

Quiz 5

Name: Answer Key

1. True or false (4 points):

Government debt is the sum of all the past federal budget deficits (up to the present day).

False: government debt is the sum of all the past federal budget deficits minus the sum of the federal budget surpluses.

2. Short Answer (8 points):

- a) Define and draw the Laffer Curve.
- b) Given that a country is on the left side of the maximum point, what happens if its government increases income taxes?
- c) Given that a country is on the right side of the maximum point, what happens if its government increases income taxes?

a) The Laffer Curve is the relationship between the income tax rate and the amount of tax revenue collected by a government.

b) If a country is on the left side of the maximum point, increasing the tax rate will increase the tax revenue.

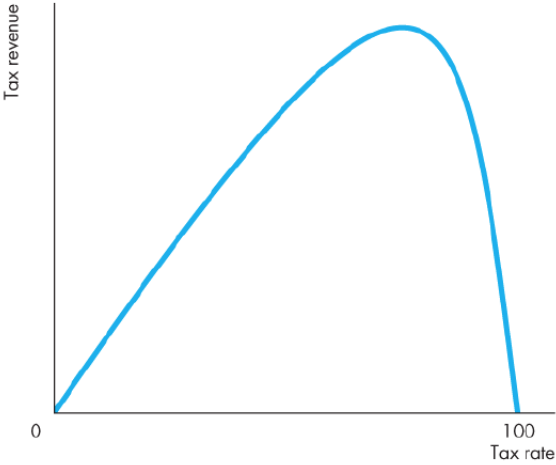
c) If a country is on the right side of the maximum point, increasing the tax rate will decrease the tax revenue. This happens because people become discouraged to work when they are taxed at such a high rate, so they leave the labor force. The government now has less workers to tax, even though individual workers pay more taxes.

Grading:

a) 4 points total.
No definition of the Laffer curve, -1.5 points.
The curve endpoints are not at 0 and 100 (either endpoint), -1 point.
The "0" and "100" are not marked on the graph, -0.5 points.

b) 2 points total. Only needed to say that the tax revenue will increase.

c) 2 points total. Only needed to say that the tax revenue will decrease.



3. Short Answer (8 points):

Consider the balance sheet items listed in the table below. In the second column, identify whether an item belongs to government receipts (R) or outlays (O).

Balance Sheet Item	R or O?
Welfare transfers	O
Social security taxes	R
U.S. military expenditure	O
Interest payments on U.S. government bonds held by the public	O
Interest payments on Canadian government bonds held by the U.S. government	R
Taxes on capital gains	R

See next page for an explanation.

Grading: 1.33 points for each correct answer.

If you are confused about the interest payments on bonds, you need to improve your understanding of what a bond is. A government bond (or any other marketable security, such as T-bill and T-note) is a debt instrument. U.S. government bonds are issued by the United States Department of the Treasury to finance the national debt of the United States. When you buy a bond, you are lending money to the government for a specific amount of time. In exchange, the government gives you a piece of paper (for a visual example [click here](#)) that states the principal amount, maturity date, and the interest rate. Even though the government doesn't have to repay the principal amount to you until the maturity date, it does have to make interest payments to you semiannually. The interest payments are always made to whoever holds the security, i.e. to a person or an entity that lent money to a government. Every country that has national debt has previously sold government securities, i.e. took a loan from somebody. Governments of different countries can buy bonds from each other. For example, China holds the highest number of U.S. government bonds (literally pieces of paper that look like in the link above), i.e. China is the biggest lender to the U.S. government. Thus, U.S. government has to make interest payments on its debt to China. Whoever physically holds a bond is a lender to a government and always receives interest payments from that government (assuming that the government in question is not defaulting on its debt). Government default (aka sovereign default) is a situation when a government is not paying interest to its lenders, and is not repaying the loans (the bonds) that have matured.

So, if the U.S. government holds Canadian bonds, Canadian government has to pay interest to the U.S.. From the prospective of the U.S. government, it is income, i.e. a receipt, but from the prospective of the Canadian government, the interest it pays to the U.S. is an outlay.

On the other hand, if I (or you, or any other person or entity) hold a U.S. government bond, U.S. government has to pay interest to me. From the prospective of the U.S. government, this is an expense, i.e. an outlay.