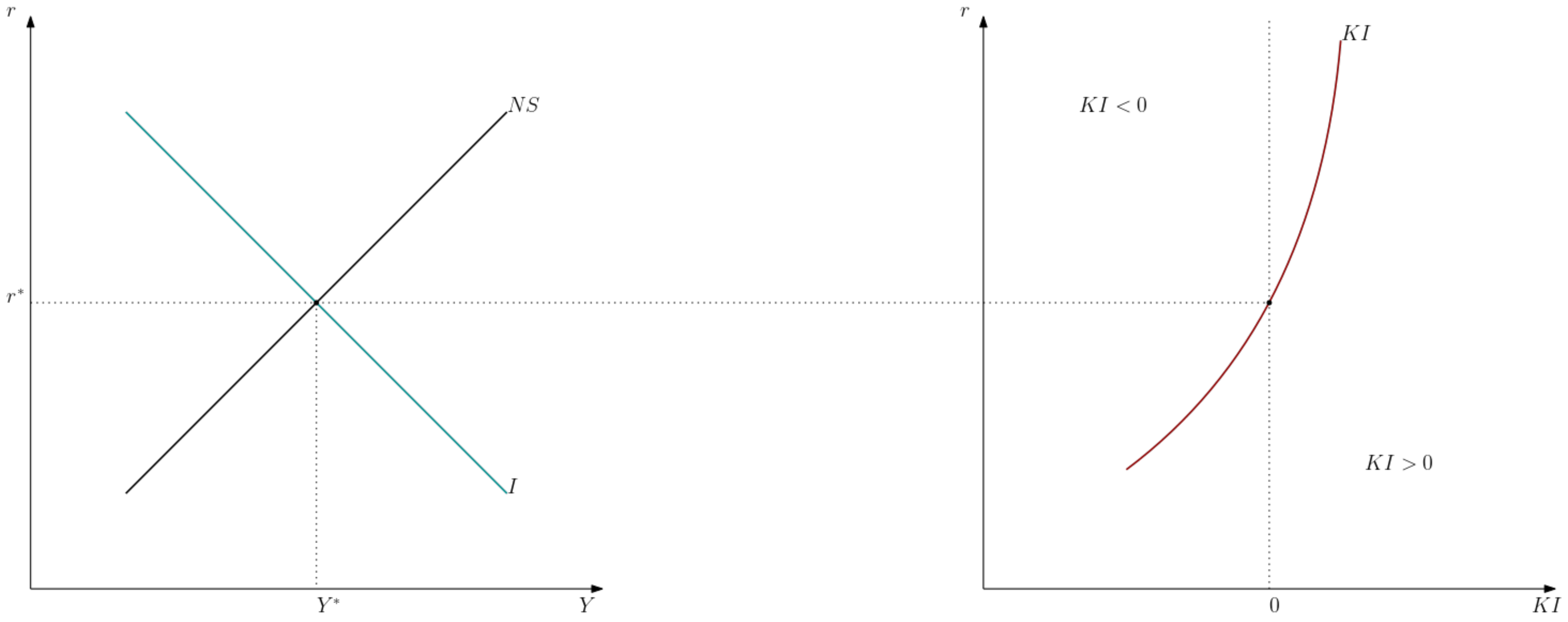
Speculative attack made the economy even worse.

Any solutions?

- Devaluation (increasing the supply)
- Imposing restrictions on trade and capital flow
- Use reserves to buy up the excess supply
- Tighter monetary policy to increase fundamental value

2. Use a diagram to illustrate the effects of each of the following on the **capital investment** of a country that is a **net borrower from abroad**

a. Investment opportunities improve owing to new technologies.



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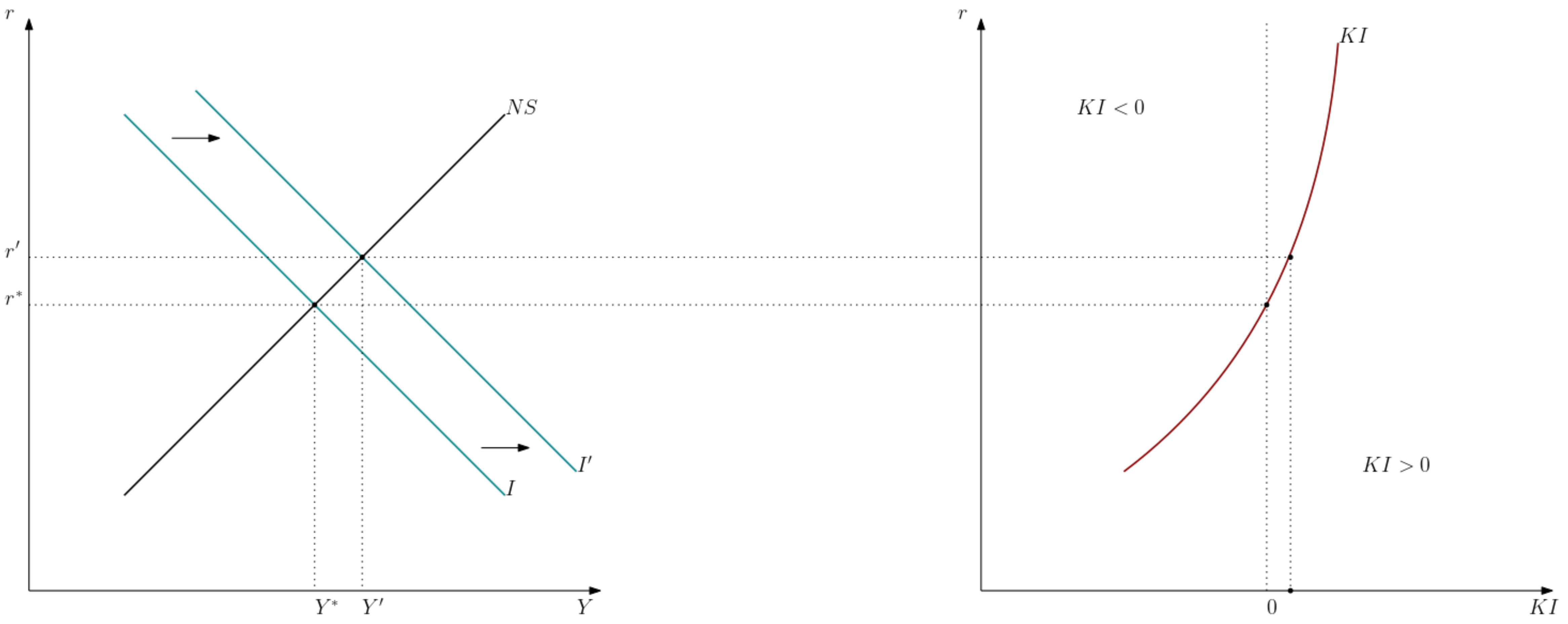
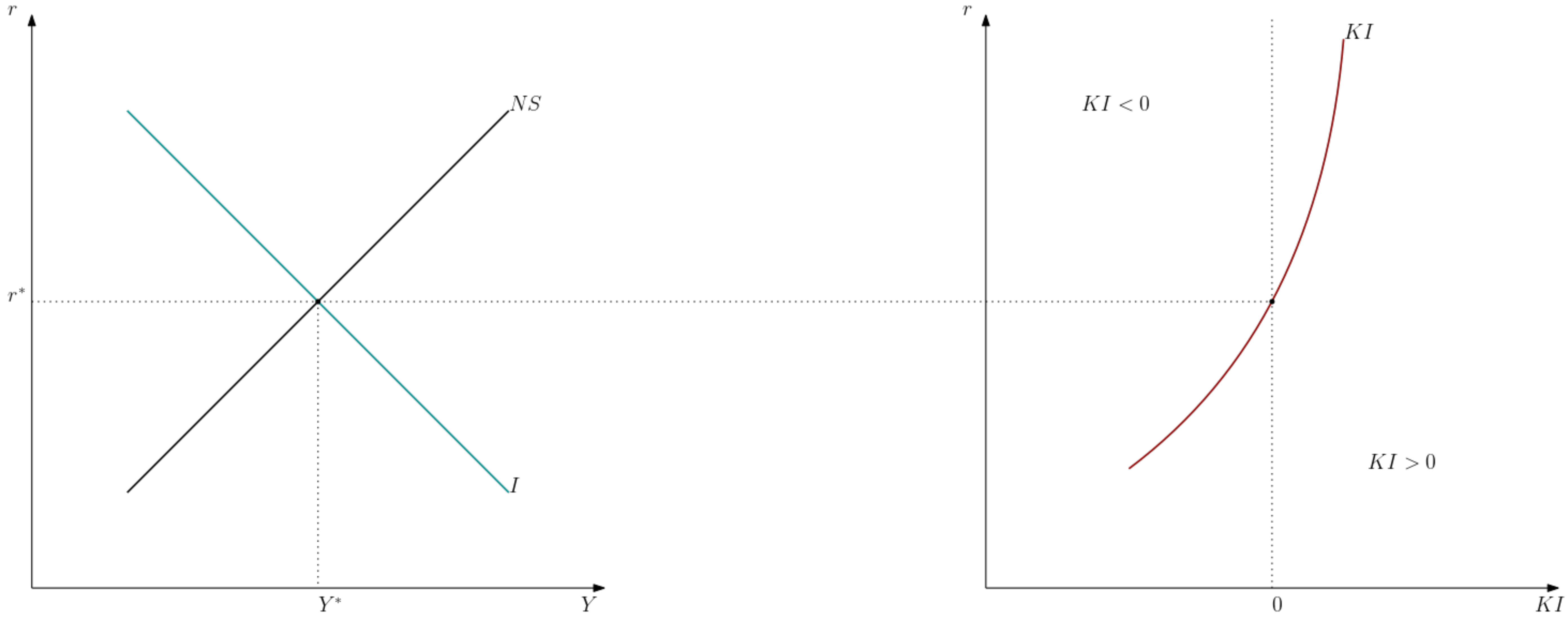
More investment $\rightarrow$ to higher capital inflows



b. The government budget deficit rises.



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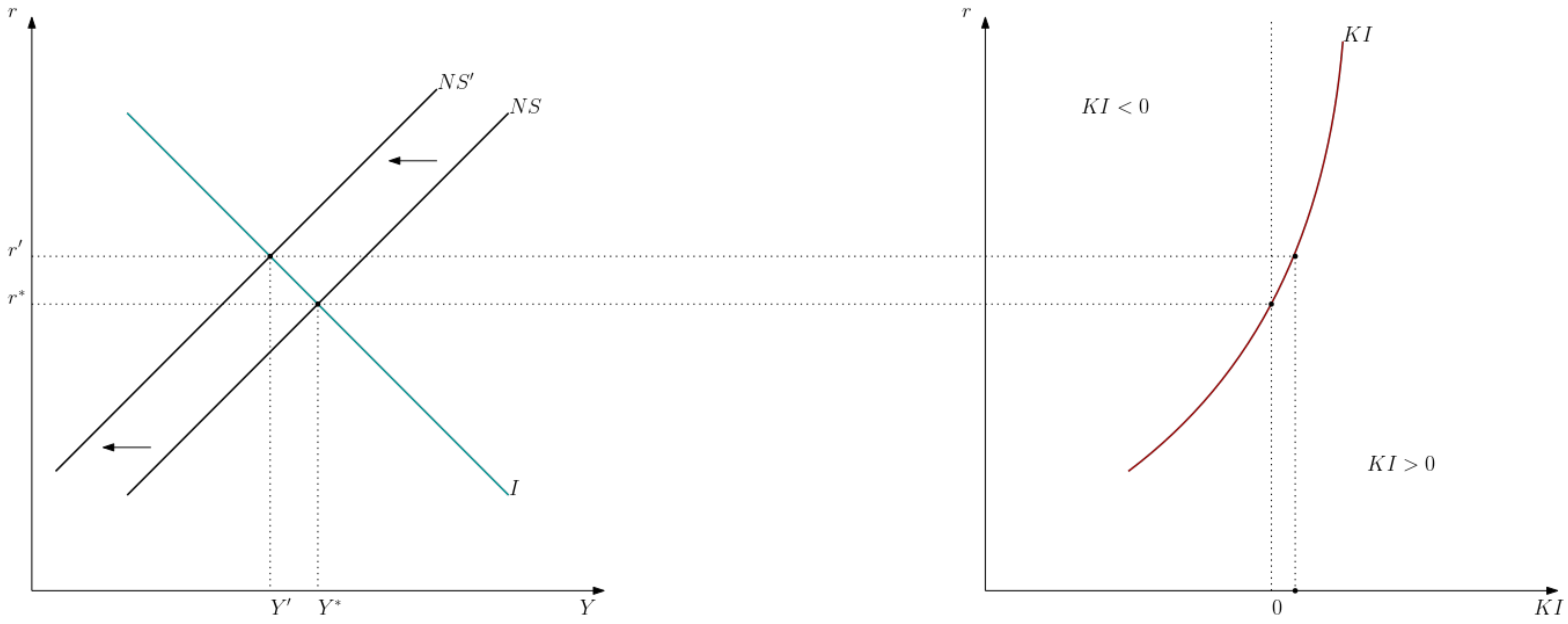
Budget deficit squeeze out national saving

$$S_{\text{public}} = T - G$$

$$S_{\text{private}} = Y - C - T$$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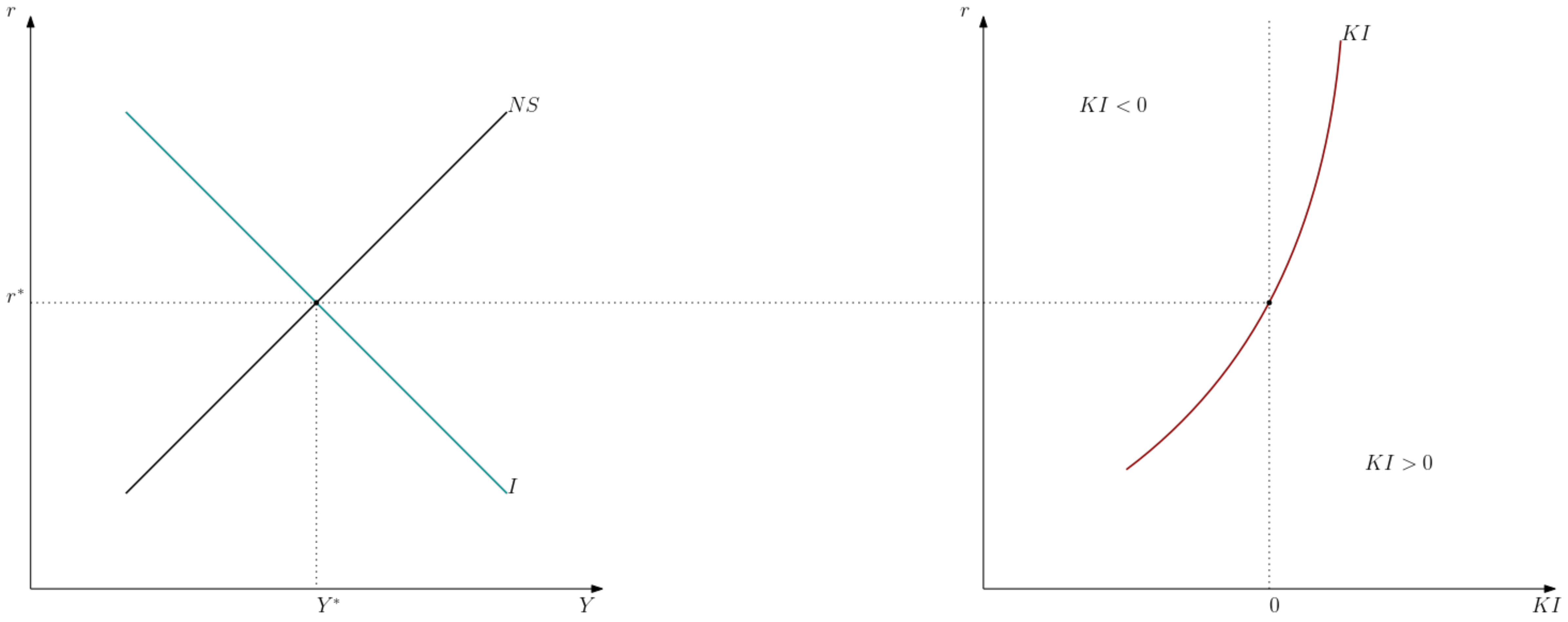
c. Domestic citizens decide to save more



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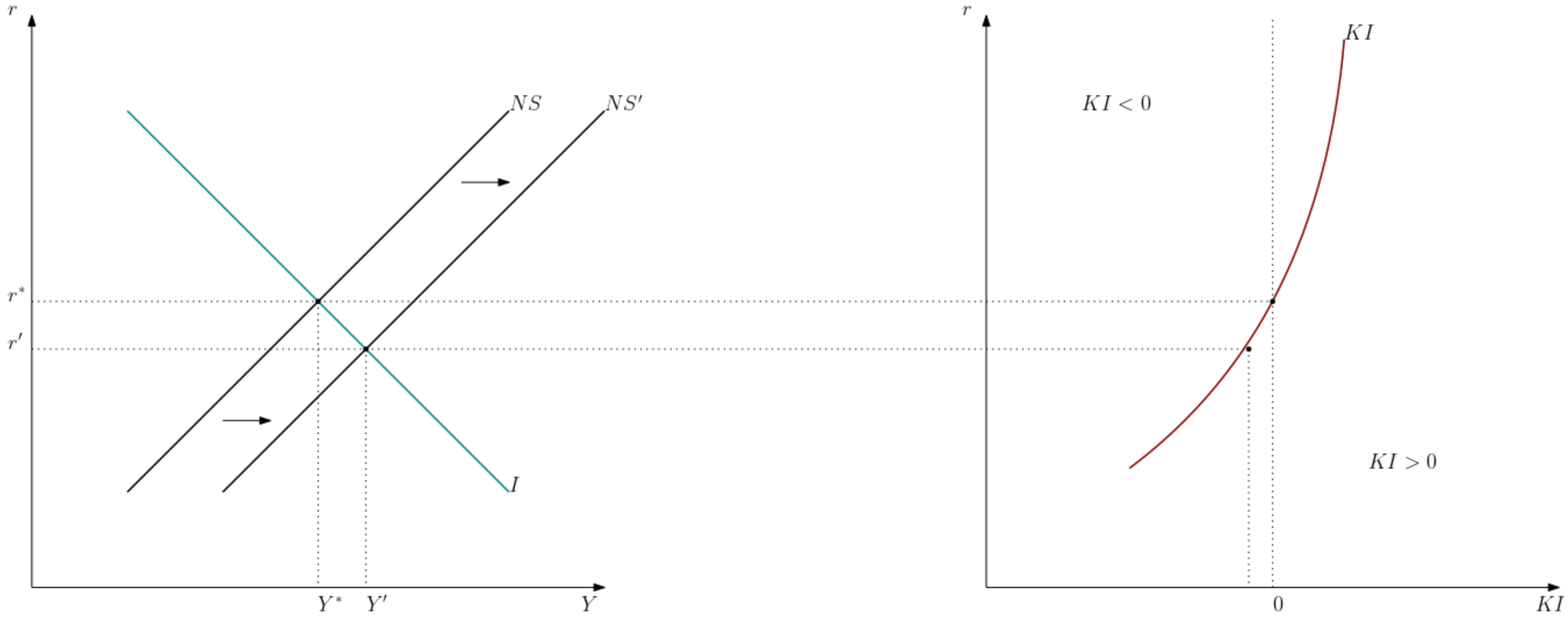

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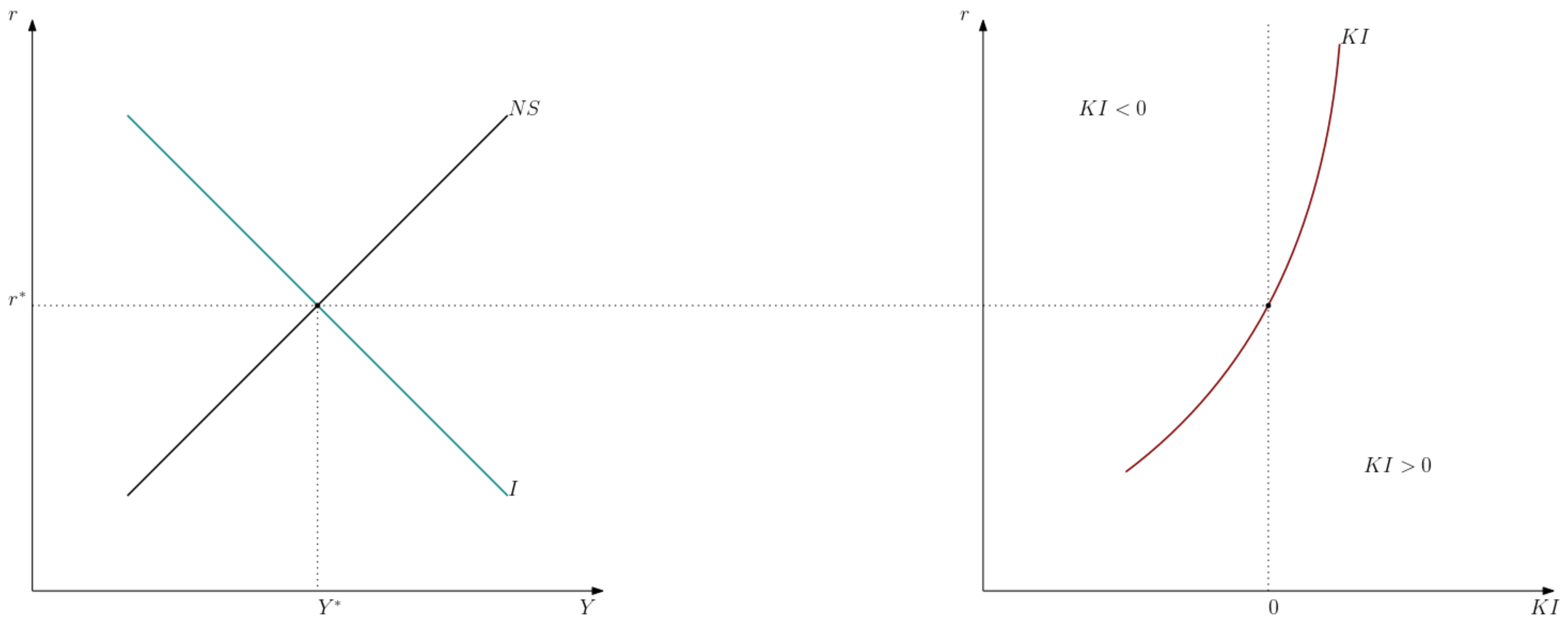
d. Foreign investors believe that the riskiness of lending to the country has increased



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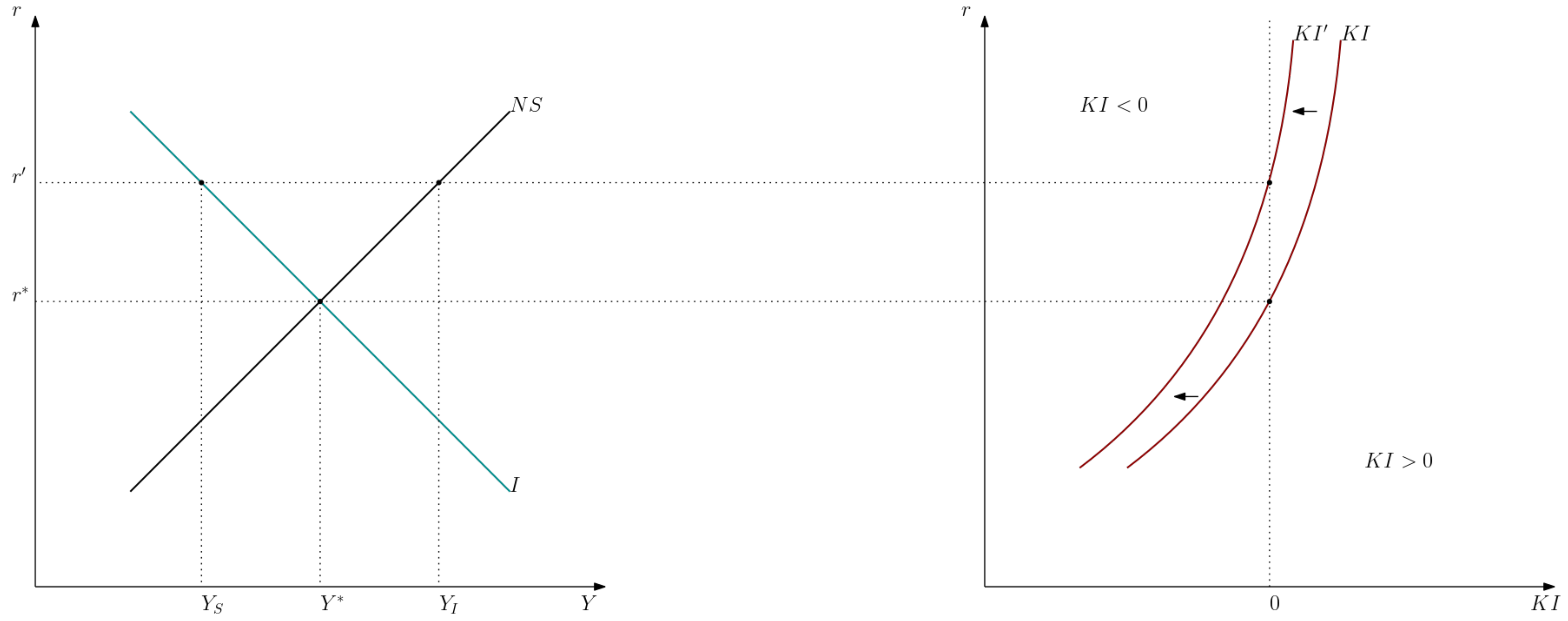

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3. How does each of the following transactions affect (1) the **current account balance** and (2) the **capital account balance** for Australia? Show that in each case the identity that the **trade balance plus net capital inflows equals zero applies**.

a. An Australian exporter sells software to Israel. She uses the Israeli shekels received to buy stock in an Israeli company.

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Software sale to Israel $\Longrightarrow$ CAB $(+)$

Purchase of Israeli shares $\Longrightarrow$ KAB $(-)$

We have both credit and debit, BP = 0 holds

b. An East Timorese firm uses proceeds from its sale of oil to Australia to buy Australian government bonds

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Oil purchase $\Longrightarrow$ CAB $(-)$

Bond purchase $\Longrightarrow$ KAB $(+)$

Both credit and debit, BP = 0 holds

c. An East Timorese firm uses proceeds from its sale of oil to Australia to buy oil-drilling equipment from an Australian firm

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Oil purchase $\Longrightarrow$ CAB $(-)$

Sale of drilling equipment $\Longrightarrow$ CAB $(+)$

Both credit and debit, BP = 0 holds

d. An East Timorese firm receives Australian dollars from selling oil to Australia. A French firm accepts the dollars as payment for drilling equipment. The French firm uses the dollars to buy Australian government bonds.

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Oil purchase $\implies$ CAB $(-)$

Bond purchase $\implies$ KAB $(+)$

We have both credit and debit, BP = 0 holds

e. A British financial investor writes a cheque on his bank account in New York to purchase AMP shares.

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Shares bought $\Longrightarrow$ KAB $(+)$

Shares move overseas $\Longrightarrow$ KAB $(-)$

Both credit and debit, BP = 0 holds

4. Explain why "a **low-saving, high-spending** country is likely to import more than a high-saving country".

- Low saving rate $\Longrightarrow$ low supply
- High spending $\Longrightarrow$ high demand
- High demand & low supply $\Longrightarrow$ high real interest rate
- Higher interest rate attracts foreign investments

Production function perspective

Low saving $\implies$ small k

$y = Ak^{\alpha} \implies$ low output

High spendings then turn toward imports

5. What are the advantages and disadvantages of flexible vs. fixed exchange rate system? Is one exchange rate system superior to the other? Discuss.

Flexible exchange rate

In the medium and the long run, insulates the economy from external shocks (e.g. foreign inflation shocks) as the flexible exchange rate absorbs such shocks.

$$q \equiv e \times \frac{P}{P^f}$$

e is the differential between foreign and domestic inflation

Flexible exchange rate

Monetary authorities are free to pursue other goals,

e.g. inflation or full employment.

Fixed exchange rate

Minimize exchange rate uncertainty and lowers transaction costs by promoting certainty.

Fixed exchange rate

Advocates are of belief that exchange rate markets are frequently subject to destabilizing speculation. That is, demand and supply forces reflect speculative forces, rather than fundamentals.

Fixed exchange rate

Benefits of a “common currency” if every country follows.

In general

Flexible exchange rates are preferable **except** when

– A group of countries is tightly integrated, they experience similar real shocks, and/or there is high factor mobility between them. EU

– A central bank (or policymakers lacking internal discipline) cannot be trusted. Argentina etc.

Note!

Advantages of flexible ER system are disadvantages of a fixed ER system and vice versa.

There is no one best system for all!!

Questions?

Good luck on your finals!

You can ask questions on Ed, or possibly arrange an office hour with me.