

# TRADE LIBERALISATION AND ECONOMIC POLICY

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I. International economic interdependence, such as participation in the GATT or membership in a customs union, entails for the individual country the surrender of a number of tools of direct economic policy, e.g. tariffs and quotas.<sup>1</sup> The remaining instruments of economic policy have not the same applicability and effectiveness for the case of partnership in the GATT and membership in a customs union, if we consider the international implications of domestic economic policy and the impact of the partner's domestic economic policy on our economy. Thus, small countries which are price takers in international markets, may find themselves exercising considerable influence in the determination of prices and trade within a customs union, and therefore use of some policy instruments which are directed to domestic targets but have external implications may require the previous approval or the acquiescence of the other members of the customs union. Therefore, the effectiveness of economic policy must be discussed in conjunction with its degree of independence.

The following theoretical discussion is of special interest for small developing countries, such as Greece, which are intending to become in the near future members of a customs union of developed countries, where they will have to adjust their ranking of priorities and targets, and in some ways to adopt among their objectives the optimisation of the customs union's welfare function. Whether this increase in international co-operation will accelerate or diselerate their rate of growth and the achievement of their other objectives is not certain.

II. The Rome Treaty states that EEC member countries will consider their economic policy «as a matter of common interest. They shall consult with each other and with the Commission on measures to be taken in response to current

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1. This is sometimes included under the so-called «loss of economic sovereignty»; see *Harmonisation of National Economic Policies*, (H.G. Johnson et al., eds.), University of Toronto Press, PPA of Canada, 1968.

circumstances».<sup>2</sup> Furthermore, it is stated that «each member state shall pursue the economic policy necessary to ensure the equilibrium of its overall balance of payments and to maintain confidence in its currency, while ensuring a high level of employment and the stability of the level of prices». <sup>3</sup> The balance of trade is not, therefore, considered by the Rome Treaty by itself, but as part of the overall balance of payments within the general framework of macroeconomic policy. The instruments of policy which member states may employ to achieve the stated objectives include exchange rate policy, trade controls, vis-a-vis non-member countries, mutual assistance «recommended by the Commission,» and, in the last resort and subject to Community approval, temporary «protective measures» against other members.

In a multinational free trade area where interdependence is not very closed more degrees of freedom in the choice and exercise of economic policy are available and usually the instruments of economic policy are ranked according to their «effectiveness» on national economic targets. The literature on this subject is dealing mostly with a small country which has independent policy instruments, in the sense that changes in policy do not effect other countries and therefore they do not induce Counter offensive policies <sup>4</sup>; the possibility that changes in the policy of other countries will affect the economic variables of the small country is not considered. This serious omission makes the model and the resulting policy implications very unrealistic, for it is well known that frequently small «independent» economies have to use their policy instruments to counteract the impact of changes in the policy of other influential countries. Interdependence, if at all, is usually examined with the capital account of the balance of payments as the main objective. <sup>5</sup> Obviously, a model of maximum international repercussions should consist of two countries only <sup>6</sup> which could be visualised as the only two members of a customs union with insignificant extraunion trade. In this case the policy for adjustment of balance of payments disequilibria is not anymore the objective of the single member-country but of the customs union as a whole. Furthermore, each member's economic policy on domestic targets has a maximum impact on the other

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2. *Treaty Establishing the European Economic Community*, Article 103.

3. *Treaty*, Article 104.

4. See M. Von Neumann Whitman, *Policies for Internal and External Balance*, (Princeton University, Special Papers in International Economics, 1970), and the references therein.

5. E.g. Turnovsky, S.T., and Kaspura, A., «An Analysis of Imported Inflation in a Short-run Macroeconomic Model», *Canadian Journal of Economics*, VII, no. 3, 1974, 355-380.

6. See R.N. Cooper's paper : «Macroeconomic Policy Adjustment in Interdependent Economies», *Quarterly Journal of Economics*, LXXXII, 1969, 1-24, which «is concerned with the gains to be derived from co-ordination of economic policies and with how those gains vary according to the degree of economic interdependence». See also, D.E. Roper, «Macroeconomic Policies and the distribution of the world money supply». *Quarterly Journal of Economics*, LXXXV, 1971, 119-146.

member's economy because of the increased interdependence. This is demonstrated with the use of a simple model of external-internal equilibrium in a two-country world, the customs union.

For each member-country the expenditure sector is given by the identity.<sup>7</sup>

$$Y - E(Y, i) - G - T(Y, Y^*, \gamma) = 0 \quad (1)$$

$$E_y > 0, \quad E_i < 0, \quad T_y < 0, \quad T_{y^*} > 0, \quad T_\gamma > 0$$

The country's income,  $Y$ , is the sum of private expenditure,  $E$ , government expenditure,  $G$ , and the balance of trade,  $T$ . Private expenditure comprises consumption and investment and depends on income and the rate of interest,  $i$ . Government expenditure,  $G$ , is in fact the budget surplus or deficit and for simplicity it is assumed that taxes are not related to income. Exports depend on the partner's income,  $Y^*$ , and the exchange rate,  $\gamma$ , and imports depend on the country's income and the exchange rate. It is assumed that prices are constant and therefore the model is expressed in real values.

The country's balance of payments is

$$B - T(Y, Y^*, \gamma) - K(i - i^*) = 0 \quad (2)$$

$$K_i > 0, \quad K_{i^*} < 0$$

The net flow of capital,  $K$ , depends on the interest rate differential in the two countries. For the study of the international repercussions of domestic economic policy it will be assumed that the partner country will not react to the country's changes in economic policy and, therefore, the partner's rate of interest,  $i^*$ , can initially be regarded as a constant. This, in fact, is the standard assumption made for a small country's economy.

The monetary sector is

$$M - L(Y, i) = 0 \quad (3)$$

$$L_y > 0, \quad L_i < 0$$

The money supply,  $M$ , is exogenous, while the demand for money,  $L$ , depends on the country's income and rate of interest. For the partner country a set of equations similar to equations (1), (2) and (3) exists, with the additional characteristic that the balance of payments equation for the partner is equal, but of the opposite sign, to equation (2), so that  $B + B^* = 0$ .

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7. We adopt the usual convention of denoting derivatives by subscripted letters. Starred letters denote the partner country's variables.



The interdependence of the two economies is, therefore, for this particular model realised through the current and the capital account of the balance of payments. More interdependence and more complicated models should include the effects of the balance of payments surplus or deficit on the monetary sector; this point will be considered later on.

Previous research in this area has shown that by adopting the conventional targets  $Y$ ,  $i$  and  $B$ , for each country we would arrive at a system of 5 equations in 6 endogenous variables.<sup>8</sup> We assume here that the policy targets in each country are full-employment income,  $Y$ , and balanced balance of payments,  $B$ , (or stability in the foreign exchange market,  $\gamma$ ), and that the instruments are fiscal policy,  $G$ , and monetary policy,  $M$ . Later, we introduce the disturbances caused by domestic economic policy on the partner's income,  $Y^*$ , as a constraint and show that without coordination within the common market there is a duplication of pursuing common objectives, such as  $Y$ ,  $Y^*$ ,  $B$ , and  $B^*$ , and incompatible *conjectural variations*, which may prevent the countries to achieve overall equilibrium. The rate of interest will also be considered as a target, proxy for the rate of growth.

From the solutions of the system of equations (1), (2) and (3) we obtain the relations,

$$\frac{\partial G}{\partial Y} > 0, \frac{\partial G}{\partial Y^*} < 0, \frac{\partial G}{\partial B} > 0, \frac{\partial G}{\partial \gamma} < 0 \quad (4)$$

$$\frac{\partial M}{\partial Y} < 0, \frac{\partial M}{\partial Y^*} > 0, \frac{\partial M}{\partial B} < 0, \frac{\partial M}{\partial \gamma} > 0 \quad (5)$$

The sign of  $\partial M$  depend on the relative strength of the income and the rate of interest effects on the balance of payments, but our conclusion will not be affected if we assume that it is positive. Assuming that under a fixed exchange rates system one of the countries has full employment and deficit and the other country has full employment and surplus in the balance of payments, policies by either of the countries directed towards attainment of internal and external equilibrium affect the internal equilibrium of the other country. Devaluation in this context will only be a half-measure. Thus, for the country with full employment and deficit the policies prescribed by relations (4) and (5) are : increase in government expenditure and decrease in money supply. But both these policies have, within the model described, a negative effect on the income of the other country, which instead of full employment and surplus faces now equilibrium in the balance of payments and deflation. If she now pursues policies for equilibrium by fiscal and monetary means,

8. R.N. Cooper, op. cit.

the other country's domestic equilibrium will be disturbed.<sup>9</sup> This instability can lead to cyclical disturbances by the action and counteraction process of economic policy. It is therefore reasonable to assume that each country recognises this danger and tries to avoid the disturbances of its own policies on the partner country's economy.<sup>10</sup> Accordingly, each country should aim at three objectives, its own income, the balance of payments, and the neutralization of the impact on the partner's income which could start the cyclical reactions. These three objectives cannot be achieved by each country acting on its own with the available two instruments of economic policy. Two solutions are possible, the ranking of which depends on the degree of preference for economic interdependence and international integration: (a) The introduction of flexible exchange rates, which will release the monetary policy tool from the balance of payments objective (or constraint); and (b) Policy co-ordination between the two countries so that with their four instruments they can attain the targets. The second solution is well recognised in the theory and practice of economic policy in customs unions which tend to «harmonise» policies and goals.

III. These conclusions need some modifications:

1. The rate of interest will not determine capital flows between the two countries, but rather capital flows and rates of interest will be determined simultaneously. Furthermore, interest arbitrage will ensure that the same interest rate will obtain in both countries.<sup>11</sup> This raises problems with the degree of effectiveness and independence of domestic monetary policy. The model for two countries will, therefore, be modified as follows:

- a) Capital is perfectly mobile so that the same rate of interest,  $i$ , will be determined in both countries.
- b) The balance of payments position will be reflected in the changes of foreign exchange reserves, which will affect the supply of money (no sterilization). Thus, the supply of money,  $A$ , consists of foreign exchange,  $R$ , and domestic assets,  $M$ ; the latter is the monetary policy variable of the country. As-

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9. For the effects of actions and reactions the time-lag structure is particularly important; see R.N. Cooper, *op. cit.* and D.E. Roper, *op. cit.*

10. Another plausible assumption usually adopted in this field is that the country will predict the effects of the other country's policies on its own economy and it will act to offset or complement them to achieve its own objectives; see R.N. Cooper, *op. cit.*, and c.f. the Stackelberg equilibrium of duopoly.

11. J.M. Holmes, «Monetary and Fiscal Policies in a General Equilibrium Model Under Fixed Exchange Rates», *International Economic Review*, 13, 1972, 386-398. See also: Thomas F. Dernburg, «Exchange Rates And Co-ordinated Stabilization Policy», *Canadian Journal of Economics*, III, 1, Feb. 1970, 1-13.

suming that the twocountry world level of reserves,  $W$ , is fixed we have the identity

$$W = R + R^* .$$

This formulation transforms the character of the problem of equilibrium in the external sector from that of flow equilibrium (balance of payments,  $B$ ,) to that of stock equilibrium (reserves  $R$ ).

The two-country model will consist of the following system of equations.<sup>12</sup>

$$Y - E(Y, i) - T(Y, Y^*, \gamma) - G = 0 \quad (1)$$

$$Y^* - E^*(Y^*, i) + T(Y, Y^*, \gamma) - G^* = 0 \quad (6)$$

$$M + R - L(Y, i) = 0 \quad (7)$$

$$M^* + A - R - L^*(Y^*, i) = 0 \quad (8)$$

For target variables  $Y$ ,  $Y^*$ ,  $R$ ,  $R^*$ , and  $i$  none of the countries acting on its own can be successful. Co-ordination of policies and instruments will eliminate the overlapping targets and the results become determinate. The effects of changes in the instruments of each country have international repercussions :

$$\frac{\partial Y}{\partial G} > 0, \frac{\partial Y}{\partial M} > 0, \frac{\partial Y^*}{\partial G} < 0, \frac{\partial Y^*}{\partial M} > 0$$

These results show that an increase in domestic expenditure increases domestic income and decreases foreign income<sup>13</sup> due to the change in the (common) rate of interest and the flow of capital. The increase in domestic money supply has ambiguous results on foreign income since it increases domestic income and induces imports, but it also decreases the rate of interest inducing an outflow of capital.

The system will not provide equilibrium solutions if each country desires different rates of growth and attempts to achieve a target rate of interest different from the one provided by the interdependence of the financial markets. In this case monetary integration would imply much more than the simple establishment of one supranational monetary authority. The two countries become regions of

12. R.A. Mundell, «Capital Mobility and Size : Reply», *Canadian Journal of Economics and Political Science*, XXX, 3, Aug. 1964, 421-31.

13. Cf. Mundel's results, op. cit., p. 426-428.



a federal monetary system, but they still follow independent fiscal policy. Equations (7) and (8) are, therefore, replaced by

$$M = L(Y, i) + L^*(Y^*, i) \quad (9)$$

and a common growth rate can now be pursued.

2. Independent actions of the national authorities in interdependent economics affect the speed of adjustment. In general «the greater the interactions between the countries, the longer convergence will take if countries act solely on their own.»<sup>14</sup> Therefore, co-ordination should include synchronisation. It goes without saying that the more the policy objectives in each country the more difficult it will be to achieve them with the national policy instruments and without international co-ordination. Extensive overlapping of targets facilitates their realisation by international co-operation. Furthermore, economic objectives must be consistent before they become attainable.<sup>15</sup>

3. The increased factor mobility in interdependent economies will accentuate further the need for close cooperation at the supranational level since these factors are used as inputs in the production of one country, but they are frequently owned by the nationals of another country. Thus, international migration of labour, mostly temporal, and direct foreign investment are increasing the interdependence from the grass-roots and coordination of policies at the higher level will in many cases be nothing more than an official seal of approval. However, there always will be a need for harmonisation of such policies as social insurance and capital gains taxation.

IV. Returning to the problem of adjustments in the balance of payments for disturbances caused by international agreements for trade liberalisation we conclude that :

a) The size of international repercussions depends on the size of the impact multipliers. If the free trade area encompasses many countries, policy actions by one of them has international repercussions, but they are difused over a number of countries. It is in this case possible that the «independence» of the country in the choice of instruments and the targets of economic policy will not be severely restricted.

b) In a customs union of two (or a few) countries, the policies of each member affect relatively more the other members than the outside world. In this case, and more so if the objectives of economic policy among the members are conflicting,

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14. R.N. Cooper, *The Economics of Interdependence* (McGraw-Hill, New York, 1968) p. 158.

15. R.N. Cooper, *ibid.*

any one member country will find it impossible to achieve her targets by acting solely on its own. The two alternative solutions depend on the degree of desire for integration : either insulate the country from foreign repercussions by adopting flexible exchange rates (minimum integration); or, «harmonise» policies by intra-union co-operation, and, ultimately, «integrate» the economies by handing over policy targets and instruments to a supranational authority (maximum integration).

c) A small country intending to participate in a customs union of developed countries, should therefore examine first the compatibility of her targets with the targets of her future partners and decide upon entry or not in the common market on a cost-benefit basis, if better realistic alternatives for the achievement of her targets are not available.