

Problem Set 13
Due in lecture, Thursday, May 3

1. Romer, Problem 11.11.

2. Consider the Alesina-Drazen model as presented in the reading and in lecture. In that model, T was assumed to satisfy $0 < T < W$. Here we assume instead $A + W < T < B + W$.

In the model as presented in the reading and in lecture, there could be an inefficient failure to achieve reform: The two sides could fail to agree on a reform package (that is, to a value of X) even though $R + W - T > 0$ (so that both sides could be better off with reform than without).

In the variant of the model with $A + W < T < B + W$: (1) Show whether there can be inefficient reform. That is, could the two sides agree on a reform package in a case where $R + W - T < 0$? (2) Show whether there can still be an inefficient failure to achieve reform. That is, could the two sides fail to agree on a reform package in a case where $R + W - T > 0$?

3. Roubini and Sachs find that:

- A. Deficits have been on average considerably higher under weaker governments.
- B. Deficits have been on average considerably more persistent under weaker governments.
- C. Deficits have been on average considerably lower under weaker governments.
- D. Deficits have been on average considerably less persistent under weaker governments.

4. In Becker and Mulligan's model:

- A. Budget deficits occur because of strategic forces similar to those in the Tabellini-Alesina model.
- B. Budget deficits occur because taxes are more obvious or salient to voters than deficits are.
- C. Government spending is determined by interest-group lobbying.
- D. Government spending is determined by incumbents' desire to get reelected.
- E. Both deficits and government spending are determined by a benevolent social planner.

EXTRA PROBLEMS (NOT TO BE HANDED IN/ONLY SKETCHES OF ANSWERS WILL BE PROVIDED)

5. Romer, 11.12.

6. In the version of the Alesina-Drazen model presented in the reading and in lecture, the potential inefficiency would disappear if:

- A. It was the capitalists rather than the workers who made an offer to the other group concerning how the burden of reform should be divided.
- B. Capitalists faced the same amount of uncertainty about workers' income if there is reform as workers face concerning capitalists' income if there is reform.
- C. Capitalists' income if there is reform were not realized until after workers had made their offer and the capitalists had decided whether to accept the offer.
- D. (A) and (B).
- E. (A) and (C).
- F. (B) and (C)
- G. All of the above.

(OVER)

7. When economists argue that the social-security trust fund is irrelevant, they mean that:
- A. If the government simply gave all the assets in the trust fund away, this would not affect the government's long-term fiscal situation.
 - B. If instead of using the excess of social-security revenues over social-security expenditures to buy government debt and put it in the trust fund, the government had used that excess to buy government debt and retire it, the government's long-term fiscal situation would be the same.
 - C. The only way to deal with the fact that under current law social-security expenditures will be far in excess of social-security revenues in coming decades is to increase taxes or cut benefits in future decades; changes in current taxes and expenditures are irrelevant.
 - D. All of the above.

EXTRA EXTRA PROBLEMS (NOT TO BE HANDED IN/NO ANSWERS WILL BE PROVIDED)

Romer, 11.15 and 11.16

10. This question asks you to think about, and take a first pass at starting to model, an idea about a possible source of deficits.

Consider the following argument:

If the United States issues debt today, some of the burden of the taxes needed to repay that debt will fall on people who migrate to the United States after the debt is issued. Since these immigrants are not represented in the political process today, this is a reason that the political process will tend to create deficits.

a. First, discuss this argument in general terms. Does the argument seem logically correct -- that is, has it identified a possible source of deficits? If not, why not? If so, does it seem that the deficits would be inefficiently high, or would they be Pareto efficient but higher than they would be without immigration? Does the argument imply that emigration will tend to create surpluses? Do you have any other general comments about the argument?

b. Now, try to model this idea. The goal is to get as far as you can in coming up with a simple model that can shed light on the argument above, not to be general or to be sufficiently realistic that we would be willing to perform quantitative exercises with your model.

Among the modeling choices you may need to make are: Discrete time or continuous time? Should the economy end at some date or go on forever? Should there be uncertainty, and if so, about what? Should there be heterogeneity, and if so, of what sort?

Note: I do not expect you to fully construct and solve a model. Just make as much progress as you can.