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HARMONIZATION OF ECONOMIC POLICIES IN CUSTOMS UNIONS: THE ANDEAN GROUP

by

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HARMONIZATION OF ECONOMIC POLICIES IN CUSTOMS UNIONS:

THE ANDEAN GROUP[1]

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Abstract

The paper examines the conditions under which the formation of a customs union or free trade area makes some degree of harmonization of economic policies desirable, and the extent to which these conditions apply in the Andean Group customs union recently formed by Bolivia, Chile, Colombia, Ecuador and Peru. The policies analysed are those concerning tariffs, export subsidies, indirect taxes, exchange rates, planning and macro stabilization, intra-union factor movements, foreign capital, and currency unification. Different conclusions as to the desirability of harmonizing these policies are derived depending on the specific type of harmonization considered and the assumptions which are made concerning concurrent harmonization of other policies.

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All customs unions and free trade areas are sooner or later faced with the question of the degree to which member countries should harmonize their economic policies. This paper examines the conditions under which the formation of a free trade area or customs union makes some degree of policy harmonization desirable, and the extent to which these conditions apply in the Andean Group customs union recently formed by Bolivia, Chile, Colombia, Ecuador and Peru. After a discussion of some general considerations in the first part of the paper, part II presents a detailed analysis of the case for harmonization of different policies under various assumptions.

I

In evaluating the net benefits, positive or negative, which accrue from the harmonization of an economic policy or policies after the formation of a free trade area or customs union it is important to distinguish between those benefits derived from increases in international economic efficiency and those arising because of improvements in domestic policies which harmonization may generate. For example, it would be a net improvement in terms of domestic efficiency if each of the Andean Group countries were to adopt a more rational tariff structure, but this would be so even if trade were not freed between them. Similarly, arguments presented by the Neumark committee (E.E.C. 1963), Rosembuj (1971) and others that members of the European

Economic Community or the Latin American Free Trade Association should adopt the value added tax have been based at least in part on the superiority of the value added tax over cascaded taxes as a domestic policy tool rather than on the avoidance of the international problems which arise when members of a customs union have different tax structures.[2] Within the set of international benefits from policy harmonization a further distinction should be made between those benefits which arise as a result of the freeing of trade itself and those which do not. For example, while it may be argued on certain assumptions that Andean international efficiency would be increased if the Andean Group countries harmonized their indirect tax structures even without removing all barriers to trade between themselves, this is not relevant to the question "how does the freeing of trade affect the arguments for and against harmonization?"

These two distinctions are illustrated schematically in fig 1. The area of the circle represents the total net benefits derived from harmonization of a particular policy in the customs union or free trade area. Sector A represents those benefits arising from the improvement of domestic policies, while B (= B1 + B2) represents the benefits from the increased international efficiency promoted by harmonization: B1 the international benefits from harmonization which can be achieved even if trade is not freed, and B2 the international benefits from harmonization which arise as a result of the freeing of trade. B2 are the only benefits from harmonization which arise as a direct result of the existence of the customs union or free trade area. Since by assumption national policies were not harmonized before the freeing of trade even

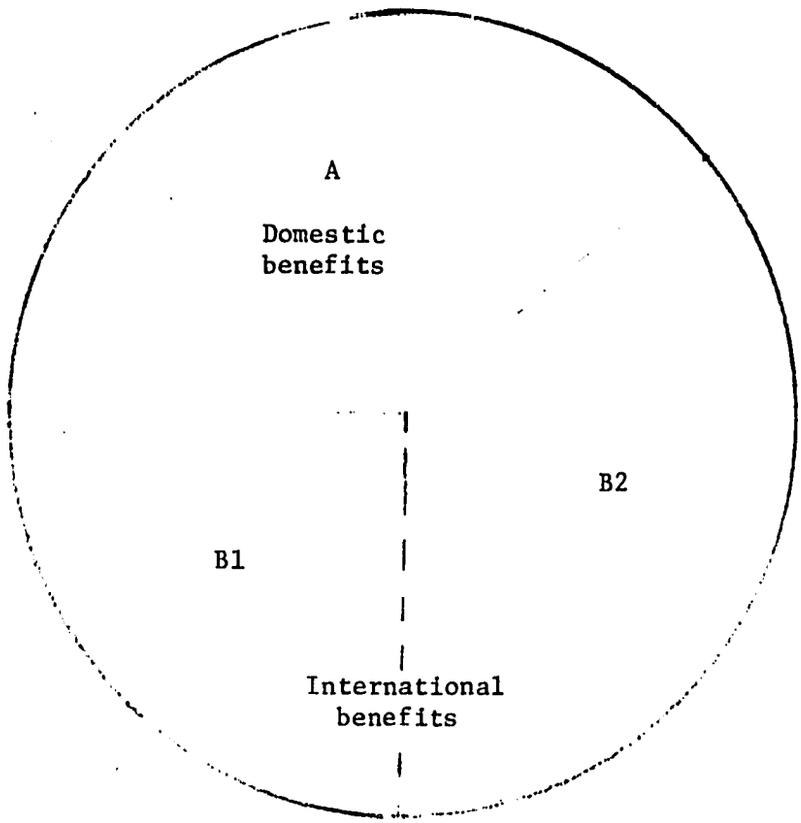

Fig 1

Total net benefits from policy

harmonization after formation

of a customs union or free trade area

though net benefits (A + B1) were potentially available, it may be assumed that there exist forces, whether of the political, administrative or simple inertia variety, working against harmonization. Assuming that countries forming a customs union or free trade area do not wish to unnecessarily disturb these forces it may be reasonable in some cases for customs union officials to be interested in the limited question "how will the freeing of trade in itself affect the case for harmonization (how large is area B2?)" rather than the often more difficult question "what are the total potential benefits available from policy harmonization (what is the total area of the circle?)." For example, if net benefits B2 are found to be insignificantly small (or even negative) and the anti-harmonization forces appear to be as strong as before formation of the union[3] harmonization may be rejected. On the other hand, if net benefits B2 appear to be large and positive, benefits (A + B1) cannot be ignored since if (A + B1) is large and negative harmonization may still not be desirable.

It is not true as is sometimes thought that a movement from restricted trade to free trade among a group of countries in itself necessarily requires a major degree of harmonization of economic policies.[4] Restricted trade lies on a continuum between free trade and no trade or autarky. Most countries lie closer to the free trade end of that continuum than to the autarky end, even the high-tariff import-substituting Andean countries importing from 15 per cent (Chile, Colombia) to 25 per cent (Bolivia) of their gross national products. A movement to

free trade should therefore be seen as a change in degree rather than one in kind. Two empirical observations support this contention. First, several apparently successful customs unions have maintained significant intra-union policy differences. In the Benelux union the Netherlands and Luxembourg rely primarily on income and capital taxes for revenue whereas Belgium relies to a much greater extent on indirect taxes. Members of the European Economic Community use four quite different systems for taxing companies and dividends, handle their balance of payments problems differently, and maintain different economic philosophies, the French favouring indicative planning while the Germans rely on free enterprise. The United States, Canada and Australia are all federal countries with appreciable differences in tax and expenditure structures and levels between their component states and provinces.[5] Second, even countries which restrict trade have been forced to coordinate or harmonize policies to some extent as improvements in transport and communications bring them closer together. This has been particularly noticeable in the "Atlantic Community" (Cooper, 1968). In most cases, then, some harmonization of policies among member countries will almost certainly already have taken place before they form a customs union.

The benefits from harmonizing economic policies can generally be expressed in terms of the increased regional economic efficiency which is attained while the major cost is loss of control over the policy instrument that is to be harmonized. The evaluation of whether harmonization of a particular policy represents a net welfare improvement

cannot in general be quantitative: although, the benefits from increased efficiency are in principle quantifiable the costs arising from the loss of control of a policy instrument are not. The size of the welfare loss caused by loss of control of a policy instrument is determined by several factors. First, it depends on whether other instruments are available or could be easily converted to do the same job as the instrument foregone.[6] For example, the objective of making automobile drivers pay the cost of road construction may be variously implemented (at least to an approximation) by taxing gasoline, by charging tolls for road use, or taxing the purchase or operation of automobiles (Johnson, 1968 p.13). Second, it depends on whether the policy was set at its pre-union level for reasons of fiscal-administrative expediency or historical accident, or whether it reflects a policy choice based on some concept of social welfare. For example, it has been well-documented that most Latin American tariff structures emerged unsystematically as a result of the influence of conflicting pressure groups. (Macario 1964) Countries forced to alter such structures to conform with a union-wide common external tariff would lose far less (they may well gain) than if their pre-union tariff systems were constructed on the basis of rational evaluations of socio-economic welfare. Moreover, in such a case the country's loss of the ability to alter tariffs may even be a blessing in disguise - the government is able to refuse interest groups' requests for increases in protection without causing undue disaffection by pointing out that such increases are prohibited under the rules of the customs union. On the other hand, where policy differences reflect differences in judgments on social welfare, the loss of control

over a policy instrument may represent a significant cost. For example, before formation of the Benelux Union Belgium had a relatively low excise tax on beer but a high tax on spirits as a means of discouraging drunkenness, while in the Netherlands priorities were reversed, the tax on beer being higher and that on spirits lower than in Belgium. In each case the tax differential reflected a real difference of national preferences and perceptions of social welfare with the result that only partial harmonization could be achieved. (Meade et al 1962, p.90)

The unit of analysis for discussing the benefits and costs of harmonization in this paper is the customs union as a whole and/or the nation-state where appropriate. Clearly, different conclusions could be derived if the analysis were focused at a different level. What is good for the Colombian coffee grower is not necessarily good for the Andean Group, nor even for Colombia. The distribution of the net benefits of harmonization between the member nations of the customs union is only treated in the most general terms in this paper: it should be fully taken into account in arriving at the complete benefit-cost calculus.[7]

The following section analyses the desirability of harmonizing policies on tariffs, export subsidies, indirect taxation, exchange rates, planning and macro-stabilization, intra-union factor movements, foreign capital, and currency unification both in general and with particular reference to the Andean Group. The case for harmonizing any particular policy depends, of course, on what is assumed about concurrent harmonization of other policies: for example, whether or not export subsidies should be harmonized depends crucially on whether tariffs have been harmonized.

With this problem in mind an attempt is made in the discussion of each policy instrument to explicitly specify what is being assumed about the harmonization of other instruments. This ad hoc approach has the drawback of being only "partially general": it would of course be better to do full general equilibrium with everything depending on everything else. On the other hand the ad hoc approach simplifies the problem considerably and provided the assumptions are judiciously chosen should yield reasonably accurate conclusions.

II

1. Tariffs

Harmonization of tariffs in a free trade area may perhaps best be interpreted as the adoption of a common external tariff on imports from the rest of the world, that is, the conversion of a free trade area into a customs union.[8] Strictly speaking only the structure of national tariff systems needs to be equalized since differences between average tariff levels may be compensated for by different degrees of currency overvaluation. However, it simplifies the analysis to restrict ourselves without loss of generality to the case of equalizing both structures and levels. This is the form of harmonization usually adopted in customs unions in practice.

The harmonized common external tariff may be "optimal" or "non-optimal." An optimal common external tariff is defined here as one that is "scientifically" determined granting more or less equal nominal and

effective protection to all activities, and adjusting tariffs where there is monopoly power in trade, an infant industry, or some other departure from the assumptions of the competitive model. A non-optimal common external tariff structure is derived in some other usually ad hoc way, for example by averaging prior national tariff rates commodity by commodity. In each case it is assumed that the common external tariff is truly "common", that is, that quantitative restrictions and other non-tariff barriers to trade are abolished and that export subsidies, which have symmetrical resource effects to tariffs, are also harmonized. It is further assumed either that indirect taxes are low relative to tariffs or that they display significantly less variation than tariffs within and between countries.

One of the major arguments in favor of the adoption of a common external tariff after trade is freed is that similar industries in different countries should receive similar treatment. If Peru's tariff on raw wool imported from outside the area is 100 per cent while Ecuador's is 40 per cent the freeing of trade will allow Ecuadorean producers of woollen textiles to gain at the expense of their Peruvian competitors. Adoption of a common external tariff on raw wool of, say, 60 per cent abolishes this source of inefficiency and inequity.[9] However, if all industries do not receive the same degree of protection under the common external tariff it is quite conceivable that the gain in efficiency arising from treating Ecuadorean and Peruvian producers of woollen textiles equally will be more than offset by an efficiency loss arising from, say, an artificial advantage granted by the common external tariff to producers

of woollen textiles over producers of cotton textiles. This could arise for example if the tariff on imports of raw cotton is higher than that on imports of raw wool while the tariffs on woollen and cotton textiles are equal. This is simply an example of the general second best rule that eliminating one distortion while leaving or introducing others does not necessarily improve the overall situation. (Lipsey-Lancaster 1956). This seems to imply that we can only be sure that tariff harmonization will be on balance beneficial if the customs union adopts the optimal common external tariff structure as defined above. However, Michael Bruno (1971a,b) has recently demonstrated that under certain conditions any across-the-board percentage reduction in tariffs is an improvement, and under more restrictive conditions that any reduction in tariff differentials is an improvement. Basically these intuitively appealing results suggest that even a non-optimal common external tariff structure may well represent an improvement if it is lower and less unequal than prior national structures. Since in real world situations one is often confined to seeking "improvements" rather than "the optimum" these results are of considerable interest.

Four conditions determine the impact of the freeing of trade on the case for tariff harmonization. The freeing of trade makes the case for tariff harmonization stronger, <u>ceteris paribus</u>, the greater the reduction in economic distance between members, the lower the remaining economic distance, the greater the disparity in pre-union national tariff structures and the more similar the national development goals. Let us examine these four conditions in turn. "Economic distance" may be defined as tariffs

plus transport costs. Assuming that intra-area transport costs are unchanged by the freeing of trade at least in the short-run the first condition reduces to: ceteris paribus the higher are pre-union tariffs the more necessary is the adoption of a common external tariff after trade is freed. For example, in the Peru-Ecuador raw wool-woollen textiles example the inefficiency introduced by non-adoption of a common external tariff after the freeing of trade is significantly greater, ceteris paribus, if the Peruvian and Ecuadorean tariffs on raw wool are 100 and 40 per cent respectively than if they are 10 and 4 per cent. Second, since intra-union tariffs are reduced to zero intra-area economic distance reduces to intra-area transport costs, and the second condition is: ceteris paribus adoption of a common external tariff is more desirable after the freeing of trade the lower the intra-area transport costs. For example, after internal trade is freed if Peruvian and Ecuadorean tariffs on raw wool are 100 and 40 per cent respectively this will lead to a greater misallocation of regional resources if the cost of shipping wool and woollen textiles between countries is 5 per cent of the value of the product than if it is 90 per cent. The third condition is: ceteris paribus the greater the differences in pre-union tariff structures the greater the need for adoption of a common external tariff after trade is freed. For example, if prior countries' tariff structures are identical harmonization is not necessary - a common external tariff already exists after trade is freed. Finally, the relation of tariffs to national priorities is important. If one country maintains a high tariff on steel because it believes that the production of steel is vital to its national defense while another has a

low tariff on steel because it wishes to import cheap steel to encourage exports of labour-intensive metal manufactures, thereby increasing employment, adoption of a single common external tariff rate for steel would involve significant costs in terms of compromising national priorities (defense, employment). On the other hand if the different tariff rates on steel simply reflect historical accident the socio-political costs of harmonization are lower. This leads us to the fourth condition: ceteris paribus the less divergent the relevant national priorities, the lower the costs of adopting a common external tariff after trade is freed.

The Cartagena Agreement, the official treaty of the Andean Group customs union, calls for agreement to be reached among member countries on a common minimum external tariff structure (tariffs may remain above but not below the common minimum) by December 1970 and on a common external tariff structure by December 1973;the latter is to be gradually implemented by member countries from 1974 to 1980. It is not clear exactly what function the drafters of the Agreement had in mind for the common minimum external tariff, but in practice its (successful) negotiation seems to have been used as a "dry run" for the 1973 common external tariff negotiations.

Let us examine the four conditions under which the freeing of trade makes tariff harmonization desirable in the context of the Andean Group. First, as shown in Table 1, pre-union Andean tariff rates are indeed high, unweighted average nominal tariffs in Bolivia being 54 per cent, Colombia 70, Peru 90, Ecuador 106 and Chile 172 per cent. Dividing each economy into 23 sectors the highest sector tariff averages are : Bolivia 95 per cent (beverages); Colombia 183 (clothing, shoes), Peru 210 (clothing,

Table 1

Nominal tariffs in Andean Group countries before formation of the customs union, the Andean Group Common Minimum External Tariff, (CMET) and the EEC Common External Tariff (unweighted sector averages)

per cent

Sector	Bolivia	Chile	Colombia	Ecuador	Peru	CMET	European Economic Community
Agriculture	77	133	45	125	57	29	
Fishing	25	150	52	102	86	27	
Mining	60	132	20	58	65	11	
Food products	49	268	92	192	92	50	
Beverages	95	388	75	291	208	64	
Tobacco	40	186	143	195	117	42	
Textiles	72	190	67	101	103	60	10
Clothing, shoes	76	283	183	184	210	80	20
Wood products	78	172	115	121	110	47	15
Furniture	53	152	77	116	85	52	15
Paper products	52	173	64	83	88	40	10
Printing	45	160	52	53	71	21	3
Leather products	76	250	86	124	115	45	11
Rubber products	62	170	98	98	78	58	15
Chemicals	34	101	32	52	56	32	14
Petroleum, coal prods.	31	111	33	57	56	35	
Non-metallic mineral products	61	164	72	86	80	42	14
Basic metals	36	87	31	49	67	27	7
Metal products	52	149	56	79	76	46	14
Non-electrical machin.	27	79	35	45	48	43	7
Electrical machinery	42	110	40	56	60	55	15
Transport products	42	183	76	81	58	42	13
Other industries	47	164	69	93	90	50	16
Arithmetic average	54	172	70	106	90	43	12
Standard deviation	19	68	37	58	41	15	4

Sources: Andean Group: national tariff schedules. Europe: Balassa (1965 p.580)
CMET: Junta del Acuerdo de Cartagena El Arancel Externo Minimo Comun, mimeo, 1971.

shoes), Ecuador 291 (beverages), and Chile 388 (beverages). Nominal tariffs on particular items are much higher still, ranging up to 1008 per cent on some chemical products in Chile. While some of these extremely high tariffs contain water others understate the true degree of nominal protection by ignoring the effect of import licensing and quotas. In Chile domestic prices were more than four times world prices at the official exchange rate for bicycles, radios, and record players in the late 1960's and similar ratios can be found for particular products in Colombia, Peru and Ecuador.[10] In addition, in many cases effective protection of value added is even higher than the already high nominal protection (though a downward adjustment should also be made for the degree of currency overvaluation). Thus the elimination of intra-union tariffs will indeed bring member countries significantly closer together. On the other hand, transport costs are still significantly higher, often by a factor of two or three, between Andean group countries than, say, between E.E.C. countries, or even between the E.E.C. and the U.S.[11] Third, while the general pattern of high-lower-lowest nominal tariffs on final goods, intermediate goods, and inputs tends to hold for all member countries the differences between national tariff structures at a more disaggregated level are nevertheless significant (see Table 1). Finally, national economic development goals tend to be relatively similar. All five countries wish to industrialize and have historically followed the import-substitution road to this end. More recently all have introduced measures (export subsidies, drawback schemes, crawling-peg exchange rates) to remove some of the bias this has caused against exporting.

The height of, and differences between pre-union tariff structures, especially when quantitative restrictions are taken into account, and the

similarity of economic development goals probably outweigh the existence of relatively high intra-Andean transport costs in an overall evaluation of the impact of the freeing of trade on the case for adoption of a common external tariff. However, the second-best arguments alluded to earlier must be stressed: whether a common external tariff is an improvement or not depends crucially on the actual tariff structure which is adopted. It seems at least possible that the common minimum external tariff or something like it will be adopted as the Andean common external tariff. This common minimum tariff is by no means optimal. It was derived by arbitrarily dividing all of the five thousand odd products which exist in the world (at a certain level of aggregation) into eleven groups using as basis an arbitrarily weighted average of three criteria of dubious economic relevance: degree of technological complexity of the product (pig's hair was deemed to have degree 1, human hair degree 0), its grade of elaboration, and its type by input, intermediate good, final good (what is a screw?). In the final stages of negotiation a fourth criterion was added, the degree of labour intensity of the product. Products with the lowest (second lowest) weighted average of these criteria were placed in group zero (one) and so on up to group ten. A nominal tariff rate was then arbitrarily assigned to each group as follows: zero for group zero, ten for group one. . . one hundred for group ten. Despite its dubious origins the common minimum external tariff does at least approximately fulfill the Bruno conditions: compared with pre-union national tariff structures its average level of tariffs (43 per cent) is lower, and its tariff rates are in general less unequal - its standard deviation is 15 compared with that of the Bolivian tariff, 19, Colombia 36, Peru 41, Ecuador 58 and Chile 68 (see Table 1). Thus the adoption of the common minimum external tariff as the Andean common external tariff would probably represent an improvement.

Even better of course would be a still lower, less unequal structure: for an example see Morawetz (1972c). It is worth noting that if either the common minimum external tariff or a lower and less unequal structure should be adopted as the Andean common external tariff the distribution problem would immediately be raised: for example, resource allocation is likely to be more affected in Chile, which previously had the highest and most widely spread tariff structure, than in Bolivia which had the lowest least spread tariffs.

The discussion has so far ignored two important factors. First, a not insignificant proportion of international trade is totally exempted from tariffs and export subsidies in almost all countries: so-called "invisible" transactions. In 1968 these transactions - investment income, transportation, freight and insurance and tourism - accounted for from 9 to 24 per cent of total exports and 29 to 37 per cent of total imports in the Andean Group countries. The optimal solution to this situation would be to subject these items to tariffs and export subsidies just like other commodities, with modifications where there is monopoly power in trade etc. If these items are not subjected to tariffs the argument that for any degree of dispersion of tariffs on commodities the lower the average level of tariff the better is strengthened.

Second, the discussion so far has ignored the very real possibility that large sections of the economy in Chile and Peru may be owned and operated by the State and that the Chilean government may nationalize a large part of Chile's foreign trade. This would not affect the analysis if governments and government enterprises were to pay tariffs or take

tariffs into account in deciding what and where to purchase. If, however, one or more governments do not take tariffs into account in decision-making the argument presented in the previous paragraph is still further strengthened: for any given degree of tariff dispersion the lower the average rate of the "common" external tariff the better. In each of these two cases - the first in which a significant proportion of transactions bear zero tariffs, the second in which one or more countries in effect do not apply the "common" external tariff - it is even more difficult than otherwise to decide whether adoption of common external tariff would be on balance beneficial.

2. Export subsidies

In the previous section it was assumed that export subsidies were harmonized together with tariffs: since export subsidies and tariffs affect resource allocation symmetrically, to harmonize one without the other is not to harmonize at all. For example, a harmonized common external tariff with a uniform rate of t per cent on all goods does not grant equal effective protection to all activities (even ignoring the problem of traded services bearing zero tariffs) unless export subsidies are also set at t per cent on all goods. Inefficiency results if export subsidies are set uniformly lower than tariffs, or if subsidy rates differ between goods and/or countries. By the same logic, the second best principle suggests that adoption of a common export subsidy with uniform rates on all goods will not necessarily be beneficial if (ignoring distortions etc.) the common external tariff is not equal on all goods and in all countries. Once the symmetry between tariffs and export subsidies is recognized it

can be seen that the arguments for and against harmonization of export subsidies both in general and in the Andean Group are identical to those concerning tariffs. They will therefore not be repeated here.

The Cartagena Agreement does not specifically discuss harmonization of export subsidies; however it does call for adoption of a "common commercial policy vis-a-vis third countries" at an unspecified date in the future. If the Andean common minimum external tariff is adopted as the common external tariff a common export subsidy of approximately similar rates (adjusted of course where there is monopoly power in trade as in coffee, copper etc.) should also be adopted to avoid the bias towards import substitution and against exports that would otherwise exist. As long as the tariff and subsidy rates on different goods are not too unequal the smaller the gap between the average tariff rate and the average export subsidy rate the better. Once we take into account the problem that invisibles are generally not subject to tariffs and export subsidies and the possibility that Chile and/or Peru will ignore tariffs and/or subsidies, a second generalization is also possible: for any given gap between the average common external tariff and the average common export subsidy, the lower the absolute level of the tariff and export subsidy the better.

The discussion in this section hitherto has been concerned solely with subsidies for exports to the rest of the world (extra-union exports). Assuming that tariffs for intra-union trade are abolished and tariffs and export subsidies for extra-union trade are set at approximately uniform and equal levels export subsidies for intra-union trade should also be abolished.

In the limit, and ignoring departures from competitive assumption, if all goods and services are subject to tariffs and export subsidies at a single uniform rate t for extra-union trade and if tariffs and export subsidies are set at zero for intra-union trade the currencies of all member countries will be overvalued by t per cent, and the situation is equivalent to free trade. Starting from this Pareto optimal situation if export subsidies for intra-union trade are now set at a positive level or levels we will have too much trade within the union. For example, assume that identical widgets are produced at constant and equal costs in countries A and B. If intra-union export subsidies are zero transport costs will dictate that A's producers sell their product in A, B's in B. However if we introduce positive intra-union export subsidies which are greater than transport costs A's producers find it more profitable to sell their widgets in B's market and vice versa. This may be regarded as a case of "detrimental trade creation." This argument relies on external tariffs and export subsidies having been set optimally: to the extent that external tariffs and export subsidies depart from allocative neutrality the economic case for setting export subsidies at zero for intra-union trade becomes less certain.

3. Indirect taxation

It is assumed throughout the rest of this paper that tariffs and export subsidies have been harmonized (that is, that we are dealing with a customs union rather than a free trade area) and that the tariff and subsidy rates on different goods are relatively similar. Without this assumption

(or the alternative assumption, unrealistic for most less developed countries, that tariffs are significantly lower and/or less unequal than indirect taxes) it would not in general be possible to determine conditions under which harmonization of indirect taxes is desirable. The assumption is less crucial to the analysis in later sections of the paper.

Harmonization of indirect taxes, using this term to include sales taxes, corporation taxes etc., may be interpreted as adoption of identical indirect tax bases, levels and rate structures. As with tariffs, strictly speaking only bases and rate structures need be harmonized since differences in average tax levels would be compensated for by exchange rate changes; but again for simplicity we confine ourselves without loss of generality to full equalization of tax rates.[12] Again as with tariffs there are two types of tax structure, optimal or non-optimal, an optimal structure being defined as one in which all goods are taxed equally with exceptions for departures from pure competition, overriding social goals etc. Of course the decision concerning which departures from allocative neutrality are "justifiable" is by no means a simple one. In the words of James Meade:

> Theoretically....national taxes or subsidies on the production or consumption of particular products ought to be banned in our union, unless they are needed to offset some other imperfection in the market mechanism. For example, a properly adjusted tax on some commodity in whose production there is a social diseconomy and in the case of which private cost is, therefore, below social cost would merely raise private cost up to social cost and thus improve the position. But this is a difficult distinction to draw. In the United Kingdom the consumption of wine is heavily taxed and that of milk subsidized. Is this an inadmissible interference with the optimization of a home industry, since milk is home-produced and wine imported?

> Or is it a legitimate case of social economies and diseconomies to encourage the feeding of milk to British babies at the expense of the drunkenness of British fathers? And who, pray, but Her Majesty's Government in the United Kingdom is competent to decide such an issue?[13]

For tax systems which depart from allocative neutrality we have the same second best problem as with tariffs - an indirect tax structure which is harmonized (equal across countries) but contains departures from allocative neutrality which cannot be justified on social welfare or similar grounds cannot be said in general to be an improvement over the maintenance of different national tax structures. On the other hand one can probably adapt the Bruno conditions to the indirect tax case. Johnson (1968 p.22) anticipates this when he states:

> [if] the problem of harmonization is approached in piecemeal fashion, the most that can be said is that there is some presumption that efficiency could be increased by lowering those fiscal burdens that are exceptionally high by the standards of the country in which they are imposed. Even this presumption has to be qualified by recognition that particular high or low fiscal burdens may be a deliberate result of some unique feature of national social policy.

The conditions under which the freeing of trade strengthens the case for harmonization of indirect taxes are completely analogous to those discussed in the tariff case. Harmonization of indirect tax structures is more necessary after the freeing of trade, ceteris paribus, the greater the change in economic distance (which reduces to the higher the pre-union tariffs assuming constant intra-union transport costs), the lower the intra-union transport costs, the greater the differences in pre-union tax structures and the less divergent the relevant national priorities. The general discussion and examples of the tariff policy section apply fully to this one substituting "indirect taxes" for "tariffs" where necessary.

The Cartagena Agreement calls for harmonization of "fiscal policies" in general terms but does not elaborate, nor does it specify a date for the achievement of such harmonization. Despite the similarity between the theoretical cases for harmonization of tariffs and indirect taxes there are several key differences between the two in the context of the Andean Group. First, Andean indirect taxes tend in general to be lower than tariffs, and in many cases are not much higher than transport costs. This suggests that the "buffer" of high inter-country transport costs is likely to be more effective in guarding against misallocation of resources due to indirect tax differences than against those due to tariff differences. Second, while pre-union tax structures differ considerably among countries, in terms of influencing resource allocation these differences are probably less significant than inter-country differences in tariff structures. Third, countries' ideas differ significantly on the desired structure of industrial organization: Peru began an experiment in worker ownership of factories in the late 1960's, Chile is moving towards its own brand of socialism and popular ownership of the means of production, Colombia and Ecuador lean towards free enterprise, and Bolivia swings from one view to another with some frequency, having had 184 governments in the 146 years since it gained independence from Spain. Since each country has its own views on the structure of indirect and corporate taxes which is appropriate to achieve its goals, the adoption of a single harmonized tax structure, even if it were politically feasible, would clearly involve significant costs in terms of the sacrifice of strongly-weighted national objectives. Given these arguments and the fact that the E.E.C. in which intra-union

transport costs are much lower than in the Andean Group, still maintained four different systems of taxing companies and dividends more than a decade after its inception,[14] the case for harmonization of indirect taxes after trade is freed in the Andean Group is considerably weaker than the case for the adoption of a common external tariff.

4. Exchange rate policy

Harmonization of exchange rate policies may be defined in at least two different ways: first, agreement as in the European Economic Community to maintain fixed exchange rates and to consult with other members whenever a parity change is (by assumption infrequently) desired ("no-devaluation-without-consultation") and second, agreement that each member will adopt a crawling peg system and will devalue pari passu with its own rate of inflation[15] on a week by week basis, consulting with the other members of the union if it desires a faster or slower rate of devaluation ("devaluation-with-inflation").[16] The major benefit from successful harmonization of exchange rate policies would be avoidance of the inefficiencies, inequities and political problems which arise if exchange rates get out of line, with producers in one country gaining an artificial advantage compared with producers in other countries. The major cost is of course loss of control over the exchange rate, the instrument with the most direct impact on the balance of payments. This loss is even more serious in the present case than it would otherwise be since we are assuming that a common external tariff and export subsidy have been adopted, thus ruling out manipulation of the average tariff-subsidy level as a means of affecting subsidy level as a means of affecting the balance of payments.

The two key variables in determining whether harmonization of exchange rate policies is desirable after formation of a customs union are member countries' rates of inflation and the degree of stability of their balance of payments. An example which is typical both of Latin America in general and the Andean Group in particular may be useful to indicate the significane of inflation rates. Take a customs union consisting of two members, country A whose exchange-rate policy prior to formation of the union was devaluation in discrete steps to cope with periodic balance of payments crises arising as a result of domestic inflation, and country B which pursued a policy of devaluing with inflation on a week-by-week basis thereby maintaining approximate balance of payments equilibrium over time. Assume to simplify the exposition that each country has a steady rate of inflation over time, that A's rate is greater than B's, and that the rate of inflation in the rest of the world (W) is zero. None of these assumptions is necessary for the conclusions to hold. Now assume that if exchange rates are not harmonized after the customs union is formed each country maintains its pre-union exchange rate policy. In this case (fig 2a) A's real exchange rate (defined as its nominal exchange rate adjusted for domestic inflation) fluctuates jumpily over time declining steadily as inflation continues and increasing in a single leap when devaluation occurs, whereas B's real exchange rate is constant over time since the steady inflation in B is exactly offset by week-by-week devaluations. Now introduce our two types of exchange rate harmonization. In terms of fig 2a harmonization of the

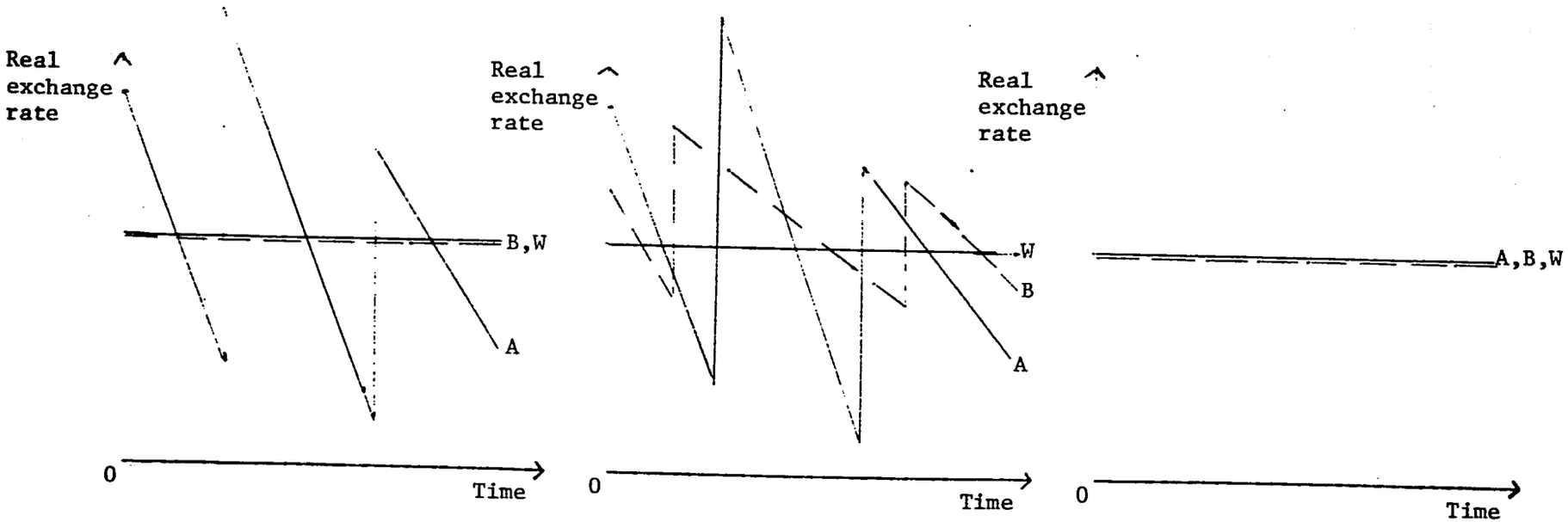

Fig 2
Exchange rate harmonization in a customs union

(2a) No harmonization: union members A and B maintain their pre-union exchange rate policies.

(2b) Harmonization of the "no-devaluation-without-consultation" type

(2c) Harmonization of the "devaluation-with-inflation" type

Note: Without loss of generality units are selected such that the number of units of national currency per unit of numeraire (eg per oz. of gold) in countries A, B and W are equal in fig 2c.

"no-devaluation-without-consultation" type means attempting to alter the time path of B's real exchange rate to make it more similar to A's (fig 2b), whereas harmonization of the "devaluation-with-inflation" type means attempting to alter the time path of A's real exchange rate so that it becomes identical to B's (fig 2c).

It cannot in general be said whether harmonization of the "no-devaluation-without-consultation" type will be an improvement over no harmonization. This is true even if we assume that A and B have equal rates of inflation and that they devalue at the same moment of time, that is, that the time path of B's real exchange rate is identical to A's in fig 2b. The reason is of course that while we have eliminated one distortion, unequal treatment of intra-union producers, two other major distortions remain and may well have been aggravated: the relative position of intra-union producers vis-a-vis producers in the rest of the world fluctuates sharply over time, as does the relative profitability of producing traded and non-traded goods within the customs union. These distortions only disappear under "no-devaluation-without-consultation" harmonization in the trivial case where the rate of inflation in each country within the union is exactly equal to the (appropriately weighted) average rate of inflation in the rest of the world; but in such a situation, ceteris paribus, "no-devaluation-without-consultation" is de facto identical both to "no harmonization" and to "devaluation-with-inflation" since in each of the three cases no member of the union will need to devalue at any time. On the other hand, harmonization of the second type, devaluation on a week by week basis at the same rate as inflation, eliminates all three distortions (fig 2c).

The real incentives facing intra-union producers of traded and non-traded goods are constant over time, intra-union and extra-union producers of the same goods are treated equally and producers of the same goods in A and B are treated equally. "Devaluation-with-inflation" therefore represents a clear improvement over "no harmonization" and "no-devaluation-without-consultation."

The above example illustrates the problems caused by differing rates of inflation. Problems can also arise if at least one member of the customs union has a relatively unstable overall balance of payments, that is, if it depends on a small number of products for a large proportion of its total foreign exchange receipts. For example, if exports of coffee account for 60 per cent of one member's foreign exchange receipts and the world price of coffee falls 40 per cent and is not expected to recover (perhaps because the world coffee agreement collapses) this country needs to be able to alter its real exchange rate to re-equilibrate its long-term balance of payments. Any scheme to harmonize exchange rates should allow sufficient flexibility for members to adjust their exchange rates unilaterally when faced with such "fundamental changes" in their long-term balance of payments prospects. This point is more important the more unstable the balance of payments of union members.[17]

We have hitherto assumed that all customs union members enter the exchange rate harmonization phase in balance of payments equilibrium. This in turn assumes that all members' exchange rates have been correctly adjusted to compensate for the long-term changes in balance of payments outlook brought about by the abandonment of national tariff structures, import quotas etc. and adoption of the union's common external tariff. However,

in practice it is likely to be difficult to ascertain exactly the right amount by which to adjust exchange rates during the transition phase. This has led Yeager (1958), Kreinin (1960) and others to propose the adoption of flexible or at least more flexible exchange rates during the transition period.

The Cartagena Agreement simply states that exchange rate policies should be harmonized without specifying what is meant. Both rates of inflation and exchange rate policies differ significantly among Andean Group countries. In the late 1960's annual rates of inflation were five to ten per cent in Colombia and Peru and over thirty per cent in Chile. In the same period Colombia and for a while Chile devalued pari passu with inflation while Bolivia, Ecuador and Peru carried out step devaluations at irregular intervals. Since rates of inflation in Andean countries differ significantly from the world-average rate of inflation the conclusions concerning the desirability of exchange rate harmonization which were derived earlier are applicable in the context of the Andean Group. First, harmonization of the "devaluation-with-inflation" type is superior to no harmonization and to "no-devaluation-without-consultation"; second, it cannot in general be said whether "no-devaluation-without-consultation" is preferable to no harmonization at all.

The balance of payments of all Andean member countries are relatively unstable in the earlier-defined sense. In the late 1960's copper accounted for 75 per cent of Chile's exports, tin for 70 per cent of Bolivia's exports, coffee for 60 per cent of Colombia's exports, bananas for 45 per cent of Ecuador's exports (new oil finds are likely to change

this in the 1970's) and fishmeal and copper for 60 per cent of Peru's exports. It is therefore extremely important that any harmonization scheme that may be adopted should permit members to alter their real exchange rates in response to "fundamental changes" in their balance of payments.

If the common external tariff adopted by the Andean Group is of similar structure and average height as the Andean common minimum external tariff the period of gradual transition from pre-union national tariff structures to the common external tariff (1974 to 1980) will require significant exchange rate changes. This is particularly true for Chile which had the highest pre-union nominal tariffs of all Andean Group members.[18] Such exchange rate adjustments will need to be carried out by all Andean countries regardless of whether exchange rate policies are eventually to be harmonized.

5. Planning and macro-economic policies

Harmonization of planning and macro-economic policies may be interpreted as co-ordination to greater or lesser degree of national development plans and stabilization policies. The conditions for the freeing of trade to strengthen the case for harmonization are similar to those for tariffs and indirect taxes. Co-ordination of planning and stabilization policies is more necessary after formation of a customs union the greater the change in economic distance (and in intra-union factor flows), the closer the intra-union economic distance in absolute terms, the greater the differences in pre-union national policies or

strategies, and the less divergent the national goals.

The Cartagena Agreement speaks generally of the need to harmonize "methods and techniques of planning." The significant differences and inconsistencies in pre-union policies and the decrease in economic distance between Andean Group members suggest that some benefit could be derived from some co-ordination of planning between the five countries. However, from what has already been said about the differences in national socio-political goals the costs of such co-ordination would be high. It therefore seems unrealistic to expect any significant co-ordination of economic planning to take place beyond agreement on programming of some parts of the industrial sector as envisaged in the Cartagena Agreement.[19] The case for co-ordination of macrostabilization policies in the Andean Group is, if anything, weaker than that for co-ordinating national planning. To be sure, the increase in intra-union trade which is likely to occur will increase the influence of changes in the level of effective demand in each country on the level of employment and activity in the others. However, this is only a matter of degree: such feedback effects exist even if trade is partially restricted. Even the relatively much more homogeneous and closely-linked E.E.C. has not yet found it necessary to set up a supranational body to co-ordinate stabilization policy.[20]

6. Intra-union factor movements

Harmonization of policy on intra-union factor movements may be defined as allowing complete freedom of flow of factors between countries. If there are no other distortions the freeing of factor movements allows factors to locate themselves optimally yielding a gain in economic efficiency. This gain is of course less to the extent that factors are immobile for institutional reasons. If some or all members of the union have significant unemployment problems and face shortages of capital the distribution question is likely to be important. Permitting the free flow of factors throughout the union may well improve the allocation of resources throughout the region, thereby enabling every country's real income to be raised if benefits were redistributed. However, if such redistribution does not in fact occur the losers of capital and skilled labour and the gainers of unskilled labour may well be unwilling to allow factors to move freely.

The Cartagena Agreement is vague on intra-union factor movements and does not set up a timetable for their liberation. All five Andean Group countries suffer from considerable unemployment of anything up to 20 per cent, and all are short of capital, which means that even those small illegal flows of labour and capital which have occurred between countries have caused considerable political problems. Examples include migration from Colombia to Ecuador and Venezuela, and from Bolivia into northern Chile.[21] Furthermore, if capital movements were free funds would flow from Chile to other union members for political as well as economic reasons, with uncertain impact on overall regional efficiency. On balance,

then, once political factors are taken into account it is not clear whether the freeing or factor movements in the Andean Group would be beneficial. On the other hand certain types of controlled factor movements could still be profitable - the pooling of some skilled labour, higher education and research resources, and the promotion of joint investment undertakings and regional multi-national corporations as foreseen in the Cartagena Agreement (Diaz-Alejandro, 1970).

7. Policy towards foreign capital

Harmonization of policy towards foreign capital may be defined as the adoption of a common set of more or less restrictive conditions for the entry of foreign capital into the union. The adoption of a common policy on foreign capital improves the bargaining power of member countries in dealing with large foreign corporations, lessens the likelihood that members will engage in beggar-my-neighbour policies to attract foreign capital, and may provide a measure of "independence from foreign influence" which may be valued for its own sake. On the other hand, if it is highly restrictive a common policy may deter investors who would otherwise have on balance benefitted the region. Adoption of a common policy on foreign capital is therefore likely to be more beneficial, *ceteris paribus*, the greater the increase in bargaining power obtained, the greater the likelihood that without such a policy members would adopt beggar-my-neighbor policies to attract foreign investment, the greater the value placed on "independence from foreign influence", and the less the value of useful foreign investment which is deterred from entering the union by the existence of the policy.

As provided for in the Cartagena Agreement the Andean countries adopted a common policy on foreign capital in December 1970. Foreign firms with investments made before that date must comply with the provisions of the common policy if they wish to take advantage of the intra-Andean lowering of tariffs, but may be exempted if they restrict their sales to national markets. All new investors must commit themselves "to place on sale for acquisition by national investors. . . the percentage of their shares, participations or rights, that may be necessary for the transformation of such companies into mixed companies, within a period that may not exceed 15 years in Colombia, Chile and Peru, or 20 years in Bolivia and Ecuador."[22] "Mixed companies" are defined as at least 51 per cent owned by national investors. The conversion must proceed steadily over time, so that after one-third and two-thirds of the time period has elapsed national investors must own at least 30 and 45 per cent of the capital respectively (10 and 35 per cent in Bolivia and Ecuador). Special treatment is given to so-called "basic sectors", and by early 1970 Colombia Peru and Ecuador had exempted foreign private investment in mining and petroleum, banking, communications, local retailing and similar lines from the provisions of the common policy.[23]

As noted above, whether the adoption of this common policy is regarded as on balance beneficial to the Andean Group depends on whether the gains from obtaining more favourable terms on new foreign investments and increasing "independence from foreign influence" are more than offset by the loss of potentially beneficial new foreign investments which are foregone (assuming that there will be fewer interested investors after adoption of the common policy than there would otherwise have been).[24] This is an empirical question on which the evidence is not yet available. One thing appears

certain, however: the distribution question is once again likely to be important. For example, independence from foreign influence is valued more highly by the left-leaning governments of Chile and Peru than by the more conservative Colombian government. At the same time Colombia may quite possibly lose more potential foreign investment as a result of adopting the common policy than Peru or Chile. On both grounds, then, Colombia can expect to gain less than Chile or Peru from application of the common policy. The heated opposition to the policy within Colombia in late 1970 and early 1971 and the strong stance taken by the Colombian delegation in Lima against an earlier more radical proposal for the common policy on foreign investment at least partly reflect this problem.

8. Currency unification

Currency unification, or harmonization of national currencies, may be taken to mean adoption of a single currency and creation of a regional Central Bank to control the money supply. Currency harmonization in this form is similar in many respects to a third form of exchange rate harmonization - adoption of irrevocably fixed rates of exchange between union members. It is, however, sufficiently different from the two types of exchange rate harmonization which were discussed earlier to merit separate treatment. Currency unification would facilitate intra-union commodity and financial interchange but countries would lose unilateral control over monetary policy, and the overall Andean unemployment level could well rise as argued below.

The case for adoption of a common currency is closely related to the debate on optimum currency areas. For a region to qualify as an "optimum currency area" it should at least approximately fulfill the following conditions.[25] First, there should be a high degree of factor mobility within the region. As Mundell (1961) and Meade (1957) argue, this is to ensure that as wages, prices and unemployment rates diverge from country to country factors move in an equilibrating manner, thus obviating the need for changes in relative exchange rates.[26] If factors are not internally mobile and a common currency is adopted (thereby ruling out changes in relative exchange rates) the average overall rate of factor unemployment would probably rise. Fleming (1971) accepts this argument as far as labour mobility is concerned, but argues that it is not necessarily true for capital mobility, and that in fact mobility of capital among the members of the group may even aggravate rather than mitigate the losses and frictions that would otherwise result from members' inability to adjust exchange rates in the face of intra-area disequilibria. Second, the ratio of imports from the rest of the world to regional gross domestic product should be relatively low (McKinnon, 1963). The larger is the ratio of imports to domestic production the less likely are workers and owners to maintain unchanged the prices in domestic currency of what they sell in the face of changes in the prices of what they buy, and therefore the less likely is an alternation of the region's exchange rate to succeed in affecting its balance of payments. Third, the region's product mix should be relatively diverse, so that on the insurance principle an exogenous setback affecting one export product

is unlikely to seriously affect the external terms of trade, employment levels etc. (Kenen 1969, Flanders 1969). Fourth, members of the region should have similar rates of inflation. This could occur in at least two sets of circumstances. (a) Members could have similar unemployment-inflation curves (also called "Phillips curves" and representing the trade-off between inflation and unemployment) and similar national preferences concerning the desirable inflation-unemployment mix: in this case both inflation rates and unemployment rates would be similar in all member economies.[27] (b) Unemployment-inflation curves could differ but preferences could be such that all members have the same rate of inflation but differing rates of unemployment. Fleming (1971) points out that given that the inverse relationsip between unemployment and inflation is typically found to be curvilinear at least in the vicinity of full employment, adoption of a common currency may well increase the average level of unemployment in the region. Consider three possible cases. First, among countries which have identical unemployment-inflation curves and the same rate of inflation at their preferred positions, emergence of intra-area disequilibrium, if unemployment in the area as a whole is maintained constant, would result in an increase in the average level of price inflation. This is because the transfer of unemployment from surplus to deficit countries would involve a rise in the rate of inflation in surplus countries greater than the fall in the rate of inflation in deficit countries (Fleming, 1971 fig 1). To prevent this acceleration in the rate of inflation it would be necessary for unemployment to rise in the surplus country more than it falls in the deficit country, that is, for the overall rate of unemployment

to rise. A similar conclusion ensues if countries have different unemployment-inflation relationships but the same slope at their preferred positions. The reverse conclusion follows in the perhaps less likely case where countries have similar unemployment-inflation curves but different preferences concerning the desirable inflation-unemployment mix.

The Cartagena Agreement vaguely calls for the harmonization of monetary, financial and fiscal policies without specifying what is meant. It is extremely unlikely that the Andean Group is an optimum, or even close to an optimum currency area. First, labour is naturally immobile not only between countries but also within countries. Thus the average Andean unemployment rate, already high, would probably rise if a common currency were adopted. Second, foreign trade is on average about 20 per cent of gross national product. While this figure is no higher than in Germany or the U.K. it has been kept artificially low because of the traditional bias towards import-substitution and may be expected to rise as increasing emphasis is placed on export promotion as an alternative strategy. Third, in terms of diversity of product mix five or six major products dominate total exports which suggests the area's balance of payments is relatively vulnerable to exogenous shocks. On the other hand it might be argued that on this score the Andean Group is a less vulnerable currency area than any of the single nations within it, since each relies on only one or two products for the bulk of its export revenues. Finally, and most important, inflation rates differ significantly both within countries at different times and between countries at the same time. Even if it were feasible to deal with this problem by contraction and expansion of effective

demand in deficit and surplus countries respectively the overall Andean rate of unemployment would probably rise as argued above. Given that such a solution is not likely to be feasible, and given the lack of labour mobility between countries, adoption of a common Andean currency would almost certainly lead to large increases of unemployment in high inflation countries accompanied by smaller decreases in unemployment in low inflation countries. Apart from implying an increase in the average level of Andean unemployment this implies that low inflation countries would gain at the expense of high inflation countries which would not only be inequitable but would make the union politically unworkable.[28]

FOOTNOTES

1. Part of the research on which this paper is based was supported by the Harvard Development Advisory Service through funds provided by the Agency for International Development under Contract CSD-1543. The views expressed in this paper do not, however, necessarily reflect the views of either organization. I wish to thank Professors Jagdish Bhagwati, Daniel M. Schydlowsky and members of the graduate seminar in international trade at M.I.T. for helpful comments on an earlier draft. In general in what follows where specific assumptions are needed they will be of a less developed country type - there exist tariffs, unemployment, a shortage of foreign exchange etc. However, for many of the conclusions these assumptions are not necessary. At the time this paper was written Venezuela was considering becoming the sixth member of the Andean Group customs union.
2. P. Wonnacott, "Policy Harmonization in Free Trade Groupings With Special Reference to the European Economic Community" in Johnson et al (1968).

3. The establishment of a central organizing body for the customs union may significantly alter the balance of forces in some cases. Dr. R. Dahrendorf, a distinguished member of the European Common Market Commission, has analysed the Commission's "propensity to push harmonization of everything in order to increase its own bureaucratic power." (Financial Times, Aug 19, 1971) A body like the Andean Group's Junta may feel more able to ignore industrialists' pleas for high tariff protection than national governments which rely in part on the same industrialists' support to gain re-election, with the result that a customs union's common external tariff could well turn out to be less "protectionist" than any of the prior national tariff structures. Something like this seems to have happened in the determination of the Andean Group common minimum external tariff (Morawetz 1972c). For a general treatment of the political dynamics of integration see Nye (1968, 1970).

4. This point has been recognized by Reddaway (1958), Ohlin (1965), and Johnson (1968). Johnson has an interesting discussion of some of the causes of the bias towards policy harmonization which tends to exist in customs unions.

5. The Economist, February 20, 1971 and Johnson (1968).

6. As Tinbergen (1952) has shown the policy-maker needs at least as many instruments as there are targets if he is to fully attain his goals.

7. For a discussion of some problems and possible solutions concerning the distribution of benefits in customs unions see Morawetz (1972b).

8. Interestingly enough there do not appear to be any examples of an integration scheme actually moving from a free trade area to a customs union. In the E.E.C., East Africa, UDEAC, Central America and the Andean Group, a common external tariff or an attempt at one was present from the start, while EFTA remains a free trade area. It has been the intention for some time to implement a common external tariff in LAFTA but almost no progress has been made (Kahnert et al 1969 p. 41).

9. Even if the tariff on raw wool happens to be equal in Peru and Ecuador, if tariffs on all other goods are on average significantly higher in Peru than in Ecuador and therefore overvaluation is greater in Peru than in Ecuador, Ecuadorean producers will still gain at the expense of their Peruvian competitors. Naturally the reverse is also possible.

10. Sergio de la Cuadra "La Estructura de la proteccion en Chile", Ph.D. thesis, Universidad Catolica de Chile, cited in Selowsky (1971). For a detailed analysis of Andean Group pre-union tariff structures see Morawetz (1972c).

11. For a detailed analysis of Andean Group transport costs see Morawetz (1972d)

12. The analysis in this section abstracts from the question of whether indirect taxes should be levied on the origin or the destination principle. For discussion of this subject, see Balassa (1961), E.E.C. (1963) and Shoup (1967). Even after tax rates are equalized definitional problems may remain. "Because of historic church opposition to cremation, Luxembourg has no crematoriums of its own. Until mid-1968, when the Six abolished international customs and substituted a complex system of 'taxes on value added' (T.V.A.), this was no great problem; when a Luxembourgeois who believed in cremation died, his family would simply have him taken across the French border to Strasbourg. But under T.V.A. French tax collectors consider cremation a taxable 'service rendered to a private person.' As a result, they now dun bereaved Luxembourgeois for 17% of the Strasbourg crematorium's fee- the 'value added' to the deceased. On their way home with the ashes, the mourners get hit again, this time by Luxembourg officials who demand payment of another 8% tax for 'work entrusted to a foreign company, with reimportation of the finished product.' In raising the cremation issue, Protester (Belgian Socialist Deputy) Glinne is trying to get action on the egregious tax inequities that exist among the Six. But so far, the main effect of his campaign has been to stir new doubts about Common Market membership in Britain, where cremation is common. Britons already consider themselves too heavily taxed on their income to be expected to cough up for what they urn as well." Time, May 17, 1971, p.28

13. Meade (1953) cited by Wonnacott in Johnson et al (1968 p.51). Note that even full harmonization of taxes is incomplete if government expenditures, work conditions, social security systems, tax evasion etc. differ significantly. Such differences are ignored here.

14. Italy uses a schedular system, under which different taxes are levied on income of different types and from different sources. Holland and Luxembourg, like the U.S. and Britain, use the "classic" system under which corporation tax is levied on companies at a single rate and dividends are taxes as shareholders' income at normal rates. Germany uses a split-rate system, levying corporation tax at a higher rate on retained earnings and on profits actually paid over as tax (51 per cent) than on profits paid out as dividends (15 per cent); dividends are then taxed as shareholders' income at normal rates. France and Belgium use a tax credit system. Corporation tax is levied at one rate (50 per cent in France) but shareholders' dividends are taxed in a special way. A dividend received by a French shareholder of Fr50 is treated as though it were one of Fr75, with tax paid already of Fr25. The shareholder is then charged more tax, or gets a rebate, according to his own tax position. He thus gets a tax credit of Fr25. This dividend, however, has already borne corporation tax of Fr50. The credit is thus equal to about half the corporation tax borne. The Economist, Feb 20, 1971, p.60.

15. Throughout this section to simplify the analysis and without loss of generality rates of inflation refer to differences between national and world-average rates, and should be understood to be adjusted for changes in productivity. For example, if prices and productivity rise by 10 and 2 percent per annum respectively in country A and by 4 and 3 per cent per annum in the rest of the world, A's rate of inflation is (10 - 4) + (3 - 2) = 7 per cent.

16. Colombia, Chile, Argentina and Brazil operated such crawling peg systems successfully in the late 1960's and/or early 1970's. In Colombia small devaluations were carried out once or twice a week so that exchange rate changes were relegated to the inside pages of the newspaper.
A third possible type of exchange rate harmonization, maintaining union members' exchange rates rigidly fixed with respect to each other(not permitting unilateral devaluation by a union member) is similar to adoption of a common currency and is discussed under section 8 below.

17. Costa Rica wanted to adjust its exchange rate in 1967-68 but was not permitted to do so by fellow members of the Central American Common Market (Nugent 1969, p.9).

18. For some estimates of the implications for exchange rates, resource allocation, and growth of various tariff-reduction programs in Chile see Taylor and Bacha (1971) and Selowsky (1971).

19. In none of the integration schemes established to date does comprehensive regional planning play a significant role, development plans being in all cases based on national rather than regional resource endowments. Some sector planning has taken place particularly in the services sector; transport, communications, energy production etc., and in isolated cases some planning of industrial subsectors has been attempted such as the steel industry in Latin America (Kahnert et al 1969 p.89).

20. Cooper (1969) has shown that even if coordination of macro-policies is not desirable on static-efficiency grounds it may yield significant gains from better mutual "timing." However, one of the key conditions necessary to obtain this result, high mobility of capital between countries, does not apply in the context of the Andean Group.

21. Diaz-Alejandro (1970, p.24). Factor flows have caused political problems in other common markets. One of the causes of the trouble between El Salvador and Honduras in the Central American Common Market which erupted in the "football war" was migration between the two countries. In the East African Common Market socialist-leaning Tanzania was forced to impose controls on capital movements to check the flow of capital to more conservative Kenya and Uganda in March 1971 (I.M.F., International Financial News Survey, XXIII, 12, March 31, 1971). Factor flows do not necessarily follow the lines set up by common markets. Eighty per cent of the migrant workers in the E.E.C. are from non-market countries (New Statesman, 9 April 1971 p.488).

22. Article 30 of Decision No. 24, "Common Rule of treatment for foreign capital and on trademarks, patents, licences and royalties," Committee of the Cartagena Agreement Third Period of Extraordinary Sessions, Lima, Peru, Dec 14 to 31, 1970 (Unofficial translation). For the full text of this Common Rule see Morawetz (1972a).

23. Peruvian Times, Nov 12, 1971 p.2

24. For some evidence on this question in other less developed countries, see Wells (1970).

25. Only the most important consitions are discussed here. For some more conditions see Fleming (1971).

26. Fully flexible wages and prices would serve as an alternative substitute for changes in relative exchange rates, as would the adoption of a highly responsive fiscal redistribution system, whereby members with higher unemployment rates, say, received transfers from those with lower rates. However, flexible wages and prices and smoothly functioning redistributive systems are rarely found in practice.

27. Factors influencing the position and shape of the unemployment-inflation curve include the rate of growth of productivity, the degree of trade union aggressiveness etc. It is not necessary that similarity should prevail in each of these respects for members to have similar unemployment-inflation curves; it is enough if differences in one respect are offset by differences in another. For example, higher productivity growth could be just offset by more aggressive trade unionism.

28. Little progress has been achieved on currency unification in other integration schemes. The E.E.C. and LAFTA countries maintain their own currencies. In East Africa a currency board operated until 1966 issuing a single East African currency, but now each country has its own central bank issuing national currencies. In UDEAC a uniform currency is used but this is because all countries are members of the franc zone rather than as a result of the regional integration scheme. In Central America a clearing house was established in 1961 and some steps have been taken in the direction of monetary union (Kahnert et al, 1969, p.89).

REFERENCES

BALASSA, B., The Theory of Economic Integration, Homewood, Illinois, Richard D. Irwin, 1961.

BALASSA, B., "Tariff Protection in Industrial Countries: An Evaluation," Journal of Political Economy, LXIII, 6, Dec 1965, pp.573-94.

BHAGWATI, J. et al, Trade, Balance of Payments and Growth: Essays for C.P. Kindleberger, Amsterdam, North-Holland, 1971.

BRUNO, M., "The Theory of Protection, Tariff Change and the Value Added Function," mimeo, Jan 1971a.

BRUNO, M., "Market Distortions and Gradual Reform," mimeo, July 1971b.

COOPER, R.N., "Macroeconomic Policy Adjustment in Interdependent Economies," Quarterly Journal of Economics, LXXXIII, I, Feb 1969, pp.1-24.

DELL, S., Trade Blocs and Common Markets, London, Constable, 1963.

DIAZ-ALEJANDRO, C.F., "The Andean Common Market: Gestation and Outlook," Yale University Economic Growth Center Discussion Paper No. 85, 1970.

E.E.C., Tax Harmonization in the Common Market (the Neumark report), Customs Clearing House, 1963.

FLANDERS, M.J., "Comment: The Currency Area Problem," in R.A. Mundell and P. Swoboda, eds., Monetary Problems of the International Economy, Chicago, University of Chicago Press, 1969.

FLEMING, J.M., "On Exchange Rate Unification," Economic Journal,81, 323, Sept 1971, pp.467 - 88

JOHNSON, H.G., P. WONNACOTT and H. SHIBATA, Harmonization of Economic Policies Under Free Trade, Toronto, University of Toronto Press, c1968.

KAHNERT, F., P. RICHARDS, E. STOUTJESDIJK, P. THOMOPOULOS, Economic Integration Among Developing Countries, Paris, O.E.C.D., 1969.

KREININ, M.E., "Flexible Exchange Rates in a Common Market, and Suggested Implementation," Social Research, 27, April 1960, pp.105-110.

LIPSEY, R.G. and R.K. LANCASTER, "The General Theory of the Second Best," Review of Economic Studies, 24, 1, 1956, pp.11-32.

MACARIO, S., "Protectionism and Industrialization in Latin America," Economic Bulletin for Latin America, IX, 1, March 1964, pp.61-101.

McKINNON, R.I., "Optimum Currency Areas," American Economic Review, LIII, 4, Sept 1963, pp.717-25.

McKINNON, R.I. and W.R. OATES, "The Implications of International Economic Integration for Monetary, Fiscal and Exchange Rate Policy, Princeton Studies in International Finance, No.16, 1966.

MEADE, J.E., "The Balance of Payments Problems of a European Free Trade Area," Economic Journal, 67, Sept 1957 pp. 379-96.

MEADE, J.E., Problems of Economic Union, Chicago, University of Chicago Press, 1953.

MEADE, J.E., H.H. LIESNER and S.J. WELLS, Case Studies in European Economic Union: The Mechanics of Integration, London, Oxford University Press, 1962.

MORAWETZ, D., Customs Unions Among Developing Countries with special reference to the Andean Group, Ph.D. thesis, M.I.T., 1972a.

MORAWETZ, D., "Distribution of Benefits in Customs Unions: the Andean Group," mimeo, 1972b; and in Morawetz, 1972a.

MORAWETZ, D., "Common External Tariff for the Andean Group," mimeo, 1972c; and in Morawetz, 1972a.

MORAWETZ, D., "Transport and Communications in the Andean Group," mimeo, 1972d; and in Morawetz 1972a.

MUNDELL, R.A., "A Theory of Optimum Currency Areas," American Economic Review, LI, 4, September 1961 pp. 657-65.

NUGENT, J.B., "Toward a Policy Planning Model for Central America," mimeo, 1969.

NYE, J.S.(ed.), International Regionalism, Boston, Little Brown and Co., 1968.

NYE, J.S., "Comparing Common Markets: A Revised Neo-Functionalist Model," International Organization, XXIV, 4, 1970 pp.796-835.

OHLIN, B., "Some Aspects of Policies for Freer Trade, " in Baldwin et al, Trade, Growth and the Balance of Payments: Essays in Honour of Gottfried Haberler, Chicago, Rand-McNally, 1965.

REDDAWAY, W.B., "The Implications of Freer Trade for British Taxation," British Tax Review, March 1958 pp. 71-9.

ROSEMBUJ, T.R., "El impuesto sobre el valor agregado en el proceso de integracion latinoamericana," Comercio Exterior

SELOWSKY, Marcelo, "Politica Cambiaria y Asignacion de Recursos," CIEUC, Universidad Catolica de Chile, 1971.

SHOUP, C.S., ed., Fiscal Harmonization in Common Markets: Vol. I Theory, Vol. II Practice, New York, Columbia University Press, 1967.

SULLIVAN, C.K., The Search for Tax Principles in the European Economic Community, Commerce Clearing House, 1963.

TAYLOR, L. and E. BACHA, "Growth and Trade Distortions in Chile, and their implications in calculating the shadow price of foreign exchange," Economic Development Report No. 184, Harvard Development Research Group, 1971.

TINBERGEN, J., On The Theory of Economic Policy, Amsterdam, North-Holland, 1952.

WELLS, L.T. Jr., "Foreign Investment in Joint Ventures: Some Effects of Government Policies in Less Developed Countries," Harvard Development Advisory Service Economic Development Report No. 167, Nov 1970.

YEAGER, L.B., "Exchange Rates Within a Common Market," Social Research, Vol. 25, Winter 1958, pp.415-38.