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THE CASE FOR CURBING CAPITAL OUTFLOW RE-EXAMINED*

MICHIHIRO OHYAMA

The traditional theory of international trade has more often than not ignored international movements of production agents, and the void which is still left in this respect renders some of its analyses more and more impractical nowadays. It would, however, be too bold to remark that there has rarely been a serious attempt to present meaningful theorems in the widest sense with regard to international capital movements. As the liberalization of capital has made considerable progress in recent years, the evaluation of overseas investment, among other problems, has come into the spotlight once again. There are today many controversies centering around such issues as the Interest Equalization Tax of the United States, the possible capital flight consequent upon the expected admission of Great Britain into the European Economic Community, and the promotion of private capital movements to the less-developed parts of the world. In this respect, many past theoretical contributions are more or less inclined to support the view that overseas investment tends to be excessive and should be curbed. This paper is intended to present a critical reconsideration of some of the arguments contrived to sustain this contention.

Freed from ignorance and irrationality, any opinions on an advocated policy depend on the viewpoint of the judging unit involved. As concerns the problem at hand, we may safely assume that there are at least three independent judging units, namely, the individual (or the private investor), the nation (or the national government), and the world (or the hypothetical world authority), each with its own standard of reference. Actually, the hitherto-developed arguments generally bring into sharp focus the different view points of the private investor and the national government concerning the evaluation of the comparative advantages of foreign investment. Therefore, it is most pertinent to classify the arguments according to the nature of the disagreement in question.

To begin with, one kind of disgreement might arise in the case of diminishing returns on foreign investment, whence we have the optimal tax argument. It is, nonetheless, easy to come up with further disagreements, even if the return remains constant irrespective of the amount of capital invested abroad. A second kind of disagreement may arise when attention is brought to the estimation of the risk of possible default in an attempt to give credit to the anti-foreign-default argument. Finally, if a tax imposition on the earnings of capital prevails both at home and abroad, this may give rise to a third kind of disagreement which is used to convince

* The author is indebted to Professor Joan Robinson of Cambridge University for providing him with enlightening comments on an earlier draft of this paper.

us of the anti-foreign-tax argument.(1)

The assumptions of the discussion are as follows:

(1) Perfect competition prevails in the commodity and factor markets.

(2) Full employment is always and everywhere maintained.

(3) The balance of payments equilibrium is not disturbed by overseas investment.

(4) Exchange rates are stable.

(5) Transfer costs for capital and its earnings are negligible.

We concede that some of the important reasons for suppressing overseas investment are excluded from the the above assumptions. The excluded points are, however, largely concerned with contingent difficulties which may be occasioned by random factors as well as foreign investment.

I

Overseas investment may exert a depressing influence on the average physical productivity of the capital invested. If this is the case, it is optimal, from the nation's point of view, to attain an allocation of its capital which equates the marginal value productivity of capital at home to the magnitude which is marginal to the total earnings abroad. Nevertheless, the individual investor, blind to the influence of his investment, tries to equate the marginal value productivity of capital at home to that abroad. Hence, in the absence of governmental intervention, the free play of the market drives foreign investment beyond the nation's optimal point.

Now, suppose that the world is composed of two parts, i.e., the home country and the rest of the world (or the foreign country) and that the home country's government is free to impose a special tax at a rate of 100 t percent on the earnings of overseas investment without provoking foreign retaliation. Let us consider a world where only one commodity is produced. That is, the home and foreign countries are producing one and the same commodity. Assuming non-capital input constant everywhere, it is incumbent on the home country's government to circumscribe the outflow of domestic capital if the nation's total income is to be maximized. In fact, the optimal rate of the tax is readily shown to be

$$t_a = -\lambda\mu$$

where λ is the proportion of the size of overseas investment to that of the capital stock abroad, and μ is the elasticity of the curve of the marginal physical productivity of the capital exported. We know that λ is presumably positive and that μ is presumably negative. Therefore, the tax rate t_a is considered to be mostly positive.(2)

(1) Murray C. Kemp also discussed the same three types of arguments in a somewhat approving tenor. While drawing on his way of exposition, the present author is skeptical of the Kemp's central theme.

(2) This type of argument has been developed in such contributions as MacDougal [5], Jasay [2], Kemp [3], and Amano [1].

The above is the gist of the well-known optimal tax argument, the policy implication of which is quite straightforward. Its maintenance, however, is not generally acceptable. For the assumption of a one commodity world renders it unnecessary to worry about the effect of the tax on the terms of trade and thus oversimplifies the whole thing. We propose to reexamine the tenor of the argument by substituting more reasonable alternatives for this oversimplifying assumption.

Consider that the home and the foreign countries are respectively producing one, but distinct, commodity. For convenience we shall call the foreign country's commodity the first commodity and the home country's commdity the second. The imposition of the tax will, under the invariable terms of trade, bring about what is in practice the redistribution of income between the two countries in the home country's favour. Accordingly, the world's demand for, say, the first commodity may decrease or increase according as the income-induced decrement in the foreign country's demand exceeds or falls short of the income-induced increment in the home country's demand. The output of the foreign country, i.e., the world's supply of the first commodity will decrease so long as the imposition of the tax decreases the amount of international capital movement. Thereupon, the terms of trade of the home country will in fact deteriorate if the income effect of the tax is neutral, or conducive to the increase of the world's demand for the second commodity. On the contrary, it will improve rather than deteriorate in the case that the income effect of the tax operates so strongly in the opposite direction as to diminish the world demand for the second commodity even more than its world supply. The optimal rate of the tax in this case is

$$t_b = -\frac{1 + m^* \mu \lambda}{(1+\theta)\bar{\eta}_1 - \bar{\eta}_2^* - m_1^*} - \mu\lambda$$

where m^* is the foreign country's marginal propensity to purchase the second commodity, θ is the proportion of the earnings of overseas investment to the value amount of the home country's export and $\bar{\eta}_1$ and $\bar{\eta}_2^*$ are respectively the income-compensated elasticity of import demand of the home and the foreign countries. Now the tax rate t_b may be of either sign depending on the specific values of $m^*, \theta, \bar{\eta}_1, \bar{\eta}_2^*, \lambda$, and μ. In particular, if $\lambda = 0$, that is, if the rest of the world relies only marginally on the home country's sources of capital, or if $\mu = 0$, that is, if the marginal productivity of capital abroad is insensitive to further investment, it is evident that t_b must be negative.[3] In light of their common argument these are perhaps surprising conclusions. And yet, they are not unexpected because of the terms of trade effect of taxation. Only if the terms of trade effect is completely insignificant, does t_b come up to $(-\lambda\mu)$, thus coinciding with the previous result.

Next, let us turn to a case when the first commodity produced in the foreign country is a raw material essential to the production of the home country. For simplicity, we presume that the whole output of the first commodity is entirely

(3) See Ohyama [7], p. 25.

imported to the home country and exclusively used in the production of the second commodity. As things stand, the tax imposition is bound to curb overseas investment with the result that the capital stock retained in the home country swells, augmenting the world's demand for the first commodity under the constant terms of trade; whereas the capital stock held in the foreign country contracts, diminishing the world supply. Because of this, a deterioration of the home country's terms of trade is unavoidable. The appropriate rate of tax is calculated as follows.

$$t_c = -\frac{r^* + \rho}{r^*(1+\theta)\eta_1} - \lambda\mu$$

where ρ is the marginal behaviour of the home country's demand for the second commodity with respect to its capital in use, and r^* is the marginal value productivity of capital abroad in terms of the first commodity. Here again, the tax rate t_c may be of either sign depending on the specific values of ρ, θ, r^*, λ, and μ. If $\lambda=0$, or if $\mu=0$, t_c must invariably be negative.(4)

Thus, it is completely possible that the optimal rate of tax on the income accruing from foreign investment assumes a zero or a negative value. What is more, if we remove the presumption that the rest of the world does not retaliate, we obviously face a typically duopolistic situation where we can never be sure even of the ultimate policy determination. Another question that may possibly be raised is that the argument implicitly assumes the national production function to be homogeneous of the first degree. This assumption is involved since the analysis assumes that the *private* marginal productivity of capital at home is identical with the *national* marginal productivity. Without getting into a maze of further garrulous censorship, however, the case for curtailing capital outflow with its rationale drawing on diminishing return is already shown to be generally untenable.

II

Generally speaking, investment of any kind is not immune from the element of risk, as it is contemplated on the basis of the expected size of the future return which is by definition uncertain in more or less degree. Let us concern ourselves here solely with risks related to default. Now default may take the form of candid failure on the part of investees to meet their obligations to pay interest or repay capital; or it may take less obvious forms, such as the regulation of the price formation of the product concerned, or taxation which discriminates against the earnings stemming from the investment in question. In this connection, it is worth dwelling for a moment on a famous passage of Lord Keynes.(5)

"Consider two investments, one at home and the other abroad, with equal risks of repudiation or confiscation or legislation restricting profit. It is a matter of indifference to the individual investor which he selects. But the nation as a whole

(4) See Ohyama [8], p. 70.
(5) Keynes [4], p. 568.

retains in the one case the object of investment and the fruits of it; whilst in the other case both are lost. If a loan to improve South American capital is repudiated we have nothing. If a Popular housing loan is repudiated, we, as a nation, still have the houses. If the Grand Trunk Railway fo Canada fails its shareholders by reason of the rates chargeable or for any other cause, we have nothing. If the Underground System of London fails its shareholders, Londoners still have their Underground System."

Undoubtedly, this is an irrefutable statement in itself. We must, nonetheless, be prudent enough to take it as a well-contrived argument with a certain purpose. Now it goes without saying that the well-informed, rational investor would direct his capital toward the highest returns only after making allowance for differences in risk. If there is absolutely no risk at home, what matters is whether the government's allowance for the foreign risk surpasses the private investor's. So long as the former outweighs the latter, the government may well have recourse to appropriate means to check investment abroad. If the reverse is the case, however, private capital outflow will be considered insufficient rather than excessive. We have, in fact, strong reason to believe that in quite a few instances the individual investor should be much more sensitive than the government to the risk of default involved in foreign investment. Just consider that even a mere marginal loss to the national asset in the eyes of the government could actually drive most of the individual investors toward bankruptcy which ruins the whole of their business life. It is not out of place, nor out of fashion, to interpret in this light the post-war stagnancy of the flow of private capital to the new-born countries.

But we must, with Keynes, take into account the fact that the risk of default also accompanies investment at home. Confining ourselves to the kind of default which does not constitute any loss to the national asset, we may tautologically assert that, from the nation's point of view, the private investor tends to overrate the riskiness of home investment. All in all, however, there is a chance of underestimating the comparative advantage of foreign investment on the part of the private investor and hence the case for *promoting* capital outflow when the rate of the private investor's estimate of the foreign risk considerably exceeds that of the government's. And the chance is far from nil.

III

It is not unusual that both at home and abroad, the earnings of capital are subject to taxation. Foreign taxation evidently reduces the net yield of overseas investment both from the viewpoint of the nation and from that of the individual investor. When it comes to taxation at home, however, an acute difference arises between the two viewpoints. The reason for this is that the private investor looks upon even domestic taxation as an additional burden. It follows that the private investor is, from the nation's point of view, in a position to overevaluate the comparative advantage of foreign investment. This provides another ground for the suppression

of capital export which seems to be most formidable.

Under the present international double taxation agreements, however, governments of lending countries typically give credit to taxes already paid abroad. Provided that full credit is given and the domestic rate of taxation exceeds the foreign rate, it is not improbable for the private investor to underevaluate the comparative advantage of overseas investment. The greater the difference between the two rates of taxation, and/or the difference between the foreign and the home returns on capital before the tax, the greater the probability of this. Thus, it may, in some cases, turn out to be recommendable not to deaccelerate but to accelerate foreign investment.

VI

All the arguments against unfettered overseas investment which we have so far reviewed, as is noted above, refer to the possible discrepancy between the private investor's account of the comparative advantage of such investment and the national government's. Even within that scope, and even if we agree with the government's view that it has transcendent priority over the private investor's, our analysis has made it clear that they, any one of them, could not be vindicated in *a priori* manner. Apart from the foregoing discussion, however, it is necessary to point out the flimsy footing upon which the above issue hazardously hinges.

In the first place, it is open to guestion whether the individual's or the nation's viewpoint should be preferred. Hence the argument for the latter is necessarily exposed to criticism from the former unless the implementation of the advocated policy is attended by the appropriate income redistribution which compensates those individuals who happen to suffer from it.

Secondly, taking notice of the world's viewpoint, put aside up to this point, we find incidentally that it is, under the assumptions of this paper, most likely to accord with the individual's viewpoint. For unrestrained movement of capital makes it possible for the individual investor to seek to maximize his income in a global perspective, whilst it also contributes to the expansion of the world's productive capacity. Here again, however, we are confronted with the difficult task of deciding whether the nation's and the world's viewpoint should go first. Therefore, the argument for the latter is necessarily exposed to criticism from the former unless the implementation of the advocated policy is attended by the appropriate income redistribution which compensates those *nations* who happen to suffer from it.

Finally, it is all the more important to bear in mind that because of ever-improving and increasing means of communication and transportation, economic interdependence between nations is becoming more and more characteristic of the present-day world. Partly as a result of this, and partly on account of the limited number and different sizes of nations, the arena for international economic policy determination has come to take on an oligopolistic aspect which is more typical than the ones observed in many of the commodity and factor markets. Under such circums-

tances, extreme adherence to the nation's viewpoint (or, as we often put it, national interests) is bound to put other nations in serious trouble and doomed to be self-destructive, especially when it induces foreign retaliation.(6) The attempt to curb overseas investment with a view only to serving national interests certainly smacks of, in the words of Joan Robinson, *the new mercantilism*, which is actually quite anachronistic.(7) To say the least, we prefer to stand for the observance among nations of what might be called the quasigolden rule: "All things whatsoever ye would that men should not do to you, neither do ye even so to them."

(6) See Ohyama [6].
(7) Robinson [9].

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