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A NOTE ON LUXURY IMPORTS, THE SAVINGS RATE, AND WELFARE

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A NOTE ON LUXURY IMPORTS, THE SAVINGS RATE, AND WELFARE

In the making of economic policy for underdeveloped countries it is often almost assumed that the curtailing of luxury imports can be beneficial to the economy in some or all of the following ways:

a) by diverting funds which would otherwise have been spent on these luxury items to savings and hence to investment, thus increasing the rate of growth.

b) by increasing the use of domestic inputs, to the extent that the funds previously spent on luxury consumer imports are still spent on consumer items, but now consumer items produced at home, and

c) by redistributing the income from the rich to the not so rich.

While it is certainly clear that all of these results are possible, their inevitability is not at all clear, and deserves some more careful analysis.

Before proceeding to analyze the question in more complex situations such as those where there is not a free exchange rate or where there is labor surplus, we consider the question within the simplest possible economic framework.

Luxury Import Restriction in a Purely Competitive Economy, with a Free Exchange Rate and No Surplus Labor

Throughout the discussion to follow, an implicit assumption is that the marginal utility of income is different for different groups of people, being lower for a "rich group" and higher for the rest of the population. It will simplify the exposition to consider henceforth that these are two discreet groups, the rich and the poor. The extent to which the marginal utility of income differs for the two groups is not something which need concern us in order to elucidate the qualtivative arguments presented below.

Consider first a situation in which luxury imports are completely prohibited. If this action had the desired effect of leading to a substantial reduction in total consumption on the part of the rich, it would presumably be to the long-run benefit of the poor in that the increasing domestic capital stock resulting from the investment of the rich (as long as they did not send their savings abroad) would lead to an increase in wage rates in the future greater than that which would otherwise have occurred. Note however, that the decrease in the welfare of the rich is not a sufficient condition for increased welfare on the part of the rest of the population through higher savings, since both the real consumption and the savings of the rich could fall as the prices of the goods they buy rise due to the import restrictions. The actual likelihood that the rich will increase their savings as a result of the import restrictions depends, of course, on the insistency of their demand for the items previously imported or for substitutes for these. If the demand for the previously imported items is inelastic and the good can be locally produced, an overall loss to the economy is very likely to result. For the rich will wind up with less of the luxury goods than they previously had, although spending a greater proportion of their income on them, and the goods will be produced at a greater per unit cost locally than they were in the rest of the world. It is possible for more resources to be used up in the production of the luxury goods than were used up in producing the exports which previously allowed a greater number of luxury goods to be imported. Such a situation is illustrated in Figure I. The resources utilized in the

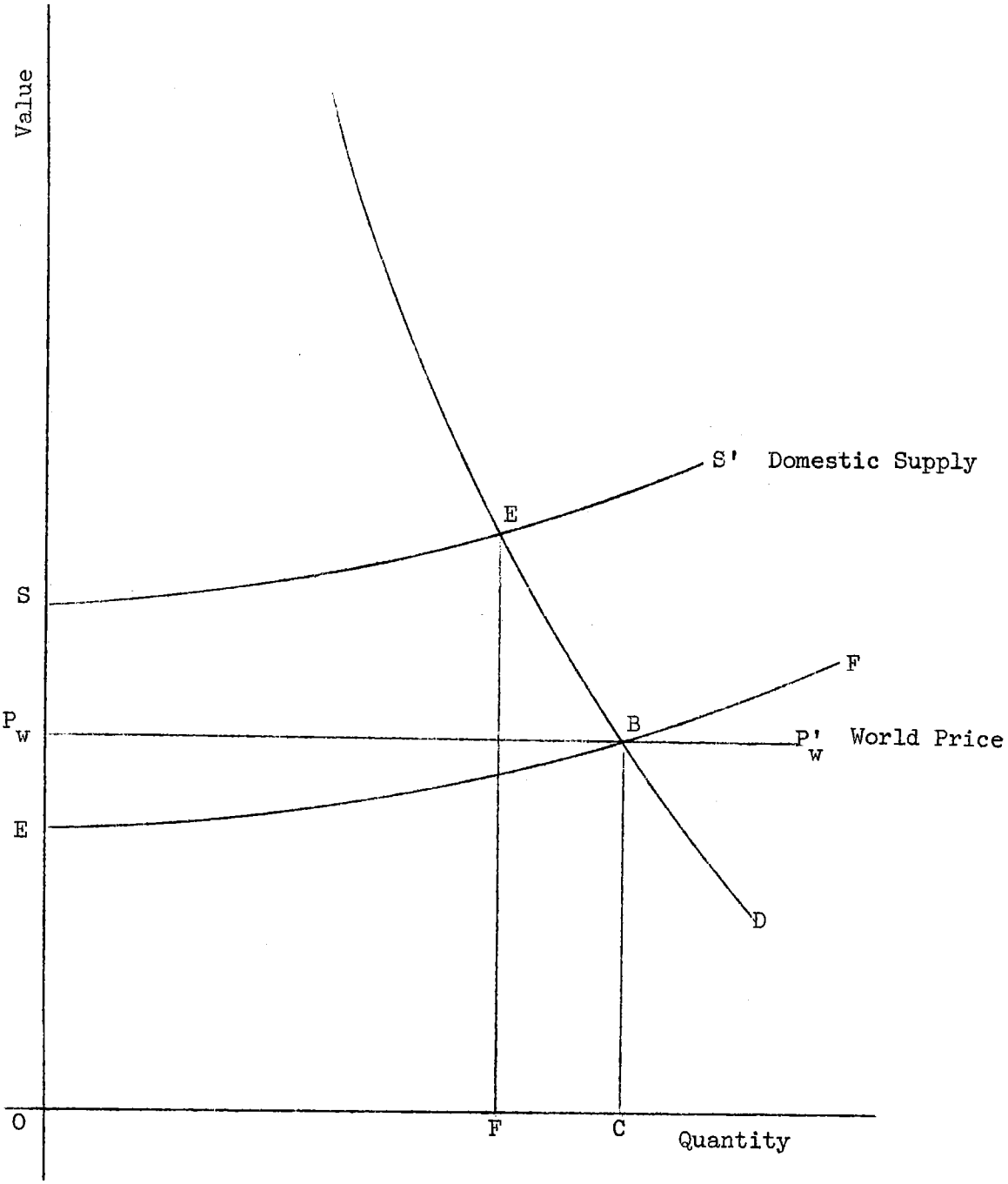
Value
S' Domestic Supply
E
S
F
P_w
B
P'_w World Price
E
D
O
F
C
Quantity

Figure 1

acquisition of the luxury items when they were imported are measured by the rectangle P_wBCO provided the elasticity of supply of exports is infinite in the relevant range, or somewhat less than P_wBCO, provided that the supply curve of exports is somewhat upward sloping[1](price being measured in terms of alternative goods given up). The resource costs of producing the luxury items at home are given by SEFO with SE being horizontal when the domestic supply curves of the luxury goods is horizontal over the relevant range. If both the supply curve of the luxury items at home and the supply curve of the exports are perfectly elastic, then with the inelastic demand for these luxury goods, more resources would be used up at home producing a smaller supply after the import barrier had been put into effect than were used to obtain the original imports. Thus only if the rich people curtailed their consumption of other items by a greater amount than enough to make up for the increased domestic resources required to pay for the luxuries after the quota, would there be more resources left to produce either consumer items for the poor people or investment goods. Whether total savings would go up is an empirical question with the result presumably varying according to the specific situation. Those theories where savings is considered to be a residual would suggest a fall in total savings in such a case; in that event the net welfare effect would be negative both for the rich people and for the poor people. To the extent that infant industry gains in efficiency could be achieved in the domestic production of the luxury items, the resource costs would gradually go down, and if the country became competitive the negative effects would probably be wiped out at about the same time for both the

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[1]It could be represented, for example, by EF.

rich and the poor.[1] If the domestic price eventually fell below the world price, one would expect both rich and poor to gain, if they had both been losing before.

Different savings theories could lead to results opposite to those reached above. Thus the nature of the savings or consumption function is of paramount importance.

A parallel but somewhat different situation prevails in cases where as a result of the restrictions of luxury imports the rich switched to the purchase of different type goods in the domestic market. The increase in total demand for these goods may either benefit or harm the poor people depending on whether this increased demand leads, through a learning process, to eventual decrease in real costs, or whether it leads to an increase in price. It is always possible that the lack of really close domestically produced substitutes for the previously imported luxury goods will make total savings either greater or less than they would have been had a closer substitute been available. Once again the short-run effect on the rich is definitely negative, and the short-run effect on the poor as well as the long-run effect may be either positive or negative.

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[1] This would be most likely to be true if the elasticity of domestic supply of the luxury type good was the same as the elasticity of supply of the exports previously used to attain the luxury goods through international trade. In this case, when the price of the domestically produced luxury good has fallen to the international level so that as far as the purchase of it is concerned the rich are in the same situation as when it was imported, the same value of resources is being used as before. Hence the quantity of other goods produced is the same. If the prices of the other goods purchased by the rich are the same as before the import curtailment, their savings will be the same. When the domestic price of the luxury goods fall a little lower, their savings may be expected to rise, thus benefiting the poor. But suppose the elasticity of supply of exports is greater than of home produced luxury goods. Then, when the price of the luxury goods is the same as before, less resources will be left for the production of other goods, and the savings of the rich will presulably be lower.

If any terms of trade gains are possible for the country in question, the previous analysis may have slightly overestimated the possibility of loss.

The analysis so far has pointed to the possible inefficiency created by the complete prohibition of a good, due to the fact that it may be impossible to prevent its domestic production, or the consumption by the rich of domestically produced substitutes.[1],[2] It is clear that unless an actual tax system is used there can be no guarantee that total savings and total investment will be increased. One can therefore ask which of the three alternatives--complete prohibition, tariffs, or domestic excise taxes will be the best in any particular case. We focus first on the extent of resource utilization in the production of goods consumed by the rich assuming a constant savings rate on their part. Regardless of the elasticity of demand for the luxury goods a tariff is always superior to a quota in these terms. This is demonstrated in Figure 2 where $P_wP'_w$ gives the world price of the commodity in question, DD' gives the demand curve on the part of the rich for the item in question, (we assume it is not consumed at all by the poor) and SS' gives the domestic supply curve of the item.

We consider the imposition of a tariff of such a height as to make the new import price to the consumer (indicated by the horizontal line $P_tP'_t$) the same as it would be under complete prohibition. In this particular case, the welfare of the rich is the same whether complete prohibition or a tariff is imposed, (because we have drawn the demand curve, the domestic

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[1] We have implicitly assumed that in prohibiting the importation of some types of luxury goods, the government does not allow demand to spill over into the importation of substitutes for them. If this occurs, the same type of loss as we have just described may occur, and even possibly be increased by a negative terms of trade effect.

[2] It is possible for the poor to be harmed more by the prohibition of luxury imports than of necessities. For if the necessities have a relatively elastic supply at home and are produced at only a small comparative disadvantage, the small price the poor must pay in the short run (more expensive items) may be more than offset by the subsequent increases in output resulting from the savings allowed because the rich were not squeezed.

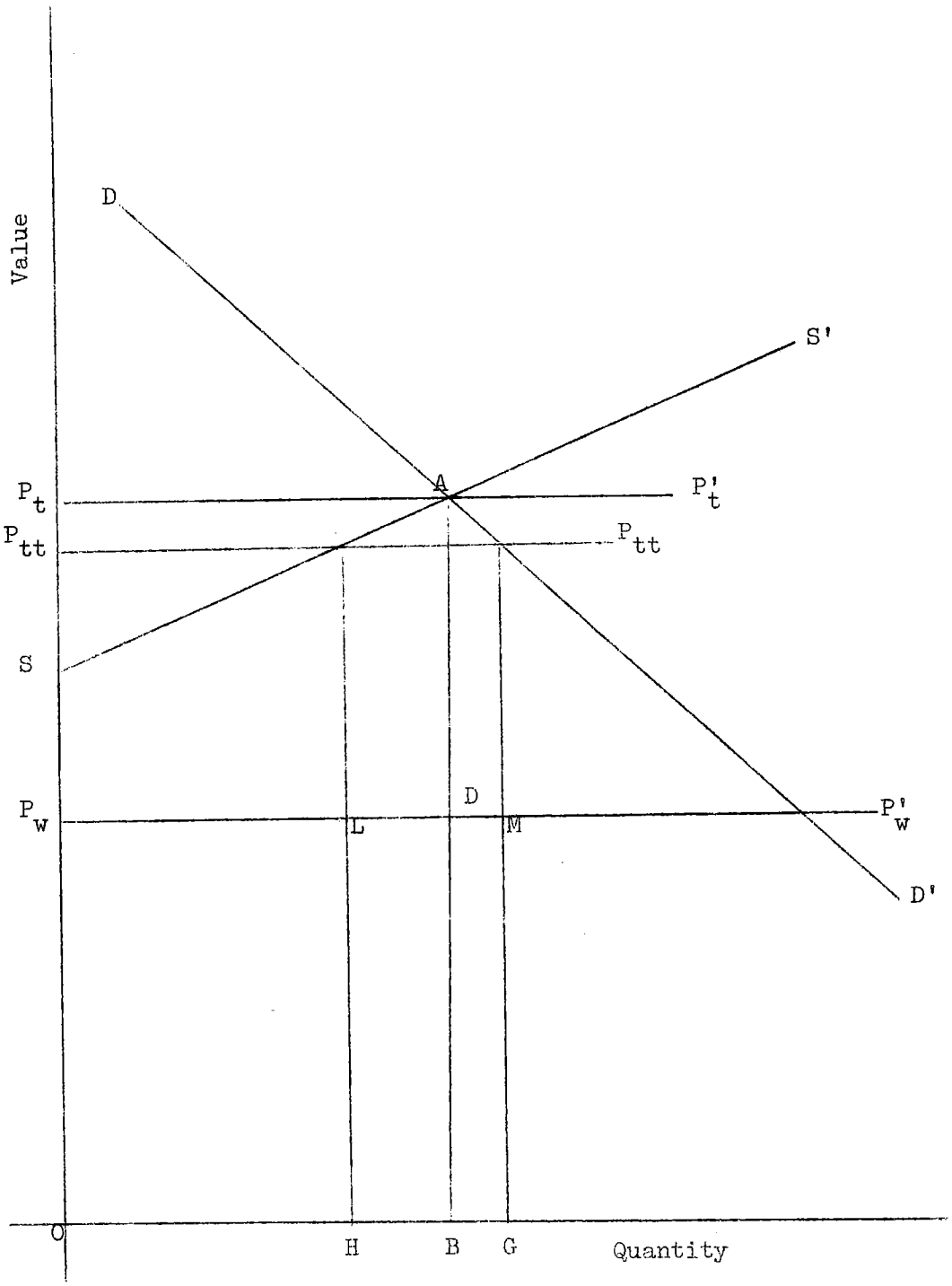

Figure 2

supply curve, and the international price line with tariff such as to coincide at A), and the total domestic supply is in each case produced domestically. (In fact the two situations are identical in all respects.) No customs duties are collected.

Increases in the tariff about the level P_wP_t will have no effect on the situation. The interesting question is--which of a complete prohibition and a tariff lower than P_wP_t is preferable? Suppose the tariff is lowered to P_wP_{tt}. The rich then achieve an additional consumer surplus given by the area P_tABP_{tt}. The social welfare to which this is equal is by assumption smaller than the comparable income gained by the poor. Meanwhile, government revenues increase by FBML and the total resources used in order to furnish the rich with the luxury items if OSFH (for domestic production of them) plus LMGH (to produce the exports exchanged for the imports of the luxury goods),[1] where previously it was OSAB. It can be seen that if the area FADL is greater than the area DMGB than all groups in the population, including the rich, the government and everyone else could be expected to gain through the use of the tariff as opposed to the prohibition. One can easily calculate the combination of slopes of the demand and supply curves, assuming that these are linear, which would bring about this effect.[2] The condition for the net change in value of goods available to the private sector plus funds in the hands of the government to be positive is clearly easy to satisly. Even under the most extreme assumption with

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[1] Assuming the supply curve of exports to be horizontal in the relevant range.

[2] Specifically, the condition is

$$\frac{1}{a_1}\ (P_wP_t + 1/2\ P_tP_{tt}) \ > \ \frac{P_w}{-b_1}$$

where a_1 is the slope of the supply curve and b_1 is the slope of the demand curve.

respect to the effect of the lower price of the luxury consumer goods on total savings by the rich it would be hard to envision the net effect being negative.

While it is thus easy to demonstrate that, with savings a fixed proportion of income, a tariff is likely to be superior to prohibition, it is always true that an excise tax is superior to a tariff (as long as the tariff is sufficiently high to lead domestic production; otherwise its presence is irrelevant). But suppose the tariff level is established at P_wP_{wt} (Figure 3) so that in the absence of an excise tax domestic production would occur to the extent of OM and an amount MN would be imported. Now if instead of a simple tariff an excise tax had been used, the foreign supply curve to the domestic economy would be the same (i.e., $P_tP'_t$, but the domestic supply curve would be different, instead of SS' it would be $S_eS'_e$. As a result no domestic production would occur. The welfare of the rich would be the same in each case since they would pay the same price. Total government revenue would be increased from the original $ABCD$ to the new level of P_tBCP_w. The resources used up in the acquisition of the luxury items would decrease by the amount $SADP_w$. Thus the use of the excise tax as a policy tool completely dominates that of the tariff alone, in cases where the tariff would be high enough to lead to some domestic production.

Both the excise tax and the tariff break a condition for Pareto optimum, so no general theorem can predict which is better in a specific case. In the present case the excise tax is as good as or better than the tariff as a result of the fact that it always leads to a smaller or equal amount of luxury goods consumed, and implies that the real cost per unit of those goods consumed is equal to or less than in the case of the tariff. By assumption,

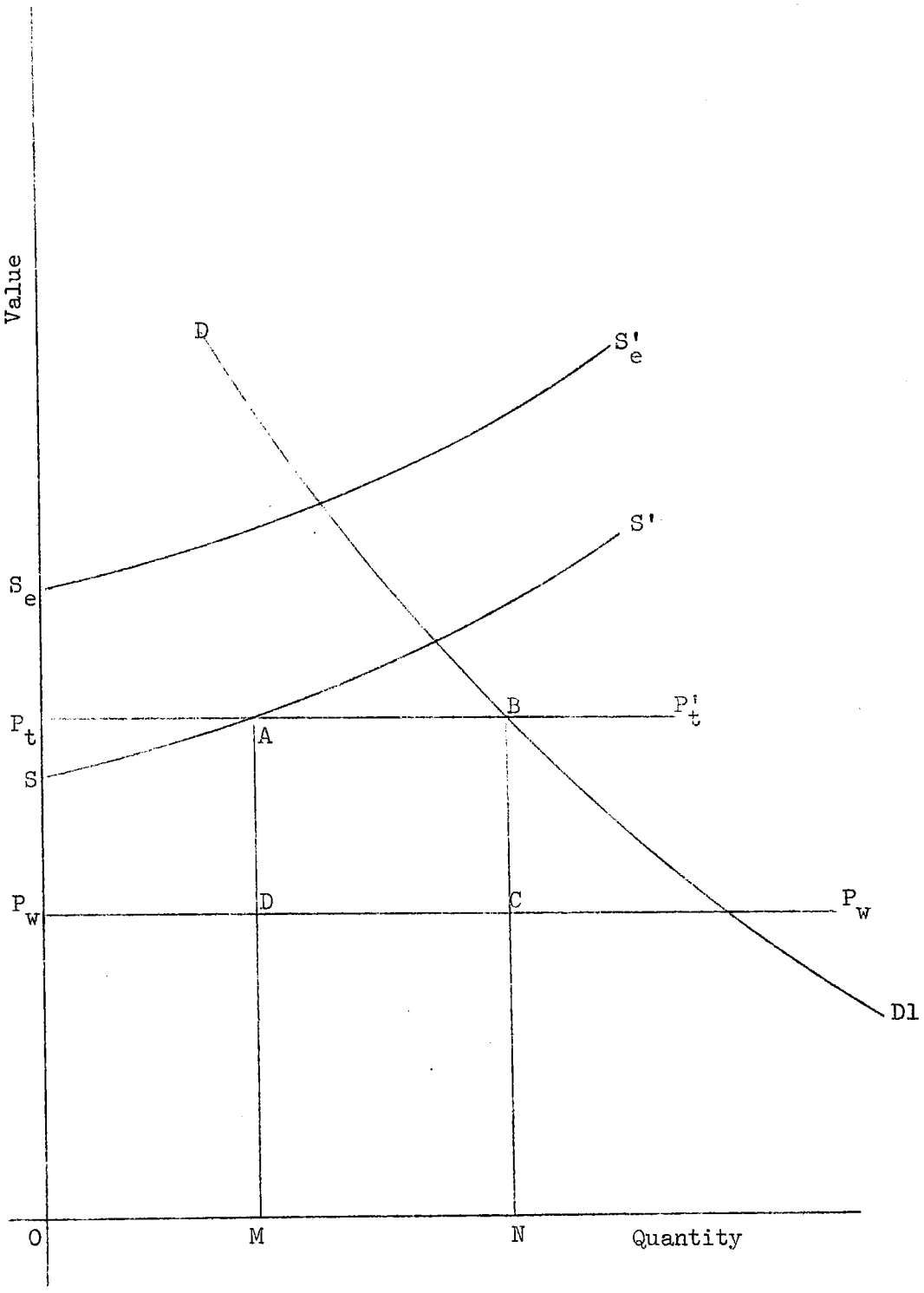

Figure 3

the smaller consumption of luxury goods is better if the real cost per unit is constant.

When the savings rate of the rich is not assumed to be constant, but is a decreasing function of the prices of the luxury goods, then the relative desirability of the three policies remains the same, though with the welfare gaps between them are greater. If savings is an increasing function of the prices of the luxury goods, the result can be reversed. Even if one concluded that savings was a decreasing function of these prices, it could be relevant to try to quantify the welfare differences among the policies, in the event that administrative costs vary among them. The administrative costs might be higher for excise taxes than for tariffs, as an example.

Luxury Import Restrictions with Market Imperfections

We have seen that in an economy with no market imperfections, it can be a mistake to prohibit imports of luxury goods. In fact the case against such prohibition may be even stronger given the conditions prevailing in many less developed countries. Many countries, for a variety of reasons, maintain overvalued currencies. And they feel that most of their foreign exchange should be devoted to capital and intermediate goods--in particular that it should not be used for luxury imports. The domestic production of these goods then begins, and since many of them are relatively capital intensive and require large imports of machinery and of intermediate goods, the balance of payments savings may be very small or conceivably even negative. In situations where loss would have occurred with an equilibrium exchange rate, it will be greater with an overvalued one, since the subsidy on the imports of

capital and intermediate goods lowers the private (but not the social) cost of production in the industry and leads to a higher output, which adds to the loss (unless the savings function is extremely unusual). The costs of domestic production of luxury goods are thus especially easy to underestimate in systems where the exchange rate is overvalued, and the capital and intermediate goods come in at a low exchange rate.

In an imperfect market situation with unemployment of some resources, it may be argued that the diversion of demand for imports to the home market is beneficial since it leads to a fuller utilization of those resources. The social cost of the newly produced items would be less than the private course. But in fact the unemployment of resources do not in general imply any greater desirability of diverting demand from imports to domestic production, but only the need to make production more attractive in general, either of exports or of goods to be consumed at home. Where no administrative machinery can be set up to stimulate production in general, an import control program could be desirable.

Our arguments so far, based on a classical model or not too extreme variants of it, have implied that there is never any "balance of payments" argument for restricting imports (of luxury goods or of anything else). In fact this is one of the major reasons adduced by most countries. Although many of their arguments seem faulty, it is at least possible that there are a number of countries in which devaluation is doomed to failure because of its effects on domestic prices. Then the price mechanism may not be a feasible one by which to allocate foreign exchange, and it may be necessary to prohibit the importation of items whose increasing scarcity will not help to continue or start price spirals. Luxury consumer goods would seem to be the obvious choice on this count.