ECON 110B Problem Set 4 Solutions

Chapter 13, exercise 3 (page 374)
(a) Right after the shock: AS shifts down, leading an increase in $\tilde{Y}$ and a decrease in $\tilde{\pi}$.
(b) Then AS returns to the original position, leading $\tilde{Y}$ and $\pi$ back to 0 and $\bar{\pi}$.

Chapter 13, exercise 5 (page 375)
(a) Right after the shock: AD shifts down, leading decreases in $\tilde{Y}$ and $\pi$
(b) Then AS shifts down until $\tilde{Y}$ becomes zero. $\pi$ falls further.
(c) As European or Japanese economies recover, AD shifts up to the original location; increases in $\tilde{Y}$ and $\pi$
(d) Finally, AS shifts up until $\tilde{Y} = 0$ and $\pi = \bar{\pi}$

Chapter 14, exercise 1 (page 402)
(a) When the financial friction rises from 0 to 2%, this causes the MP curve to shift upwards by 2%; the IS curve now intersects this new MP curve at a point where $\tilde{Y} < 0$.
(b) We would recommend that the Federal Reserve lower the federal funds rate (and, hence, the MP curve) until the MP curve once more intersects the IS curve at a point where $\tilde{Y} = 0$. This policy would have the effect of stabilizing output.
(c) If the financial crisis were this severe, we can see that the Federal Reserve will not be able to stabilize output (i.e., attain $\tilde{Y} = 0$) solely by lowering the federal funds rate, since the federal funds rate cannot be lowered below 0. In this case, we would recommend that
the Federal Reserve cut the federal funds rate to 0 and in addition, that they purchase long-term securities (i.e., engage in quantitative easing).

(d) Expansionary fiscal policy could also be considered.