Solution key

to exercises from chapter 12 of Macroeconomics

12.1 Check for a causal relationship between changes in the money supply in the country under consideration and other countries' money supplies.

12.2 Small open economies must take the world interest rate as given: M↑ → P↑ → R↓ → government spending is crowding out net exports. IS and LM return to their original positions. No effects on other economies.

12.3 Differences/additions to standard DAD-SAS:
- Germany as a big country can influence i^W even if it fixes its exchange rate. Hence the DAD curve looks can be written as $\pi = \mu + \Delta G - b(Y-Y_{-1})$
- Y* as well as monetary and fiscal policy measures were uncertain
Results: DAD_{actual} further to the right than $DAD_{planned}$, EAS_{actual} and SAS_{actual} further to the left than $EAS_{presumed}$/$SAS_{presumed}$ → higher inflation than anticipated.

12.4 The Netherlands benefitted the most from the demand increase for the exports of Germany's trading partners. That is, the negative impact of the rising interest rate was – at least partially – compensated by the positive effect of the demand increase, which was most pronounced in the Netherlands.

12.5 High degree of persistence: a one-time deviation from the equilibrium (m = 0) will usually take some time to be reversed.

12.6 (a) No intervention: $e = m$
Intervention: $e = \alpha m$
weak intervention: exchange rate response line lies between the lines of a non-intervening and a fully intervening monetary authority
(b) $e = 2\alpha m/(1+\alpha)$

12.7 Stochastic LM curve (cases (a) and (c)): fixing the interest rate is the best option. Case (b): It is better to fix money supply. Case (d): choice is difficult, as fixing i *increases* output deviations in the country hit by the shock but leaves the other country *unaffected* (while fixing the money supply will lead to *smaller* output deviations taking place in *both* countries).

12.8 (a) Currency union currency appreciates ⇒ Net exports of Austria and Belgium decline ⇒ Y_B increases by less, Y_A decreases by more.
(b) Currency union money supply increases ⇒ Y_B increases by more, Y_A stays unchanged.

12.9 When the bubble starts the currency price begins to deviate at an accelerating speed from its fundamental value. When the bubble burst it goes back to its fundamental value.
An expected appreciation of the currency leads to an appreciation of the currency today, which leads to an even larger appreciation tomorrow as further appreciation is expected.

12.10 After the announcement of the lower bound, the Swiss-franc response line alters from a straight line to a curved line near the lower bound.