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# BUDGET DEFICITS AND THE EXCHANGE RATE

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## I. Introduction

In the recent literature on flexible exchange rates, attention has been focused primarily on monetary policy. Fiscal policy, in particular, has been afforded scant attention. Moreover, unlike the case of monetary policy where there is a consensus as to the effect monetary policy is likely to have on currency exchange rates, the various articles dealing with fiscal policy are not unanimous with respect to the exchange-rate effects. This is evident from the recent survey by Penati (1983).

In the fiscal policy literature, an important assumption concerns the degree of substitutability between domestic and foreign financial assets. There are two limiting cases: that of zero substitutability, and perfect substitutability. In the first case, the traditional flow models of the 1960s predict a depreciation of the domestic currency when there is an expansionary, bond-financed fiscal policy since the trade balance has to remain in equilibrium. The second case, formerly called perfect capital mobility, leads to an opposite result. Currency appreciation is necessary to equilibrate the goods market, since accommodating capital flows guarantee an overall equilibrium in the balance of payments. Consequently, any in-between case of imperfect (i.e., non-zero and non-perfect) substitutability of domestic and foreign assets gives rise either to a depreciation or an appreciation, depending on the degree of integration of the domestic financial market within the international economy.

In this article, we shall focus on the special case of perfect substitutability between domestic and foreign financial assets which is relevant to small open economies whose financial markets are highly integrated with the world capital market. As is already well-known from traditional models (section II), this assumption permits a simplication of macroeconomic models since the domestic interest rate can be assumed to be given by the rest of the world. The advantage of this assumption is that it allows abstraction from portfolio analysis.

Following studies by Dornbusch (1976), Frenkel (1976), Dornbusch and Fischer (1980), and Branson and Buiter (1983) on the necessity of a long-run stock equilibrium, section III analyzes the path of the exchange rate from an initial appreciation to a final depreciation given a fiscal policy shock. Since a current account deficit decreases net financial wealth, and thus reduces expenditures on domestic goods, the subsequent excess supply in the goods market is eliminated mainly by a depreciation of the domestic currency. Furthermore, there are inherent equilibrating forces leading to an equilibrium in the current account. Exchange-rate expectations, introduced in section IV, which are assumed to be of the rational type will only dampen the initial appreciation effect, whereas the final depreciation rate will remain unaffected.

In section V, we take into account the government budget constraint as elaborated by Sachs and Wyplosz (1984). Considering first government bonds as a net wealth item, the initial fiscal impulse is amplified by the positive wealth effect on private expenditures, leading to a continuous increase in the exchange rate. On the other hand, if government bonds do not constitute net wealth and if the government budget is balanced over the long run, there will be no exchange rate effect of an expansionary fiscal policy.

In the concluding section VI, we shall emphasize the real (as compared with the financial) determinants of the exchange rate which are particular for a model characterized by the assumption of perfect substitutability between domestic and foreign assets. Finally, we shall indicate other restrictive assumptions for which the proposed model is valid.

## II. The Traditional IS-LM Model

In a small, open economy for which the level of the interest rate is assumed to be given by the rest of the world, any bond-financed budget deficit produces an appreciation of the domestic currency. The familiar argument runs as follows: The budget deficit caused by an increase in public expenditures creates an excess demand for goods. To the extent that there is full employment, the excess demand cannot be satisfied by an additional output of domestic goods.

Since the interest rate is that of the world economy, a rise in the domestic interest rate is excluded.[1] This excludes crowding-out of domestic private expenditures in favor of public expenditures via an interest-rate effect. Assuming also a constant price level, another crowding-out effect via the wealth-effect can be disregarded. Consequently, the only way to satisfy the additional public expenditures is through the foreign sector of the goods market.

The mechanics of the satisficing process are as follows: The excess demand in the market for domestic goods is eliminated by currency appreciation which decreases exports and increases imports. The additional public expenditures on domestic goods are satisfied by more available exportable goods for internal use and more available import substitutes being replaced by additional imports. The domestic currency will appreciate by such an amount, at which the budget deficit equals the trade-balance deficit (provided, of course, that the trade balance was initially in equilibrium).

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[1] The assumptions with respect to an unchanged interest rate are discussed in section III.

The above argument can be illustrated formally by the traditional Mundell model (1963):

$$L\ (r,y) = M \quad \text{[LM schedule]} \tag{1}$$

$$y = E\ (r,y) + G + T\ (E,e) \quad \text{[IS schedule]} \tag{2}$$

where $T_E < 0$, $T_e > 0$ and where

L = demand for money,

M = supply of money,

y = domestic output,

E = domestic private expenditures on domestic and foreign goods,

G = public expenditures on domestic goods,

T = trade balance (exports minus imports),

r = interest rate,

e = exchange rate.

The sum of E and G represents total absorption, so that E + G + T is the total demand (by residents and foreigners) for domestic goods whereas y is the supply of domestic goods.

Since the domestic interest rate (r) is given by the world economy ($r^*$), the equilibrium condition of the money market determines real income ($\bar{y}$; see the upper panel of Fig. 1). We assume that $\bar{y}$ is the domestic output at full employment when it is not specified otherwise. Any remaining disequilibrium in the market for domestic goods will be eliminated by a change in the exchange rate. For a given level of public expenditures ($G_o$), the exchange rate which equilibrates the goods market is $e_o$ (see lower panel of Fig. 1). Thus, under the assumption of perfect substitutability of domestic and foreign financial assets, the exchange rate is determined exclusively by the real sector of the

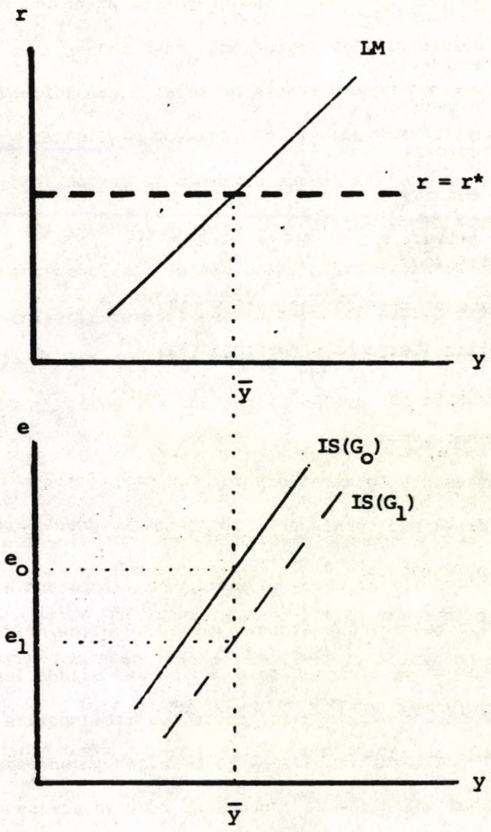


Figure 1

economy, i.e., by the IS schedule. An increase of public expenditures from $G_0$ to $G_1$ shifts the IS schedule to the dotted line, producing a fall in the equilibrium exchange rate from $e_0$ to $e_1$. The appreciation crowds out foreigners' demand for domestic goods (less exports) and residents' private demand for import-competing products (via more imports) such that the additional demand for domestic goods by the public sector (dG) creates a corresponding trade-balance deficit:

$$dG = - T_e \, de. \qquad (3)$$

As far as the balance of payments is concerned, it is always in equilibrium at any exchange rate since any trade-balance deficit is financed by accommodating capital inflows.

The traditional literature based on Mundell's analysis goes no further than this--budget deficits unambigously appreciate the domestic currency (i.e., always under the assumption of perfect substitutability between domestic and foreign assets). However, as will be shown, the appreciation is only a short run consequence of the budget deficit. Over time, the appreciation will be reversed, and in the long run there will be a depreciation of the domestic currency by comparison with the initial level of the exchange rate.

## III. Foreign Indebtedness and the Exchange Rate

The argument for a long-run depreciation of the domestic currency is based on the wealth effect on private expenditures. The trade-balance deficit implies capital inflows, which reduces financial wealth, and thus, private expenditures. Lower private expenditures release parts of domestic products for satisfying additional public expenditures. As a consequence, future trade-balance deficits for financing government expenditures should decrease in order to maintain equilibrium in the goods market. The initial appreciation will be reversed. In the long run, the trade-balance deficits vanish by a series of depreciations and they are replaced by an excess supply of domestic goods being made available for public expenditures by a fall in private expenditures. The final level of the exchange rate will be above the initial one when the full stock equilibrium (a lower stock of foreign financial assets) has been established automatically. The trade balance has to be positive (to the extent that it was in equilibrium at the outset) in order to finance additional interest payments to foreign countries.

When taking into account the wealth effect on private expenditures, the equilibrium condition of the goods market (2) has to be modified in the following way:

$$y = E\,(r,y,W) + G + T\,(E,e) \quad \text{[IS schedule]} \tag{4}$$

W stands for net financial wealth which is composed of the outstanding stock of money and net foreign assets (F):

$$W = M + F\ . \tag{5}$$

Since the quantity of money is assumed to be constant, any change in wealth arises from a change in the stock of net foreign assets ($dW = dF$). Private expenditures are an increasing function of wealth

($E_W > 0$). The impact of a change in wealth on the trade balance is indirect because a <u>ceteris paribus</u> increase in wealth raises private expenditures ($dE = E_W\,dF$) and higher private expenditures deteriorate the trade balance ($T_E\,dE = T_E E_W\,dF$ where $T_E < 0$). A change in wealth ($dF$) is produced by the imbalance in the current account of the balance of payments:

$$dF = T(E,e) + r^*F \quad [=0] \text{ [CA schedule]} \tag{6}$$

To the extent that the current account is not balanced, a change in F feeds back on the conditions in the goods market (4), provoking a change in the exchange rate since the value for r and y are predetermined.

The equilibrium condition of the goods market (4) is represented by the IS schedule in Fig. 2. Departing from any point on the IS schedule, an increase in F creates an excess demand for domestic goods which is eliminated by a fall in the exchange rate which decreases exports and increases imports:

$$\left.\frac{de}{dF}\right|_{IS} = -\frac{E_W + T_E E_W}{T_e} < 0$$

where, in absolute terms, $E_W > T_E E_W$. The equilibrium condition of the current account (6), the CA schedule, is also negatively shaped. Again taking any point on the CA schedule, a rise in F improves the current account through higher interest payments from abroad which are partly offset by a deterioration of the trade balance ($T_E E_W dF$). The surplus of

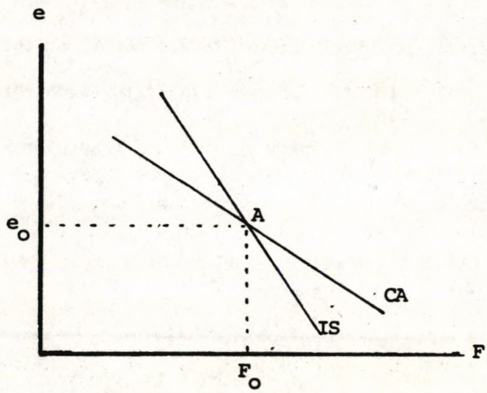


Figure 2

the current account can be eliminated by an appreciation which worsens the trade balance:

$$\left.\frac{de}{dF}\right|_{CA} = - \frac{r^* + T_E E_W}{T_e} < 0$$

To the extent that, in absolute terms, $r^* = T_E E_W$, the CA schedule would be a horizontal line: an increase in F leads to a rise of foreign interest payments from abroad which are exactly matched by a deterioration in the trade balance through the wealth effect on imports. Stability conditions require that the slope of the CA schedule is lower than the slope of the IS schedule, both measured in absolute terms, i.e., that

$$r^* < E_W . \qquad (7)$$

Thus, for instance, any point <u>on</u> the IS schedule rightward from the intersection point A implies a deficit in the current account so that the system moves back towards A. If, on the contrary, the CA schedule is steeper than the IS schedule, there would be a surplus in the current account and the system would move further rightward (Sachs and Wyplosz, 1984).

Fig. 3 represents a combination of Fig. 2 with the lower panel of Fig. 1. The solid lines describe the initial equilibrium at point A before government expenditures are increased. For reason of simplicity, we assume that the initial stock of net financial assets ($F_0$) is zero. A rise in government expenditures from $G_0$ to $G_1$ produces the appreciation of the domestic currency from $e_0$ to $e_1$ (see point B) according to the Mundell model. At point B, the current account is in deficit, wealth is decreasing, and thus, private expenditures are falling. The equilibrium condition in the goods market require a lower trade-balance deficit which is brought about by an increase in the exchange rate. In the righthand panel of Fig. 3, the system moves on the IS ($G_1$) schedule gradually towards point C, where the current account is in equilibrium and net foreign indebtedness reaches the level $F_1$. In the lefthand panel, the IS schedule for the lower wealth level shifts towards the position IS($G_1$, $F_1$).

With respect to the initial exchange rate ($e_0$), the domestic currency has been depreciated by $e_2-e_0$, i.e., by

$$\frac{de}{dG} = \frac{r^* + T_E E_W}{(E_W - r^*)T_e} \tag{8}$$

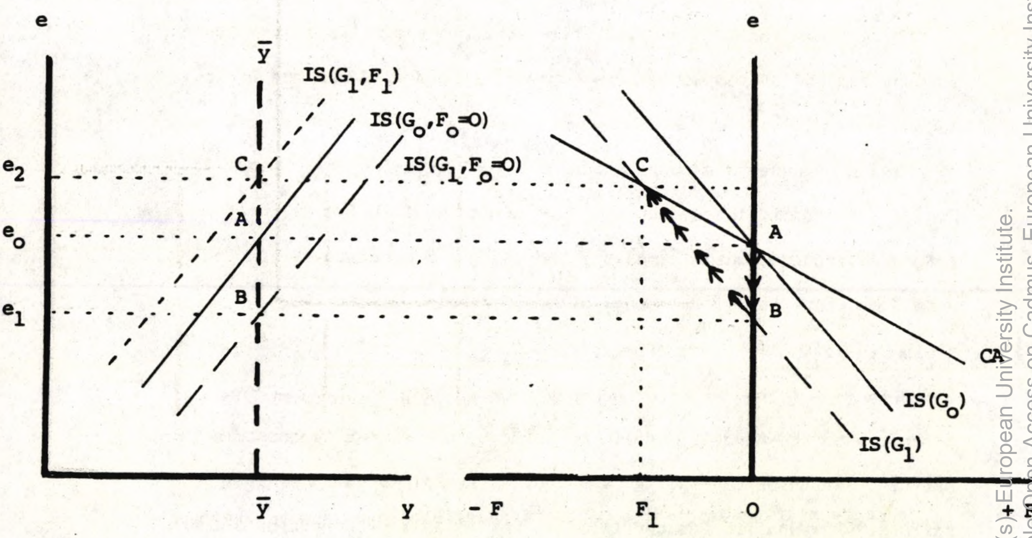


Figure 3

The expression (8) is derived from the equilibrium conditions (4) and (6). Formula (8) is positive to the extent that the stability condition (7) holds. The long-run depreciation takes place provided that $r^* + T_{E}E_{W} > 0$, according to which the higher indebtedness worsens the current account (the increase in interest payments is higher than the improvement of the trade-balance via lower imports). Consequently, a depreciation has to occur in order to create a trade-balance surplus (initially, it was assumed to be in equilibrium) which is sufficient to honor the interest service on foreign debt. The exchange rate would remain unchanged if $r^* + T_E E_W = 0$, i.e., if the interest payments on the additional debt are offset by a trade-balance surplus induced by the reduction of imports via the wealth effect. Finally, there can be an appreciation provided that $r^* + T_E E_W < 0$, which means that the trade-balance surplus created by the wealth effect exceeds the interest payments on foreign debt.[2]

To summarize, an expansionary fiscal policy leads to an appreciation of the domestic currency in the short-run, but to a depreciation in the long-run. Due to the assumption that the monetary sector always remains in equilibrium, the downward and subsequent upward movement in the exchange rate arises from the equilibrating forces within the real sector (goods market and current account). At the very beginning of the expansionary fiscal policy, the economy as a whole consumes more goods than it produces, and the extra goods are provided by a real transfer from abroad. However, there are automatic forces which maintain the country's long-run external budget constraint. The real transfer will be paid for eventually by a gradual reduction in private absorption (via the wealth effect of foreign indebtedness) which produces a series of depreciations.

## IV. The Role of the Monetary Sector

That the monetary sector plays a passive role in the determination of the exchange rate arises from the assumption that domestic and foreign financial assets are perfect substitutes. However, two influences resulting from a change in the demand for money on the

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[2] It should be noted that at the new long-run equilibrium point C, the additional government expenditures ($\Delta G$) are completely financed by a fall in private expenditures. Since the trade-balance must be in surplus, the reduction in private expenditures finances not only the budget deficit, but also the trade-balance surplus ($\Delta G + \Delta T = -\Delta E$).

exchange rate are conceivable. The first one produces only a temporary impact, and the second one reveals a permanent effect on the exchange rate.

The short-run influence of the money market on the exchange rate is caused by a temporary increase in the domestic interest rate (r) above the world interest rate (r*) according to the interest-rate parity (IRP):

$$r = r^{*} + \frac{\bar{e} - e}{e} \quad \text{[IRP schedule]} \tag{9}$$

The last term in formula (9) stands for the expected change in the exchange rate, where $\bar{e}$ represents the expected exchange rate. The interest-rate parity is illustrated by the IRP schedule (Claassen, 1983) in the righthand panel of Fig. 4 for a given international interest rate ($r^{*}$) and for a given expected exchange rate ($\bar{e} = e_o$). Its slope is equal to

$$\left.\frac{de}{dr}\right|_{IRP} = -\frac{e^2}{\bar{e}} < 0 .$$

To the extent that the actual exchange rate is below the expected one ($e < \bar{e}$), there will be an expectation of a depreciation, and the domestic interest rate lies above the international one ($r > r^{*}$) by the amount of the expected depreciation rate. There is no risk premium since we assume rational expectations according to which the expected change in the exchange rate is equal to the actual change.

The initial equilibrium is at point A in both panels of Fig. 4 ($e_o = \bar{e}$ and $r_o = r^{*}$). The increase in government expenditures leads to the short-run appreciation $e_1$ (point B in the lefthand panel) and to the long-run depreciation of $e_2$ (point C). Long-run expectations about the exchange rate are revised from $\bar{e} = e_0$ to $\bar{e} = e_2$ and the IRP schedule shifts towards the dotted line. At point B, the expected rate of depreciation is $(e_2-e_1)/e_1$, which corresponds to the interest-rate differential $r_1 - r^*$. The domestic interest rate must rise; otherwise the rate of return on domestic financial assets would decrease in comparison to the international one, and the additional public debt would not be bought by the residents of the country.

At point B, the goods market is in disequilibrium because the rise in the domestic interest rate creates an excess supply of goods for two reasons. First, by relaxing the assumption of full employment, output will rise since there is an excess supply of money as a consequence of the interest rate-induced fall in the demand for money. Second, private expenditures are also falling as a result of the higher interest rate. Consequently, the size of the initial appreciation (point B) which was necessary to eliminate the government-induced excess demand for goods will be lower such that the appreciation will be settled, for instance, at point B' instead of point B.[3] As far as the long-run exchange-rate level is concerned, it continues at point C since the domestic interest rate is only higher over the adjustment process from B' to C, during which the interest rate falls continuously until it has reached the world interest level $r^*$. Thus, by taking into account the short-run rise in the domestic rate, the path of the exchange rate will be

[3]Since we assume an instantaneous adjustment process in the goods market (and, a fortiori, in the money market), the movement of the exchange rate will be that of A to B' and not from A to B and then from B to B'.

modified (see the arrows in Fig. 4), its final quilibrium level, however, remains unchanged.[4]

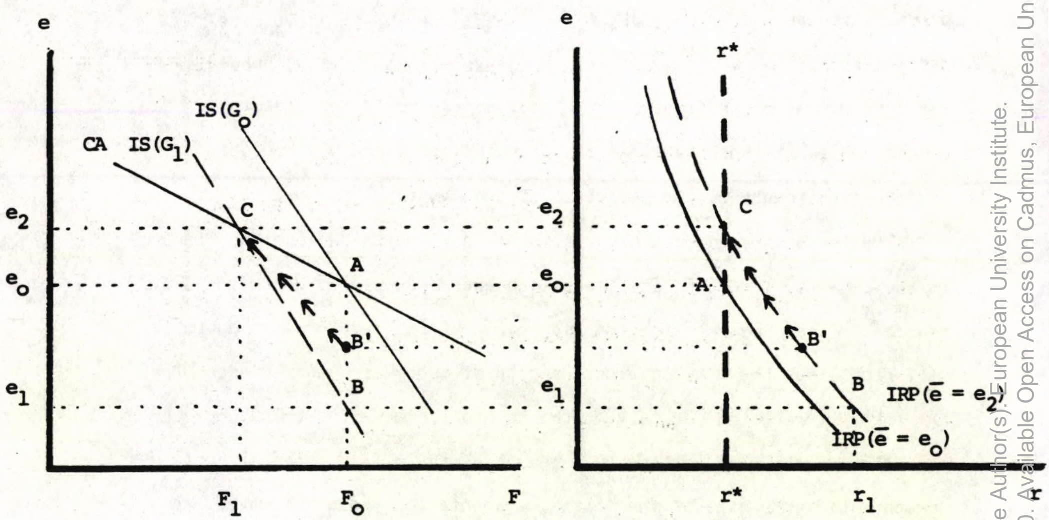


Figure 4

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[4]In exchange-rate models with imperfect substitutability of domestic and foreign financial assets ("portfolio models"), both the initial appreciation rate and the final depreciation rate are dampened since the domestic interest rate rises in the short run and in the long run, leading to an interest-rate induced crowding-out of private expenditures. Consequently, the fiscal stimulus remains lower even though output increases, since the demand for money decreases with a higher interest rate (Branson and Buiter, 1983 and Sachs and Wyplosz, 1984.

A lasting long-run impact from the money market on the exchange rate arises when the demand for money depends on wealth, as stressed in the exchange-rate models of Dornbusch and Fischer (1980) and Boyer and Hodrick (1982). Since the current account is in deficit during the adjustment period involving a decumulation of wealth, the demand for money decreases and money-market equilibrium requires a continuous increase in output over the transition period when the full-employment assumption is relaxed. Whereas the initial appreciation following the fiscal stimulus will be the same, the depreciation rate at the final full-stock equilibrium is stronger than the depreciation without the wealth effect in the money-demand function, provided that the response of the money demand with respect to wealth is high. Under this condition, the excess supply in the money market will be large, leading to a strong output effect and, by this, to an additional excess supply of goods which is eliminated by a higher rate of depreciation.[5]

[5]By including the wealth variable in the demand function for money of equation (1), the differential of the equilibrium conditions (1), (4), and (6) indicates the following depreciation rate for the long run:

$$\frac{de}{dG} = \frac{r^{*}+T_E E_W - T_E E_y (L_W/L_y)}{[E_W - r^{*} + (1-E_y)(L_W/L_y)]T_e} \qquad (8a)$$

For $L_W = 0$, we obtain the expression of formula (8). If $L_W$ is relatively large, then (8a) > (8).

## V. Public Indebtedness and the Exchange Rate

To this point, we have neglected that the once-and-for-all rise of government expenditures from $G_o$ to $G_1$ gives rise to a continuous increase in public indebtedness, since the additional government expenditures were assumed to be financed on the domestic credit market. To the extent that government bonds (B) are considered to represent net financial wealth,

$$W = M + B + F, \tag{10}$$

there will be a supplementary demand impulse on the market for domestic goods since private expenditures are an increasing function of wealth. As a result, both the size of the initial rate of appreciation and the size of the final rate of depreciation must be higher. In Fig. 5, the government-expenditures effect and the wealth effect are illustrated separately. The first one is known from Fig. 3 and the exchange-rate path is from A to B and from B to C. The additional wealth effect produces the trajectory from A to B' and from B' to C'. It should be noted that the CA schedule shifts upward since the increase in wealth from $B_o$ to $B_1$ worsens the trade balance. The reason for the higher depreciation rate at point C' is that the additional demand impulse arising from the wealth effect creates a stronger cumulative deficit in the current account during the transition period. Consequently, the economy ends up with a higher level of foreign indebtedness. The interest payments on foreign debt are higher such that the trade-balance surplus must be larger, which is brought about by a greater depreciation rate.

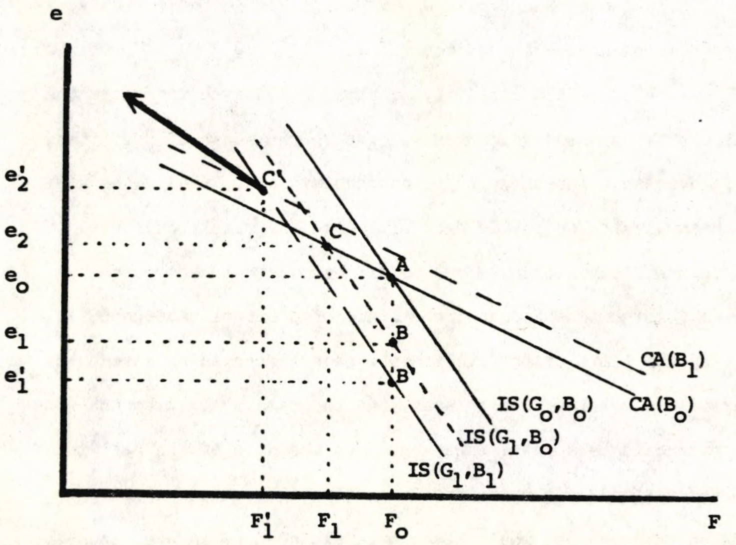


Figure 5

The adjustment process does not stop at point C', however. Public debt continues to increase, and over time the IS schedule shifts continuously downward and the CA schedule continuously upward--both move steadily at the rate of increase of public debt. It follows that there will be a continuous increase in the exchange rate according to the arrow in Fig. 5.

Consequently, a permanent budget deficit--at least in our framework of a stationary economy--creates a stability problem which is already well-known from the literature for a closed economy (Christ, 1979;

Mayer, 1984). In the context of an open economy, there would be an endless rise in the exchange rate which could even become explosive if one introduces exchange-rate expectations.

In order to solve the stability problem, one has to introduce the constraint of a balanced government budget in the sense of a limited level of government indebtedness (Sachs and Wyplosz, 1984); otherwise the interest service on public debt will grow infinitely over the distant future. Given that in our model the public indebtedness involves a foreign indebtedness, the limit of public indebtedness is also set by the limit of foreign indebtedness. Increasing government debt implies increasing foreign debt, and there is a limit to the size of the trade-balance surplus (and, thus, to the size of the fall in private absorption); otherwise the ever-increasing amount of interest payments on foreign debt would have to be financed by an ever increasing trade-balance surplus (which, by the way, involves an ever increasing exchange rate).

By setting the tolerable size of public indebtedness to a finite level $\bar{B}$, the increase in government expenditures has to be financed either by additional taxes when the public debt has reached the upper limit $\bar{B}$, or be reduced to the initial level $G_o$. In both cases, by neglecting the wealth effect of additional government bonds, the system has to return to point A in Fig. 5. For the very long run, the temporary fiscal stimulus would be neutral both with respect to the exchange rate and the level of foreign indebtedness.[6]

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[6] The case of an increase in taxes has to be conceived in such a way that the expansionary impulse of additional government expenditures on the demand for domestic goods is offset by the restictive impact of higher
(Footnote continued)

On the other hand, if one takes into consideration the wealth effect of the additional government bonds ($\Delta W = \Delta B = \overline{B}-B_0$, where $B_0$ is the initial level of government debt), there will be a depreciation rate of

$$\frac{de}{dB} = \frac{r^*(E_W+T_E E_W)}{(E_W-r^*)\ T_e} \tag{11}$$

compared to the initial exchange rate $e_o$ at which fiscal policy became active. Formula (11) results from a differentiation of the equilibrium conditions (4) and (6) for the wealth definition (10) and for $dG = 0$. Under the stability condition (7), the expression (11) is positive, but it is smaller than (8) (for $dB = dG$ even though $\Delta B = \overline{B} - B_o = \Sigma\Delta G$). The interpretation for the long-run depreciation is straightforward. Even though the long-run government budget is balanced, the past fiscal "experiments" have produced not only a higher level of public debt, but a higher level of foreign debt where

$$dF = - \frac{E_W}{E_W - r^*}\ dB\ . \tag{12}$$

During the adjustment process, the current account is in deficit--this gives rise to a higher level of foreign indebtness. The increased amount of interest payments on foreign debt must be financed by a corresponding trade-balance surplus brought about by the depreciation of the domestic currency.[7]

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[6](continued)
taxes.

[7]It should be noted that, according to (12), $/dF/>dB$, i.e., the level of foreign debt is higher than the level of public debt. The reason is the following one: The overall wealth effect on private expenditures would

(Footnote continued)

However, if one relaxes the assumption according to which government bonds constitute a net wealth item, the economy will not only return to the initial exchange rate, but the exchange rate could even remain unchanged from the very beginning. The latter case is the one advanced by Barro (1974, 1981). Since there is a finite level of government debt, any government budget has to be balanced over the longer-run. If taxpayers discount their future tax liabilities in the proper way, the positive wealth of government bonds is netted out by the negative wealth of future tax liabilities, or, in flow terms, the expansionary impulse of additional government expenditures is offset by the contractionary impact of lower private expenditures as a consequence of a lower permanent disposable income.

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[7](continued)
be zero if $dF + dB = 0$. Under this condition, the depreciation creates an excess demand in the market for domestic goods; consequently, foreign debt has to rise more in order to equilibrate the goods market.

## VI. Concluding Remarks

Exchange rate models with perfect substitutability of domestic and foreign financial assets are particularly well suited to demonstrate that, over the long-run, bond-financed government expenditures depreciate the domestic currency. The reason is that given the constancy of the interest rate, the exchange rate is the key variable for equilibrating the real sector of the economy--at least in the long-run. There are two reasons for this. The first relates to the increase in indebtedness of the concerned country. At final full-stock equilibrium, the current-account deficit will be eliminated, but the higher amount of interest payments on foreign debt must be matched by an appropriate trade-balance surplus via a certain depreciation rate. This has been stressed in a well-known article by Rodriguez (1979). The second reason for long-run currency depreciation arises when government bonds are considered as net financial wealth. Even if the long-run stability conditions of a balanced government budget are met by reducing the exchange rate to its initial level, the higher level of government debt represents an expansionary effect on private expenditures through which temporary current-account deficits are created. The economy ends up with a higher level of foreign indebtedness in this case as well, and the corresponding higher interest payments require a higher trade-balance surplus and thus a higher depreciation of the currency.

Whether the results of the proposed model corroborate the facts of the evolution of the US-dollar exchange rate since the beginning of the 1980s is a job for econometric analysis. To be sure, relative expansionary fiscal policy of the U.S., by comparison with Europe and

Japan, constitutes one reason for the appreciation of the U.S. currency with respect to the other currencies. However, over the time, a gradual depreciation of the U.S. dollar must be expected according to the arguments of our model, since the service of the higher level of indebtedness of the U.S. economy with respect to the rest of the world has to be financed by an improvement in the American trade balance.

References

1. Barro, Robert J. "Are Government Bonds Net Wealth?" Journal of Political Economy (November/December 1974).

2. _________. "Output Effects of Government Purchases." Journal of Political Economy (December 1981), pp. 1086-1121.

3. Boyer, Russel S. "Perfect Foresight, Financial Policies, and Exchange-Rate Dynamics." Canadian Journal of Economics (February 1982), pp. 143-64.

4. Branson, William H. and Willem H. Buiter. "Monetary and Fiscal Policy With Flexible Exchange Rates." In J. S. Bhandari and B. H. Putnam, eds., Economic Interdependence and Flexible Exchange Rates. (Cambridge, Mass.: MIT Press, 1983), pp. 251-85.

5. Christ, Carl. "On Fiscal and Monetary Policies and the Government Budget Restraint." American Economic Review (September 1979), pp. 539-52.

6. Claassen, Emil. "The Keynesian and Classical Determination of the Exchange Rate." Weltwirtschaftliches Archiv, vol. 199 (1983), pp. 19-35.

7. Dornbusch, Rudiger. "Capital Mobility, Flexible Exchange Rates, and Macroeconomic Equilibrium." In E. Claassen and P. Salin, eds., Recent Issues in International Monetary Economics (Amsterdam: North-Holland, 1976), pp. 261-78.

8. Dornbusch, Rudiger and Stanley Fischer. "Exchange Rates and the Current Account." American Economic Review (December 1980), pp. 960-71.

9. Frenkel, Jacob A. "Adjustment Mechanisms and the Monetary

Approach to the Balance of Payments: A Doctrinal Perspective." In E. Claassen and P. Salin, eds., Recent Issues in International Monetary Economics (Amsterdam: North-Holland, 1976), pp. 29-48.

10. Mayer, Thomas. "The Government Budget Constraint and Standard Macrotheory." Journal of Monetary Economics (1984), pp. 371-79.

11. Mundell, Robert A. "Capital Mobility and Stabilization Policy Under Fixed and Flexible Exchange Rates." Canadian Journal of Economics (November 1963), pp. 475-85.

12. Penatti, Alessandro. "Expansionary Fiscal Policy and the Exchange Rate." IMF Staff Papers (September 1983), pp. 542-69.

13. Rodriguez, Carlos A. "Short- and Long-Run Effects of Monetary and Fiscal Policies Under Flexible Exchange Rates and Perfect Capital Mobility." American Economic Review (March 1979), pp. 176-82.

14. Sachs, Jeffrey and Charles Wyplosz. "La Politique Budgétaire et le Taux de Change Réel." Annales de l'INSEE, no. 53 (1984), pp. 68-92.

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