

**Problem 1.** Consider the country of Nilfgaard, whose currency is the *floren*.

- This year it invests 400 floren in domestic investment, and its previous investments generated 15 floren in capital gains this year.
- It purchases 160 floren worth of foreign assets, and sells 120 floren worth of domestic assets to foreigners.
- Valuation effects lead to a total 5 floren in capital gains.

Supposing  $KA = 0$ , answer the following things.

- (a) What is the change in external wealth?
- (b) What is the current account?
- (c) What is the total change in wealth?
- (d) What is the amount of domestic savings?

**Problem 2 (Sample Midterm 2, Question 3).** Suppose that in a typical year, a country produces  $Q = 50$  output with  $C = 50$  and  $I = G = 0$ . The country has no initial wealth, and the world interest rate is  $r^* = 10\%$ .

- (a) There is an unexpected drop in output in year  $t = 0$ , so output falls to 39 and is then expected to return to 50 in every future year. If the country desires to smooth consumption, how much should it borrow in period  $t = 0$ ? What will the new level of consumption be from then on?
- (b) There is an unexpected war in year  $t = 0$ , which costs 11 units and is predicted to last one year. If the country desires to smooth consumption, how much should it borrow in year  $t = 0$ ? What will the new level of consumption be from then on?
- (c) Following on from part (b), the country wakes up in year  $t = 1$  and discovers that the war is still going on and will eat up another 11 units of expenditure in year  $t = 1$ . If the country still desires to smooth consumption looking forward from year 1, how much should it borrow in year  $t = 1$ ? What will the new level of consumption be from then on?