Adjustment Burdens, Potential Protectionism and the Vulnerability of Export-Led Growth

H. Peter Gray*

The Newly Industrializing Countries (NICs) have enjoyed spectacular successes in the growth of their exports of manufactured goods to the developed world and have, simultaneously, achieved impressive increases in their per-capita incomes. Any interruption to the growth of the NIC's exports would be likely to react back upon their developmental prospects by severely limiting demand in the more dynamic sectors of their economies. The problem of a rising wave of protectionist sentiment in the developed, manufacturing countries causes serious concern both for the NICs and for those other nations who would hope to follow in their developmental footsteps.

This paper examines the thesis that the rise of incipient protectionist sentiment may be attributed to the burden of adjustment experienced by the developed countries and that any severe inequality in the division of that burden is likely to aggravate global protectionist pressures. Section II provides preliminary evidence that the burden of adjustment has been unequally divided in the aftermath of the food and energy shocks of 1973 and 1974. Possible strategic solutions are considered briefly in the conclusion.

^{*} Rutgers University.

I. Protectionist Pressures and Adjustment Burdens

Krueger (1980) identifies six NICs: Brazil, Hong Kong; Korea; Mixico: Singapore and Taiwan. The criterion for inclusion in this select group is that the country's share of the world's total manufactured exports in 1976 shall exceed 0.4 percent and that the share shall have doubled since 1963. India and Yugoslavia met the share but not the growth dimension of the criterion. These six nations have not all achieved a state of labor shortage but all may be said to be entering into or to be approaching the stage of selfsustained growth. The self-sustaining quality of their growth is more than usually vulnerable because of the NIC's heavy reliance upon the growth of manufactured exports. The success of the NICs is, in large measure and particularly for the Asian NICs, testimony to the effectiveness of rationalization of the domestic economy and export-led growth. But this strategy depends directly upon the willingness of the developed nations of the world to accept increases in imports at the requisite rate. The strategy may not be available for more than a small number of developing countries at any one time and, hinging as it does upon the continued ability of developed nations to accept steady increases in imports, it could become a victim of its own success if protectionism suddenly halts growth of or brings about an absolute reduction in the volume of manufactured imports from the developing world. If the development process is to continue and other countries are to rely on export-led growth as the current NICs phase themselves out of low-technology goods, protectionism must not become worse. Protestations of faith in the ultimate efficacy of the market mechanism and de-emphasis of the actual costs of adjustment may not be a sufficient guarantee for the continuance of the liberal trading system.

The fundamental behavioral assumption is that the burden of adjustment imposed on an economy is determined by the rate of increase of absorption of manufactured imports from the NICs. Any increase in the burden of adjustment will contribute to the growth of protectionist sentiment in the importing nation (Walter,

¹ The burden of adjustment is seen to increase with the rate of growth of imports and with the rate of growth of the rate of growth (both the first and second derivatives of burden with respect to the rate of growth of imports are positive).

1972). Export-led growth becomes vulnerable if developed countries reduce their willingness to accept steady increases in manufactured imports. There are two possible scenarios by which exportled growth can be weakened by protectionism in export markets: individual action and group action. If the protectionism is undertaken on an individual basis it may be expected to occur in a country with a large burden of adjustment and, therefore, in a country with a high-rate of growth of manufactured imports. If protectionism is instituted on a group basis, all nations will institute restrictions simultaneously but not necessarily of the same severity. Both scenarios depend upon the degree of inequality of the burden of adjustment.

If an individual country restricts imports of manufactured goods form the NICs it is likely that country will be a country with a high growth rate of imports. Such measures obviously affect the potential growth of NIC manufactured exports adversely but it leaves room for some trade diversion as attempts to place exports in other developed countries are increased. But the restrictions will probably have been imposed in what was a relatively-congenial market and the substitute markets have to be sought in nations which have records of being less willing to accept high rates of growth of manufactured imports. If protectionism is introduced on a group basis, the developed nations all take similar positions and the strategy of substitution will be ineffectual.

If individual nations bear unequal shares of the burden of adjustment to the growth of NIC exports, the probability of individualistic action is high. But the substitution process will tend to change the degree of inequality of burden and entice other nations to impose restrictive measures against NIC exports. If the nominal leader in matters of North/South commercial policy is the country exposed to the largest burden, then the possiblity of bloc action is enhanced. Thus, if the United States is shown to bear an undue share of the costs of adjustment to the surge in manufactured exports by the NICs, the (relatively) liberal international trading order which the world currently enjoys is endangered.²

It is useful to think of import penetration as bringing about ad-

² The question of the inequality of the burden of adjustment (and therefore of any 'undue' share) is by no means a precise concept but small differences are not the problem (see Table 1 below).

justment costs of four different degrees of severity: no cost, benign, accelerated; and chronic. No-cost adjustment occurs when the home, import-competing industry is growing absolutely and losing its share of the domestic market. This is clearly a case of negligible interest. Benign adjustment occurs when the domestic industry is forced to reduce output at a rate of less than the industry-specific factors of production are depreciating naturally. This adjustment process also involves negligible short-run costs of adjustment since presumably young workers are attracted into expanding industries.

Accelerated adjustment occurs when the industry is being forced to contract at a rate which involves displacing workers and closing down productive capacity so quickly that industry-specific human and physical capital become valueless. Cost of adjustment associated with excessively fast import penetration in an industry can be eliminated by 'phase-out' or 'senile industry' protection whereby an industry is given protection at a decreasing rate for a predetermined duration. This kind of adjustment is important if the growth of manufctured exports by the NICs is not to be severely inhibited. But the degree to which senile industry displacement generates protectionist sentiment is directly related to the availability of employment of appropriate levels of general human capital elsewhere in the economy. Protectionist sentiment is liekly to be stronger the less prosperous the economy when displacement of domestic workers by import competition actually takes place and the more widespread the breadth of import penetration. This relates to the ease or difficulty with which displaced workers can find alternative employment - albeit at lower wage-rates. If the import penetration occurs when the economy is already suffering from excess capacity, job vacancies will be scarce. If a single industry is extremely hard hit, there will be an excess of workers with very similar general skills and there will be 'congestion' in the maket for that particular skill level. Parsons (1980) shows labormarket congestion to exist when overall unemployment rates are high but is unable to identify congestion in the regional/skill dimension. This failure may be attributable to the very short lag (one month) incorporated in the empirical test. Alternatively, if industries using workers with similar skill levels are put under pressure at the same time, labor market congestion will be likely to

³ Human capital may be said to depreciate as the workers in which it is embodied leave the workforce voluntarily.

take place and political resistance to imports will be pro tanto enhanced. In Canterbery's terms (1979), this is a problem of short-run structural unemployment requiring workers either to relocate, or to upgrade their skills or to donwgrade their jobs. To the extent that NIC exports substitute for goods using approximately the same type of labor as far as human capital is concerned, rapid growth of NIC exports may be especially likely to cause labor-market congestion.

Chronic adjustment costs are generated when a nation cannot re-employ the displaced factors of production. This is the essence of structural unemployment when the skills required for the job vacancies do not match the skills of the unemployed. This is an example of market failure and will usually involve the inability of a developed importing country to avoid structural unemployment of its low-skilled and unskilled workers. (The worker actually displaced may not end up being unemployed but may bump a lowerskilled worker out of a job by downgrading his/her own qualifications). There are limits to the amount and the degree to which displaced low-skilled workers can be trained to find new jobs without merely displacing another equally (un)skilled person. The problem is simply a mismatch between the mix of qualifications required for actual jobs and the mix of qualifications available in the work force (Canterbery, 1979). Industries such as footwear and apparel (SITC 84) are important export avenues for countries which are beginning to develop the export of manufactured goods as a leading sector but it is these very industries which induce chronic adjustment costs in the developed nations. Certainly, the United States has not had great success with programs designed to eliminate the need for protection in these industries by enhancing the potential of its work force to acquire human capital. If protectionism is to be avoided, very effective training programs must be instituted and even these cannot guarantee success if the domestic sector also substitutes capital for low-skilled labor. In this way, reserve armies of low-skilled unemployed and social strains are created.

As a single measure of the costs of ajdustment imposed on dif-

⁴ Canterbery (1979) identifies a set of compartmentalized labor markets partitioned by differences in general levels of human capital and geography and views short-tun movement among these markets as quite small giving a theoretical basis for the concept of labor market congestion.

ferent countries, the rate of growth of imports as a percentage of GNP is probably the best. No measure is perfectly satisfactory but the rate of import growth as a percentage of GNP automatically eliminates any distortions that might be introduced by world inflation and changes in exchange rates. The measure also indicates the speed of adjustment imposed upon the importing country and, therefore, the probability that labor market congestion occurs for specified skill levels. It will also reflect the degree to which chronic adjustment costs are imposed. At the degree of aggregation for which data are available, the absolute degree of penetration (imports divided by GNP) is not very illuminating - "the increase in market shares of broad commodity groups conceals a highly differentiated picture" (OECD, 1979, p. 8). The absolute degree of import penetration (tables 2 and 4) does serve to show the degree to which the importing nation has allowed its manufacturing industries to be subjected to import pressure and provides confirmation of the hypothesis of high rates of growth of imports relative to GNP also generate high levels of import penetration.

But the increase in manufacturing capacity of the NICs (and in other developing nations) is not the only disturbance experienced by rich nations during the past ten years. The developed world as a whole had been attempting, since 1974, to adjust to the fourfold increase in oil prices and, in addition, the United States had been attempting to adjust to the overvaluation of the dollar between the mid-sixties and 1973. It is by no means true to suggest that the burden of adjustment to the oil crisis was evenly divided, but it can be argued that the costs of adjustment to increased exports from the NICs were greater after 1974 for all developed nations.⁵

The hypothesis to be tested is that it is possible for individual nations which are members of the same bloc, to bear quite unequal shares of the total costs of adjustment to a surge in the export capacity of a definable group of fast-growth nations. The second strand of the hypothesis is that any inequality of the burden will be magnified after 1973 because of the large concomitant adjustment strains imposed on the importing nations by the food and oil shocks.

⁵ See Gray (1981) for evidence that the inflationary burden, at least, was unequally divided.

II. The Data

Data were collected for imports by six developed 'countries' from the NICs at the one digit level. The developed countries were: Canada; the European Economic Community (the original six countries); Japan; Sweden; the United Kingdom and the United States. The data were collected for the four one-digit SITC categories that comprise manufactures goods: 5; 6(less 67 and 68); 7 and 8. Imports from NICs are reported as percentages of GNP for the countries concerned for 1968, 1973 and 1978 (Table 2). These data are then used to compute growth rates over five year periods: 1968 to 1973 and 1973 to 1978. Growth rates are quinquennial rates and use the 1973 ratio of imports to GNP as a base. This procedure has the disadvantage of constraining the growth in the earlier period to a maximum of 100 percent but has two advantages: it avoids spectacular growth rates occasioned by computation on very small bases of 1968 improts; and the percentage growth rates have the same base so that the two numbers identify relative changes in the absolute magnitude of the ratios (and therefore provide an approximate measure of any change in the adjustment burden of NIC exports between the two periods).

Table 1 shows the growth rates of manufactured imports from the NICs for the two periods which roughly correspond to the preand post-energy price hike. During the second period, protectionist sentiment may be said to have grown impressively and the developed world was suffering not only from the spectacular successes of the NICs but also from the staccato real shocks that impinged upon the world in late 1973 and early 1974.

All six 'countries' showed robust rates of increase of manufactured imports from the NICs in the first period. The rates of growth experienced by Sweden and the United Kingdom were noticeably smaller than those of the other four nations and that of Japan somewhat larger. Asian NICs seem to account for most of the growth of manufactured exports although Brazil and Mexico both increased their exports to the developed world substantially during the same period.

It is the second period which is of greater interest. It is in this period that market differences in import growth appear among the individual countries. Japan, probably the most severely impacted

by the energy crisis (but not by inflation) showed an actual decline in the ratio of imports to GNP. This decline applied to both the Latin American and the Asian NICs.

Table 1
GROWTH RATES OF NIC IMPORTS, 1968-73 AND 1973-78^a

COUNTRY	PERIOD	TOTAL NICs	ASIAN NICs
Canada	68-73	63.61	60.81
	73-78	31.55	34.45
EEC (6) ^b	68-73	70.69	72.77
	73-78	66.83	60.67
Japan	68-73	84.89	88.29
	73-78	-9.56	-7.46
Sweden	68-73	42.26	38.84
	73-78	57.51	58.47
United Kingdom ^C	68-73	47.21	46.72
	73-78	8.07	6.21
United States	68-73	67.14	64.82
	73-78	86.81	93.54

a SOURCE. See Table 4. The figures given are quinquennial rates of increase of imports as a percentage of GNP. Both periods use 1973 data as the base: this procedure has the advantage of reducing the exaggeration of growth rates caused by the very low shares existing in 1968 but it constrains growth rates in the first five-year period to be less than 100 percent. The procedure used shows the relative magnitudes of the absolute changes in the ratios.

The growth rates for the United Kingdom fell off sharply. The E.E.C. maintained high rates rates of import growth even though the growth rate declined. Sweden increased its growth rate of imports to GNP. The United States increased its imports of manufactures from the NICs substantially. This suggests that the United States was either faced with more severe vulnerability of its manufacturing industries and/or its markets were more open and attractive to foreign imports. On the basis of the data contained in Table 1, the hypothesis that the United States has been bearing a larger than proportionate share of the adjustment costs inherent in the surge of NIC exports of manufactures receives a good deal of

^bComparable data for total NICs plus 'Africa' are: 1968-73, 70.06, 1973-78, 48.76.

^cComparable data for total NICs plus 'Africa' are: 1968-73, 39.69, 1973-78, 12.63.

support.⁶ The United Kingdom, Japan and, to a lesser degree, Canada all increased their imports from the NICs in the second period by substantially less than in the first period.

The hypothesis that U.S. markets are more open to imports from foreign suppliers and that their size attracts would-be exports to attempt to penetrate them, also receives a substantial measure of support from the absolute values of the ratios in Table 2. The United States has the highest ratio of imports from the NICs to GNP of any of the six nations assessed. This relationship does not

Table 2
IMPORTS AS A PERCENTAGE OF GNP

COUNTRY	YEAR	NICs	ASIAN NICs	NICs PLUS AFRICA*
Canada	1968	0.1430	0.1341	
	1973	0.3930	0.3422	_
	1978	0.5170	0.4601	-
EEC (6)	1968	0.0546	0.0443	0.0703
	1973	0.1863	0.1627	0.2348
	1978	0.3108	0.2614	0.3493
Japan	1968	0.0582	0.0424	_
	1973	0.3851	0.3621	
	1978	0.3483	0.3351	_
Sweden	1968	0.1499*	0.1452	_
	1973	0.2596	0.2374	
	1978	0.4089*	0.3762	_
U.K.	1968	0.2784	0.2643	0.3556
	1973	0.5274	0.4961	0.5896
	1978	0.5700	0.5269	0.6641
U.S.A.	1968	0.1395	0.1143	
	1973	0.4246	0.3249	_
	1978	0.7932	0.6288	_

^{*} Africa is taken as excluding South Africa and the northern tier of states.

^{**} SITC 84 (clothing) alone accounts for about two-thirds of the rates in 1968 and 1978. These shares are unusually high.

⁶ The hypothesis is not, of course, susceptible of absolute proof in any operational sense.

hold for imports of apparel (Table 4) because Canada, Sweden and the United Kingdom all have higher or approximately equal absolute ratios. The relation does hold strongly in apparel for comparisons with EEC and with Japan. These higher absolute values of the ratios for the United States might have been expected in the 'sixties because of the United States' pre-eminence in manufcturing and technology at that time. In 1978, that pre-eminence had disappeared and there is no reason to expect on a priori ground that the United States should have absolutely larger ratios of import penetration from the NICs.

It was possible that the EEC and the United Kingdom, by virtue of their close ties to African developing nations, might have been absorbing large amounts of manufactured imports from African developing nations rather than from NICs. The inclusion of developing Africa south of the Sahara does not alter the growth rates appreciably but it does augment the UK penetration ratio (see Table 2).

Chronic costs of adjustment are closely associated with imports in industries which use low-skilled labor intensively. Footwear and apparel are prominent in this group. Only data for apparel (SITC 84) are available and these are reported in Tables 3 and 4. Here the pattern repeats itself in terms of the change in the ratios but the discrepancies in import behavior of Japan, the United Kingdom, and the United States are magnified. It is to be expected that countries with better facilities for employing displaced low-skilled workers in other industries would have higher growth rates of imports of apparel (if only because the burden of adjustment would be smaller). This is certainly true for West Germany which had ratios of apparel imports to GNP and rates of growth of those ratios well in excess of those of the EEC as a whole. During this period, German apparel manufacturers did make greater use of subcontractors located in Yugoslavia and CMEA countries.8 The very high rates of growth of apparel imports into the United States, particularly in the 1973-78 period, suggest that voluntary export restraints were not very effective and support the allegation of a representative of the International Ladies Garment Workers Union

⁷ The German ratios of SITC 84 imports to GNP were (in percentage comparable to Table 4): 1968, .0009; 1973, .2506; 1978, .4471.

⁸ West Germany did enjoy the ability to repatriate *Gastarbeiter* when demand slackened. For a description of German subcontracting in apparel, see Renshaw (1980, pp. 194-5).

Table 3
GROWTH IN IMPORTS OF CLOTHING (SITC 84) FROM NICs (IN PERCENTAGE)

COUNTRY	PERIOD	FOTAL NIC IMPORTS ² GNP	ASIAN NIC IMPORTS ^a GNP
Canada	68-73	50.23	48.22
	73-78	28.79	32.44
EEC (6)	68-73	68.81	67.82
	73-78	45.83	46.83
Japan	68-73	87.48	87.46
	73-78	-12.64	-12.50
Sweden	68-73	24.89	23.97
	73-78	35.66	26.37
United Kingdom	68-73	47.49	91,31
	73-78	0	. 0
United States	68-73	60.23	57.48
	73-78	96.44	104.06

^aThe measure gives the change in the ratio of imports to GNP and both numbers use the 1973 ratio as the base: see Table 1, Note a. *Source:* Table 4.

who suggested that U.S. bilateral arrangements under the Multi-Fibre Agreement were markedly less restrictive than those imposed upon developing nations by other developed countries. In fact, the rate of increase of apparel imports to GNP for the United States may be slightly exaggerated by the increased exploitation of U.S. Tariff Schedule item 807.00. This item allows imports of parts assembled abroad to be reimported free of duty so that duty is paid only on value-added abroad. In 1968, imports of apparel under item 807.00 amounted to 2.8 percent of total apparel imports by value. This percentage increased in 1973 to 6.7 and, in 1978, to 7.8. Approximately one third of the value of goods imported under item 807.00 were exported from the United States and came in free of duty. (U.S. International Trade Commission, 1980, pp. 45-7).

⁹ In a personal conversation with the author.

Table 4
APPAREL IMPORTS AS A PERCENTAGE OF GNP

COUNTRY	YEAR	NICs	ASIAN NICs
Canada	1968	0.0657	0.0656
	1973	0.1320	0.1267
	1978	0.1700	0.1678
EEC (6)	1968	0.0213	0.0213
	1973	0.0683	0.0662
	1978	0.0996	0.0972
Japan	1968	0.0121	0.0121
	1973	0.0965	0.0963
	1978	0.0843	0.0843
Sweden	1968	0.1053	0.1053
	1973	0.1402	0.1385
	1978	0.1902	0.1881
United Kingdom	1968	0.1080	0.1070
	1973	0.2057	0.2047
	1978	0.2051	0.2039
United States	1968	0.0381	0.0368
	1973	0.0958	0.0865
	1978	0.1880	0.1765

Source: All trade data are thane from OECD, Trade by Commodities Series C, (Paris, various years). GNP data and exchange data were taken from International Monetary Fund, International Financial Statistics (various years).

Conclusion

The hypothesis that nations can divide unequally the burden associated with the surge of manufactured exports by the NICs has received a good measure of evidential support for the second quinquennial. In particular, Japan and the United Kingdom (and to a lesser degree, Canada) have used relative reduction in imports of manufactured goods from the NICs as a way of reducing the adjustment costs on them by the oil and food shocks. Somewhat surprisingly, the United States has shown the biggest rate of growth of imports of manufactured and, by assumption, has subjected itself to the greatest burden of adjustment. Current protectionist pressures in the United States in the 1980s are likely to be a reflec-

tion of this very high rate of growth of manufactured imports. At a minimum, the leadership of the United States in maintaining the continuation of the current, relatively liberal, world trading order will weaken.

First, the developed nations must take more forceful steps to make the adjustments which a liberal world trading order requires. These problems pose severe difficulties if the adjustment costs involved are inherently chronic and the United States, at least, has enjoyed little success with programs designed to retrain workers for more complex tasks. Second, the developed nations, themselves, must recognize their own interdependence and attempt to develop a means by which some equalization of the burdens of adjustment can be achieved. Finally, the NICs themselves may need to take cognizance of the interrelationship between the burdens of adjustment in their customer nations and the continuation of their successful reliance upon export industries as leading sectors in the development process. The NICs may need to create their own trade policy group which will encourage greater equality of growth rates of imports in the developed world.

References

- Canterbery, E. R., "A Vita Theory of Personal Income Distribution," Southern Economic Journal 45, July, 1979.
- Gray, H. P., "Oil-Push Inflation: A Broader Examination," Banca Nazionale del Lavoro Quarterly Review, No. 136, March, 1981.
- Krueger, Anne O., "The Newly Industrializing Countries: Experience and Lessons," paper prepared for the Congressional Research Service, "An International Economic Agenda: Major Issues for the 97th Congress," November 1980.
- O.E.C.D., The Impact of the Newly Industrializing Countries, Paris: OECD, 1979.
- Parsons, D. O., "Unemployment and

- the Allocation of Labor, and Optimal Government Intervention," American Economic Review 70, September, 1980.
- Renshaw, G. (ed)., Employment, Trade and North-South Cooperation, Geneva, International Labor Office, 1980.
- Trade Commission, Import Trends in TSUS Items 806, 30 and 807.00, U.S. International, Washington: January, 1980.
- Walter, Ingo, "How Trade Policy is Made: A Politico-Economic Decision System," in R. G. Hawkins and I. Walter (eds.), The United States and International Markets, Lexington, Mass.: Lexington Books, 1972.

