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Office Correspondence

Date September 29, 1936.

To Chairman Eccles

Subject:

From Lauchlin Currie

L.C.

A group of Professor Taussig's old students are contributing to a volume in honor of his seventy-seventh birthday. The enclosed is my contribution. I don't expect you to read it, as it is written in my worst academic style, but you might be interested in the conclusion.

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DOMESTIC STABILITY AND THE MECHANISM OF TRADE ADJUSTMENT TO INTERNATIONAL CAPITAL MOVEMENTS

By Lauchlin Currie

I

Since the War, and particularly since 1929, there has been increasing disinclination on the part of central banking authorities to "play the rules of the gold standard game" as applied to capital movements. England has even declined to permit trade adjustment to capital imports under inconvertible paper, and has sought to discourage exports of capital. The policies of offsetting and sterilizing capital movements were probably not so much a reflection of the acceptance of a generalized theory as a recognition that in particular circumstances failure to do so would be disruptive to the internal economy. Even those economists who have deplored the growth of monetary management in general have usually been forced to concede that, on various particular occasions, it would have been unwise to permit the adjustment of trade to capital movements.

The present paper attempts to outline a generalized theory to the effect that the monetary mechanism, relied upon to secure the adjustment of trade to international capital movements, is incompatible with the maintenance of domestic stability -- to supply, in other words, the rationale for policies actually being pursued by monetary authorities. While doubtless the very term "adjustment"

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implies disequilibrium, it would appear to be worthwhile to indicate the nature of the disequilibrating process. There are exceptions to this general theory but these exceptions in turn are subject to qualification. The theory applies not only to unmanaged gold standards with rigid exchanges but also to unmanaged standards with flexible exchanges; not only to movements of "nervous money" and speculative capital but also to capital movements motivated by differences in interest rates and investment opportunities.

It has an important bearing on the question of gains arising from capital movements. The gains have been questioned by various recent writers, notably, by V. F. Coe [1] and H. D. White. [2] Both of these writers were concerned with the gains after adjustment has occurred. The interest of this paper is focused on the possible losses incident to the mechanism of adjustment itself. If capital movements entail a departure from internal stability, the resulting loss to the community should, of course, be offset against any gains that may later arise from such movements. While such losses may be dismissed as transitional difficulties, the transition may be so long and entail such disturbances as to dwarf the gains after adjustment has occurred. This may be a deciding factor unless the capital movements go on at a steady rate and for a long period, conditions that may cause the ultimate gains to outweight the cost

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1/ Canadian Journal of Economics and Political Science, November 1935, page 588.

2/ French International Accounts, Cambridge, Mass., 1933.

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of initial instability. Monetary authorities can have little assurance that capital movements will continue at a steady rate and for a long period and, therefore, must weigh heavily the transitional disturbances entailed by such movements.

Insofar as the argument herein presented is valid, it offers support for the development and use of controls to reduce the magnitude of capital movements and to prevent the adjustment of trade to such movements.

Requirements of space make it necessary to be somewhat elliptical and do not permit an examination of all the possibilities and ramifications of this subject.

II

There appears to be fairly general agreement that monetary policy should be directed toward making conditions favorable for as full a utilization of the productive resources of the country as can be sustained under conditions of general stability. It is, perhaps, needless to add that this implies some continuous degree of slack in the productive system. The concept which we shall identify with stability is, in other words, that of sustainable production, rather than full capacity production. The term "full employment" is to be interpreted, then, as meaning the degree of employment consistent with general stability.

Opinions differ more widely as to what conditions favor this objective. Broadly speaking, monetary writers appear to be coalescing

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into two main opposing groups on this question. On the one hand are those who feel that stability corresponds with stationary per capita money incomes, with prices falling as production increases for reasons other than an increase in population. On the other hand are those who feel that stability corresponds with rising per capita money incomes, the increase in incomes being proportionate to the increase in output per capita. In this view, a rise in production is compensated by a rise in money incomes, so that a general price index would remain comparatively stable. A qualification to this conclusion is that if increased imports are due to a fall in prices abroad the maintenance of stability need not require the accompaniment of increased imports by increased per capita money incomes. It is possible to take a middle course and hold that increasing output per capita may be in part compensated by rising incomes per capita and in part by falling prices.

The following discussion is based on the rising money incomes viewpoint. Although this corresponds with the present writer's convictions, it is believed that the general conclusions of this paper apply independently of one's position on this question. In some cases they are even more applicable to the first set of conditions, in others less.

In order for per capita incomes to vary with per capita production it is necessary, in a progressive economy, that two things occur. The disbursements of business and of public bodies

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must increase steadily, and they must exceed in any "period" the combined consumer purchases and savings out of income arising from disbursements in the preceding "period". This entails either an increase in the supply of money and/or an increase in the circular velocity of money. An increase or decrease in the supply of money is assumed to exert its influence, if any, on business disbursements through the familiar mechanism of changes in the price and availability of long-term loans. In the absence of capital imports to finance a specific project, there is no reason to expect an increase in money arising from capital imports to affect business disbursements any more or any less than an increase in money brought about by the monetary authorities. There appears to be no justification for the view which some writers seem to maintain, that a movement of gold influences business disbursements immediately while open market operations have no effect. At least I judge that to be the view of those who in the same breath advocate an unmanaged gold standard and deny any efficacy to monetary control. The less effective is the influence of changes in money upon the volume of business disbursements, the less effective is the mechanism of trade adjustment to capital movements under the gold standard.

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III

In one group of the following cases it is assumed that the availability of capital is such as to bring about the requisite expansion of disbursements and per capita incomes for full employment under conditions of stability. Attention is focused upon the impact of capital movements on domestic activity under these conditions. In the other set of cases unemployment is assumed. It is assumed that the capital movements are substantial in amount and are net, i.e., are not offset by short-term counteracting movements in the opposite direction. It is finally assumed that capital movements are not "tied" to specific projects nor directly related to the financing of specific projects. Cases apply throughout to the United States. To minimize duplication the first case will be accorded fuller treatment than the others.

CASE I - Assumptions: unmanaged gold standard, full employment, net new capital imports.

The treatment of this case usually runs in terms of an inflow of gold [1/], increased supply of money, rising incomes and prices, increasing imports and/or decreasing exports. When the mechanism is examined more closely doubts arise as to the adequacy of such a treatment. From the point of view of domestic stability, and assuming no price changes abroad, disbursements and incomes should increase by the amount of the capital import and this increase

1/ An interesting minor point is that, since the adjustment mechanism entails a net increase in the borrowing country's supply of gold, the borrowing country will not receive the full amount of the loan in goods.

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should be spent on goods imported or hitherto exported. This appears extremely unlikely to occur.

Assuming that the balance of payments is in equilibrium, an increase in capital imports will involve an inflow of gold. Gold will be exchanged for deposits which are now available for investment. In addition, in a fractional reserve deposit system, banks will be in a position to increase their earning assets and deposits, thus creating additional funds for investment. If the additional funds available for investment are actually disbursed, it is obvious that disbursements and incomes will be increased by far more than the amount of the capital imports, and hence by far more than the amount consistent with stability. If, for example, the new money acquires the average income or circular velocity of the old, which we will assume to be three, and the deposit expansion ratio is ten to one [1/], disbursements and incomes will increase by thirty times the amount of the gold inflow. Let us examine the mechanism relied upon to prevent this development.

In the first place, the inflow of gold is expected to lead to an increase in demand in the market sense for foreign goods and/or a diminished demand for the country's exports, because of relative price changes. Secondly, an increase in demand in the schedule sense (shift of the demand curve to the right) is expected to follow an increase in incomes and disbursements.

1/ This ratio is chosen solely for illustrative purposes.

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Insofar as the adjustment mechanism relies on an increase in demand of the first type it has already created internal disequilibrium. The rise of prices is in itself evidence that per capita incomes have increased relative to per capita output. Moreover, in the United States of today it would appear that the maladjustment would proceed a long way before being checked by changes in demand consequent upon relative price movements. Owing to high tariffs, a large portion of American imports is in raw materials, for which the elasticity of demand is less than unity or not much greater than unity. This is true also of many specialties and of tourist travel.

We are, therefore, forced back to the second type of increased demand as a possible means of preventing a departure from stability. Here again the possibilities do not appear to favor rapid adjustment. Domestic production is so large relative to imports that it would be most unreasonable to expect all of the additional disbursements consequent upon capital imports to be spent immediately on foreign goods. We may contrast the estimate of income produced in 1929 of $81 billion with the value of imports and American tourist expenditures of $5.5 billion, as an illustration of the relative magnitudes involved.

A further source of instability will arise if the inward movement of capital is discontinuous. The longer the period

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before trade adjustment occurs, the greater will be the inflow of gold and the greater will be the likelihood of an eventual excessive expansion of incomes and prices. By the time the relative excess of imports occurs, the inward movement of capital may have ceased. The excess of imports consequently will result in an outflow of gold and the domestic economy will be forced to undergo another adjustment of incomes and prices, this time in the opposite direction.

It would appear, therefore, that in conditions of stability and in the absence of intervention by the central bank, an increase in capital imports will result in an expansion of incomes excessive from the point of view of domestic stability. Only at those times when the continuance of domestic stability is threatened by an outflow of gold would a capital inflow be consistent with the maintenance of stability. It is true that if domestic requirements call for an expansion of money equal to that resulting from the capital import, a capital inflow of a certain amount would be consistent with stability. But this is attributable to the increase of gold. The adjustment of incomes and prices to bring about a transfer of the loan in the form of goods would entail instability.

A final observation. The mechanism of adjustment would operate more quickly if the capital were imported to finance a specific project already under way. In a country with a highly developed capital market, however, imports of capital

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are likely to be induced not by direct capital flotations abroad but, rather, because of more favorable security markets relative to foreign markets. Such capital would be used to purchase existing securities and to stimulate investment by increasing the availability of capital. Again, the adjustment will be more rapid if the capital importing country is young and if its foreign trade is important relative to its total trade, since a larger proportion of an increase in incomes would be spent on foreign goods. Neither of these characteristics favorable to adjustment applies to the United States. Most of the classic instances of international trade adjustment to capital imports show these characteristics. Even those cases, however, appear to afford evidence of excessive expansion of incomes, as indicated by a rise of domestic prices.

CASE II - Assumptions: unmanaged gold standard, full employment, net new export of capital.

The mechanism of trade adjustment to capital exports under these assumptions likewise involves a departure from domestic stability. Deposits otherwise available for investment are in effect exchanged for gold and exported. A further loss of investment funds arises from bank contraction following a loss of reserves. The lessened availability of capital for home investment will result sooner or later in a decrease of investment. Business disbursements, incomes and the demand for home and foreign goods,

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will decline. If the adjustment of trade finally occurs through relative price changes this is evidence of a departure from stability. If it occurs through a shift in the demand curve to the left there will again be a departure from stable conditions to the extent that the total decline in incomes is greater than the decline in purchases abroad.

As before, a net new capital export, in the absence of intervention by the central bank, appears to be consistent with continued domestic stability only if it succeeds in preventing an excessive inflow of gold that would otherwise have occurred. Unless this is the case the increased claims on foreigners arising from capital exports will be more than counter-balanced by the loss of domestic production resulting from increased unemployment.

CASE III - Assumptions: unmanaged gold standard, unemployment, net new capital imports.

In this case the mechanism of adjustment, which is likely to result in excessive expansion of disbursements and incomes under conditions of full employment, may merely permit some of the unemployed to be absorbed in increased home investment. The country would in this case gain not only from increased imports relative to exports but also in increased domestic production and consumption.

There are two further considerations, however, which qualify seriously this favorable appraisal of capital imports when unemployment exists. In the first place, insofar as the mechanism proceeds

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through making more capital available for investment, it is likely to be ineffective if there is widespread excess productive capacity. If this is the case, the adjustment of trade would not occur and the capital imports would be in the form of gold on which the country is in effect obligated to pay interest. In the second place, if the mechanism is effective after a time in stimulating home investment and foreign trade adjustment to the import of capital, and if the inflow of capital has ceased by this time, the resulting outflow of gold will call for a downward movement of incomes and employment. In this case it would be much more economical for the country to have a stimulation of home investment brought about through an increase in the money supply by the monetary authorities. For a country to borrow when it has excess capacity is analogous to a business borrowing to erect a plant when it already has a plant it is not using.

CASE IV - Assumptions: unmanaged gold standard, unemployment, net new capital exports.

This case resembles Case II. Capital exports will decrease the availability of capital for home investment. To the extent that this is effective in decreasing business disbursements, unemployment would increase still further. In order, therefore, to bring about the requisite increase in exports relative to imports to stop a gold outflow the value of domestic production will decline by many times this amount. This case is even more

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unfavorable to capital exports than Case II. There, it will be recalled, the conclusion was favorable if the capital exports prevented an excessive inflow of gold that would otherwise have occurred. In this case, however, if capital exports prevented an inflow of gold that would otherwise have occurred it would also prevent whatever stimulus to home investment the gold imports would have effected.

CASE V - Assumptions: Unmanaged flexible exchange, full employment, net new capital imports.

The adjustment mechanism calls for a rise in exchange rather than a transfer of purchasing power. The exchange will rise until the difference between the increased imports and the diminished exports equals the capital import. Will this cause a departure from internal stability? At first sight the answer appears to be in the affirmative. The rise in exchange results in a decreased demand for American goods both at home, because of the lowered prices of foreign goods to Americans, and abroad, because of the appreciation of the dollar. This view is confirmed by a closer examination of the mechanism.

Before the import of capital occurred importers, in effect, turned dollars over to exporters. When capital is imported dollars arising from the excess of imports are turned over to the importers of capital. Funds in the capital market available for home

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investment are thereby increased by the amount by which purchases of American goods have declined. The entire proceeds of the excess of imports are "saved". Capital imports, therefore, give rise to an increased supply of funds in the capital market. If an increase in home investment occurs simultaneously with the increased availability of capital, the decrease in the demand for goods, in employment, in business disbursements, and in incomes, consequent upon the rise of the exchange rate, is offset. Domestic production remains unchanged but a larger portion is retained at home and/or more imports are secured.

The maintenance of stability depends, it will be noted, upon the synchronization of decreased and increased expenditures, -- upon immediate shifts of factors of production with no loss of money income. Such synchronization appears unlikely to occur. The restrictive repercussions are immediate. The offsetting repercussions work through the time-consuming interest rate-capital issue mechanism. Moreover, increased availability of capital is unlikely to be very effective in stimulating investment when sales are decreasing and "foreign competition" is increasing.

On the whole it appears likely that an increase in capital imports under conditions of an unmanaged flexible exchange would entail a departure from internal stability in a downward direction, as contrasted with a departure in an upward direction under an unmanaged gold standard.

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CASE VI - Assumptions: unmanaged flexible exchange, full employment, net new capital exports.

The adjustment mechanism calls for a fall in the exchange rate until the difference between the increased exports and the diminished imports equals the export of capital. The immediate repercussion is an increased demand for American goods both at home, because of the higher prices of foreign goods to Americans, and abroad, because of the fall in the dollar. Whether this is an uncompensated increase in demand depends, as in the previous case, upon the quickness and extent of the reaction of home investment to the decreased availability of capital. Funds otherwise available for investment are now passed over to exporters and are disbursed by them in current production. If a decrease in investment corresponds immediately with the increased demands for American goods arising from the fall in the exchange rate, total disbursements, incomes, and total production remain unchanged. The community either consumes less of its production of consumer goods or retains less of its production of producers' goods.

Here, again, the slowness of the adjustment mechanism and the psychological background are unfavorable for the continuance of stability. The repercussions on sales are immediate, while it will take some time for the effect of

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lessened availability of capital for home investment to show itself. Moreover, increased sales are liable to stimulate investment. This would mean an excessive expansion of per capita money incomes.

CASE VII- Assumptions: unmanaged flexible exchange, unemployment, net new capital imports.

The mechanism of adjustment calls for a rise in the exchange rate and an increase in imports and/or a decrease in exports. The availability of capital is increased and if this stimulates increased home investment either more producers' goods will be made or a larger portion of an unchanged volume will be retained at home, depending upon the character and extent of the movements in imports and exports. As in Case III, increased availability of capital is less likely to stimulate investment at a time of excess capacity than in conditions of stability, especially when the demand for home goods is declining because of increased "foreign competition". Capital imports, therefore, under these conditions, would be likely to result in additional unemployment.

CASE VIII - Assumptions: unmanaged flexible exchange, unemployment, net new capital exports.

The mechanism of adjustment calls for a fall in the exchange rate, an increase in exports, and/or a decrease in imports. As in Case VI, it is doubtful whether the expansive effects of increased sales will be offset by the restrictive effects of lessened availability of capital. A net expansion

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of disbursements, incomes and production is likely to result, taking up some of the slack in employment. If this occurs, the export of capital is not only costless but may actually result in a gain through a more than corresponding increase in production. The case differs radically from an export of capital under the gold standard when unemployment exists.

IV

Summarizing the broad findings of the various cases considered above, it would appear that, as applied to the United States, a net new capital import or export is incompatible with the continuance of domestic stability either under the unmanaged gold standard or unmanaged flexible exchange standard, unless the tendency of gold or the exchange rate to move because of capital movements is just sufficient to prevent a movement inimical to domestic stability that would otherwise have occurred. An import of capital under an unmanaged gold standard, or an export under an unmanaged flexible exchange standard, would tend to cause a departure from stability in an upward direction, while an export of capital under an unmanaged gold standard or an import under an unmanaged flexible exchange standard would tend to cause a departure from stability in a downward direction. In the United States, because of the elastic monetary system and the relative smallness of its international trade and the character of that trade, the disruptive effects of the mechanism of trade adjustment to capital movements under an unmanaged gold standard appear to be greater than under an unmanaged flexible exchange standard.

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If capital movements entail a departure from stability, they entail also the familiar relative and absolute changes in the incomes and buying power of different classes in the community that accompany such a departure. Moreover, owing to various factors, a departure from stable conditions tends to be self-perpetuating for a considerable period, rather than self-corrective.

When unemployment prevails the mechanism of trade adjustment to an export of capital under an unmanaged gold standard or to an import of capital under an unmanaged flexible exchange standard is restrictive in its effect, and is likely to result in additional unemployment. The mechanism of trade adjustment to an import of capital under an unmanaged gold standard or to an export of capital under an unmanaged flexible exchange standard is expansive in its effect and is likely to result in additional employment. In the case of a capital import under the gold standard, however, it would be more economical for a country to use its own idle factors to add to its consumption or to its capital, rather than to import goods. In the case of an export of capital under a flexible exchange the same absorption of unemployed could be secured through an expansion of home investment.

It should be remembered that the above cases are "pure" in the sense that they are based on a number of assumptions, in particular relating to "stability", the complete lack of management and the absence of counteracting capital movements, which

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are today rarely fulfilled. The fact, however, that we rarely attain a state of domestic stability and that capital movements are inextricably mixed with other developments in no way invalidates the theory. What it means in practice is that capital movements are but one of a large number of factors that go to make up the economic picture at any particular time, some of which counteract and some of which reinforce the effects of such movements. If the broad objective is a furtherance of internal stability the monetary authorities, in pursuing this objective, will permit only such adjustment of trade to capital movements as will not be disruptive to the general economy.

Although space prevents a more comprehensive treatment of the whole question of the gains and losses arising from the type of capital movements the United States is likely to experience in the future, the tenor of this paper, so far as it goes, is that under most conditions the central bank is justified in striving to prevent the working out of the mechanism of trade adjustment to capital movements. A corollary is that a strong case can be made for the legislation and use of powers and controls that will tend to reduce the magnitude of capital movements and will permit the disruptive effects to be minimized.

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