## Econ 182 – Fall 1999 Suggested answer key for Midterm

Question 1

50 == 5 + 5 \* 9 points

Valid introduction and conclusion to essay beyond mere answers for headings 5 points

Certain points can be made under different headings. They count fully if they are related to the heading.

We give full score only if one good argument is made *and* a second point is mentioned. In the list of possible arguments below, the first argument usually carries six out of nine points, and any second argument receives the remaining three points.

a) Stability 9 points

- The system automatically stabilizes itself under the price-specie flow mechanism (even if the country with a current account surplus does not increase its monetary base). Current account imbalances are reversed automatically.
- There is almost no exchange rate risk. This allows capital to flow freely and promotes international capital market integration. Currency crises can become less likely under such a system.
- But the design of the gold standard disregards internal balance and domestic full employment as policy goals (monetary policy is ineffective and expenditure-switching policies are ruled out). This may be a source of instability in the long run.
- The stability of the gold standard is dependent on the willingful participation of all nations. Historically, governments ignored the "rules of the game" at times, for example by sterilizing gold flows. This undermined the system.

b) Credibility 9 points

- The credibility of a gold standard derives from the pegging of all currencies to gold, and not from mutual exchange rate pegs as under other systems. The historic gold standard between 1879 and 1913 gained its full credibility from three rules in particular: Central banks or governments committed themselves to freely convert between domestic money and gold at the gold parity. Countries did not restrict the export or import of gold and did not impose restrictions on the current or capital account. Domestic money supply had to be backed by earmarked gold reserves.
- The credibility of the gold standard as a system can be limited, however. When economic growth exceeds the growth in world gold supplies, the system may no longer be sustainable. The reason is that fast growing countries may need to increase their money supply beyond the gold peg (a variant of Triffin's argument, applied to the gold standard).
- Debtor countries who adhere to the gold standard are more credible on the international capital markets and find foreign capital more accessible at lower interest rates (Eichengreen's "good housekeeping seal of approval").

c) Inflation 9 points

 Under a gold standard, domestic money supply has to be backed by earmarked gold reserves. This rule limits discretionary monetary policy. Hence, the gold standard may tend to keep inflation low.

- On the other hand, most monetary regimes depend on a core country (or a small number of core countries). If such a core country is not sufficiently inflation-averse, other countries on the gold standard may be exposed to higher inflation than they would otherwise choose. (The role of the US as the manager of Bretton Woods in the late 1960s is a historic example from a different period.)
- Generally, under a gold standard, inflation and deflation depend on the relative price of gold. The gold price, in turn, depends on the amount of gold that is mined worldwide. The mining process for gold can be unforeseeable, possibly making prices move unpredictably.
- Deflations may become more likely under a gold standard than under the current monetary regimes with fiat money. At the moment of a return to the gold standard, a deflation occurs if the monetary base has to be contracted to meet the new gold peg. In addition, if many countries simultaneously switch to a gold standard this is likely to increase the price of gold (since demand is high for given gold supply). Therefore, countries on the gold standard will suffer a deflation since the prices of goods fall relative to gold when the gold price rises.

## d) Bias towards growth or recessions

9 points

- Under a gold standard, countries with a current account deficit and countries with
  a current account surplus are affected asymmetrically. Whereas a country in
  current account deficit always has to contract its monetary base in response to the
  gold outflow, a country in current account surplus need not increase the money
  supply. A "surplus country" can simply hoard the gold. This asymmetric
  sterilization of gold inflows biased the system to contractionary monetary policy,
  and thus possibly to lower output growth.
- Under a gold standard, the monetary base is restricted by the limited world gold supply. Too small a monetary base can slow down output growth or cause recessions. If the return to the gold standard lead to a monetary contraction, world output would fall.
- An international transmission of recessions may become more likely under a gold standard than under floating exchange rates (the Great Depression is an example for such an international transmission of a recession).
- Monetary policies and expenditure switching policies are ruled out under a gold standard. This may prolong recessions because central banks and governments have fewer instruments at their disposal to end recessions.
- If many countries simultaneously strive for large gold stocks as reserves, their contractionary monetary policies may restrain output.
- After the Great Depression, countries that abandoned the gold standard the fastest also recovered earlier than others. This suggests that the gold standard tended to prolong recessions (Eichengreen).

e) Management 9 points

Under the automatic stabilization scheme of the price-specie flow mechanism, central banks or governments need not manage the current account closely. All countries simply have to abide by the "rules of the game," as Keynes put it. However, some management may help. For example, increasing the money supply under a current account surplus in accordance with the gold inflow allows the price-specie flow mechanism to work more rapidly.

- A manager to police "the rules of the game" or to remove the asymmetry may be required under a gold standard. In contrast to the historic gold standard, Bretton Woods and the EMS both had managers: officially the IMF and the EU respectively (unofficially the US and Germany respectively). The latter two countries could not separate their own interests from their management role. Could an effective management institution (e.g. a World central bank) be designed?
- Regarding domestic demand management, monetary policy is ineffective under any exchange rate fix, and more stress needs to be put on fiscal policies for the management of domestic full employment.
- Since expenditure-switching policies are ruled out, a change in economic fundamentals may alter the external and internal balance conditions in a way that internal and external balance can no longer be achieved simultaneously. This can make exchange rate realignments necessary at times.

## a) Permanent, but instantaneous monetary expansion, fixed prices

25 points

Note that the answer uses the *asset approach* to the exchange rate

- Correct diagram for simultaneous foreign exchange market equilibrium and domestic money market equilibrium under asset approach 5 points
- Outward shift of the real money supply curve, not followed by any further shift

5 points

• Fall in domestic interest rates

5 points

• Depreciation of spot exchange rate

- 5 points
- Consistent argument about change in expectations (two possible answers) 5 points
  - 1. Prices are never fixed in the long run, so the expected future exchange rate exceeds the current spot rate. Therefore, the real return curve for foreign assets must shift outward.
  - 2. Prices are assumed to be fixed in the question, even in the long run. Therefore, the real return curve for foreign assets does not shift.

## b) Permanent, but instantaneous monetary expansion, flexible prices

25 points

There are two possible answers.

*Monetary approach* to the exchange rate

• Statement of Abs. PPP

5 points

• Statement of the nominal exchange rate equation under the monetary approach

8 points

• Suitable verbal argument accompanying the mathematical statement

12 points

Asset approach to the exchange rate

• Effect of Absolute PPP on expected exchange rate

5 points

• Correct diagram for simultaneous foreign exchange market equilibrium and domestic money market equilibrium under asset approach 5

5 points

• Outward shift of the real money supply curve, followed by an immediate backward shift (within a logical second)

5 points

• No movement of the domestic interest rate

5 points

• Outward shift of the real return curve for foreign assets

5 points