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The Impact of *Southern* Regional Trading Arrangements on Trade Regime Bias: Some Evidence for CARICOM

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Abstract

Trade regime bias, in particular anti-export bias, is likely to be a feature of 'southern' regional trading blocs of small, relatively inefficient countries, with relatively high external tariffs. This paper explores the reasons for this, and provides evidence of the pattern of trade regime bias prevailing in two CARICOM countries, Barbados and Trinidad. The paper also investigates the extent to which trade regime bias can be lowered through country-specific policy reforms, such as the lowering of non-tariff barriers, and the extent therefore to which regional commitments may constrain trade policy reform in developing countries.

I. Introduction

Trade policy reform has been a key element in the policy-conditioned lending programmes of the last decade. The aim has been to encourage more outward-oriented development strategies through the lowering of trade regime, and in particular anti-export bias. Trade regime bias, in particular intra-tradeables bias, exists where there are differential incentives induced by trade and exchange rate policies to produce importables and exportables. A greater incidence of interventions in the importables than

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the exportables sector leads to a tendency for the bias to be of an anti-export nature. This is particularly the case for developing countries pursuing import substitution policies, and there is now a considerable amount of documentary evidence of the phenomenon.[1] By liberalising trade within a regional trading bloc, it is possible, but not inevitable, that trade regime bias is reduced. The outcome, as will be shown in this paper, depends on the nature and membership of the regional grouping and on external tariffs of the member states. The less competitive is regional production relative to global production and the higher are external tariffs the greater is the degree of anti-export bias that will persist even with fully liberalised regional trade. The implication is that membership of a regional trading arrangement may serve as a significant constraint on the elimination of trade regime bias in the case of many developing countries. This may be a significant consideration for developing countries undertaking trade policy reforms aimed at promoting exportables production and exports, and therefore a significant constraint on the effectiveness of a structural adjustment programme.

The aims of this paper are to identify the nature and sources of trade regime bias in the presence of geographically (regionally) discriminatory tariffs and to quantify the trade regime bias associated with membership of the CARICOM[2] regional grouping (using structure of protection information for Barbados and Trinidad and Tobago). This will provide a basis for

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1. For earlier work see for example Krueger[1978] and Balassa[1982], and for more recent evidence see several of the contributions in Milner[1990a] and Milner [1990b].
2. The membership of CARICOM (Caribbean Community) is comprises Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St Kitts and Nevis(including Anguilla), St Lucia, St Vincent and the Grenadines, and Trinidad and Tobago. CARICOM has developed into a more integrated regional grouping(including the transitional harmonisation of tariffs to create a common external tariff) out of the earlier free trade area(CARIFTA). The combined populations of these countries(1988) was less than 6 million, with only two countries (Jamaica and Trinidad) with a population of more than one million. The average per capita income is about US$1,800. The combined GNP of CARICOM is therefore under $10 billion which makes it smaller in economic terms than Ecuador(which might well be viewed itself as a small country).

investigating the extent to which *southern* integration arrangements which involve commitments to common commercial policies may constrain the effectiveness of unilateral trade policy reform in many developing countries, and for considering whether regional reforms may be used to complement unilateral reforms.

The remainder of the paper is organised as follows. Section II describes the nature of trade policy regimes that exist in Barbados and Trinidad as a result of both regional and country-specific measures. Section III provides a framework for investigating trade regime bias in the context of geographically discriminatory commercial policies. This framework is applied in section IV in the context of CARICOM to evidence on the structure of protection for Barbados and Trinidad. Section V discusses the implications of the results for unilateral trade policy reforms and for *southern* integration arrangements. Finally section VI provides some conclusions.

II. National and Regional Trade Policies in CARICOM

The trade policy regimes operative in Barbados and Trinidad reflect both the effects of regional commitments arising out of membership of CARICOM and of unilateral measures adopted by the respective national governments. In order to understand the relative importance of nationally and regionally-determined policies and how the separate elements interact so as to influence the protective structure, we set out in this section a brief summary of the trade policy regimes operative in these two members of CARICOM.

A. Regional Measures

After a period of transitional adjustment (following the signing of the Treaty in 1973), a structure of CARICOM common external tariffs (CET) came into effect (in principle) on 1 January 1991. These tariffs are applicable only to imports from non-members of CARICOM. The CETs vary from 5% to 45% according to the type of product. The structure of CETs is summarised in Table 1. There is clear tariff escalation in this structure where non-competing inputs are involved. However, the conflicting pressures within the region to protect final goods, while simultaneously encouraging

Table 1
Structure of Common External Tariffs in CARICOM

	Group A (non-competing)	Group B (competing)	Group C (competing)	Group D (non-basic, non-competing)
Inputs				
Primary	5%	30%		
Intermediate	10%	20%		
Capital	10%	30%		
Final Goods	10% (basic category)	30% (basic category)	45%	30%

regional production of some intermediates are also evident. These conflicts and differences in production structures and income levels of the members mean that the harmonisation of tariffs is in fact not yet complete. Individual countries continue to operate suspensions (for indefinite or fixed periods) of specific CETs, in order to allow duty free access of specific products (*e.g.* certain meats, maize and soybeans in the case of Trinidad). There is also a fairly extensive list of conditional duty exemptions and reductions: relating to goods imported under specified circumstances or for specified purposes.

Except for specific provisions and circumstances (security, health, balance of payments difficulties *etc.*), the CARICOM articles require that intra-regional trade should be free of quantitative import restrictions (QRs), as well as free of tariff barriers. In practice this is not always the case. For either retaliatory or protective reasons, members may apply informal and discriminatory QRs against specific CARICOM sources. They tend to be concentrated on agricultural and agro-industry products where intra-regional competition is more evident.

B. National Measures

Given the protective motive for *illegal*, intra-regional QRs, QRs tend also to apply simultaneously against extra-regional imports in the same tariff lines. Indeed, it is these and other national measures (evident throughout CARICOM) rather than the CETs that define at present the extent of the extra-regional barriers to trade. The CARICOM articles do not restrict the ability

of member states to apply whatever quantitative import restrictions against extra-regional imports they wish to use. Thus the pervasive use across the membership of additional trade barriers against extra-regional competition besides CETs means that the protectiveness of the national, non-tariff measures tends not to be reduced by trade deflection through less protected entry points into the region.

The non-(CET) tariff measures used by national governments are broadly of two types, other border taxes and quantitative import restrictions. In the case of Barbados and Trinidad stamp duty at a uniform rate of 20% of CIF import value applies against extra-regional imports (of final goods). Since this duty is not levied on local production, it operates like a protective tariff; the effective protectiveness being increased by the pervasive availability of duty exemptions on imported intermediate goods. There is also a consumption tax in Barbados, which is leviable on all goods irrespective of origin. However for some products a higher tax rate (leviable on the tariff-inclusive cost of imports) is applied to extra-regional than intra-regional sourced goods. This differential consumption tax rate again serves as a protective tax.

Although both Barbados and Trinidad have begun recently to liberalise quantitative import restrictions, QRs were extensive in both countries at the start of this decade. Extra regional imports by Barbados in about one quarter of all tariff positions were subject to import license requirements, with quotas or flexible QRs applying in many of these. Imports in up to 70 tariff heading were prohibited: in the case of specific garments import prohibitions were alternatively described as items on a negative list! In the case of garment imports protection was also given by the setting of minimum import prices. A similar use of import licensing requirements and discretionary/flexible quotas for items on a negative list was evident in Trinidad. Some items had been removed by 1991 from the list, and further liberalisation was planned. But items that have been removed from the negative list are subject to an import surcharge (with rates up to 50%). These surcharges have been seen as some approximation to or compensation for the protection associated with the QRs. The scale of these surcharges and the tariff-equivalents of remaining quota-restricted imports means that national policies constitute, in general, a more important source of protection against extra-regional competition.

III. Regional Integration and Trade Regime Bias

Since we wish to concentrate on the production aspects of trade distortions, we can do so by measuring trade regime bias (B) in terms of how the net or effective price of exportables (X) changes relative to the change in the net price of importables (M) as a result of trade policy interventions. In other words

$$B = \frac{1+e_x}{1+e_m} \tag{1}$$

where $e_j = \frac{P'_{jD} - P'_{jw}}{P'_{jw}}$ (2)

is the effective rate of protection of good j, [$j = M$ or X] and P' is the net price. (D denotes distorted domestic prices and w denotes undistorted world prices.)

In the single intermediate input case with tariffs(t) and export subsidisation(s) only, effective rates of protection are given by the following expressions:

$$e_m = \frac{t_m - a_{im}t_i}{1-a_{im}} \tag{3}$$

and

$$e_x = \frac{s_x - a_{ix}t_i}{1-a_{ix}} \tag{4}$$

where a_{ij}[$j = M$ or X] is the share of tradeable input i in the value of output at world prices. Thus with the escalating tariff case ($t_m > t_i > 0$) and zero export subsidisation ($s_x = 0$), there is positive effective protection of importables ($e_m > t_m$) and negative net protection of exportables ($-a_{ix}t_i/(1 - a_{ix})$), and trade regime (anti-export) bias is present. The bias (B) ratio ⟨equation (1)⟩ is less than unity. In fact even if $t_i = 0$, *e.g.* there are input duty exemptions for exportables, and therefore $e_x = 0$, there will still be trade regime bias if $e_m > 0$. Only if both $e_m = e_x = 0$ (*e.g.* because of free trade) or $e_m = e_x > 0$ (*e.g.* because uniform intervention, $t_m = s_x = t_i$) will production distortions resulting from trade regime bias be avoided.

In the presence of non-discriminatory commercial policy, the nature of trade regime bias is dependent solely on the structure of protection. The extent of the bias can also be quantified in a straightforward manner (given input structure and nominal protection information) by estimating equation (3) and (4), and applying e_m and e_x to equation (1). The (net) protective effects of specific trade policy instruments in sales to the home and export markets can be clearly distinguished. Once we allow for geographically (regionally) discriminatory tariffs, the structure of effective protection and trade regime bias for members of regional trading blocs depends on both the structure of nominal protection and on the characteristics of the regional trading group.

If we assume the rest of the union to be large relative to the individual member and that constant costs in regional production prevail, then the effect of liberalising trade within the region only depends on the competitiveness of regional production relative to extra-regional production. Where there is no trade diversion induced by the regional discrimination the actual rate of effective protection in domestic sales is unaltered (relative to non-discriminatory tariff policy). This would apply if there was no competing regional production or if tariff-inclusive import prices sourced outside the region are still below regional prices. Where the discriminatory use of tariffs does induce trade diversion, the implications for effective protection in domestic markets depend (given the constant cost assumption) upon the competitiveness of regional production versus world production. In which case the effective rate of protection in domestic sales in competition with intraregional imports will vary from zero (assuming zero input tariffs) to the rate that would apply against extra-regional imports, as the union supply price for imports ranges between the tariff-exclusive and tariff-inclusive price of competing, extra-regional imports. Thus, in the constant cost case, the effective rate of protection in domestic sales falls with regional discrimination (relative to the non-discriminatory situation) as the cost competitiveness of regional production increases. This indeterminacy disappears, however, if we assume increasing costs for both domestic and regional production. Since trade diversion can now occur with regional producers pricing up to the maximum level permitted by the tariff on extra-regional imports, the effective rate of protection in domestic sales against competition from

extra- and intra-regional imports is the same for both a discriminatory and non-discriminatory output tariff.

In the increasing cost case where the union export supply schedule is positively sloped over its whole range for technological reasons or where regional production is small relative to both regional and global demand, the effective rate of protection or subsidisation on extra-regional exports depends on the structure of domestic interventions only, as in the absence of a regional trading arrangement. From equation (4) we can see that the effective rate of protection on exportables (e_x) can be negative or positive depending upon whether any nominal export subsidies (s_x) or input tariffs (t_i) separately or jointly apply. Given international and fiscal constraints on the use of export subsidies, the probability of positive protection is in fact low. In the case of intra-regional exports we assume the probability of free, but subsidised, entry to the regional market to be zero. Now the ***nominal*** rate of protection depends on the external tariffs that apply in regional markets; for convenience the home country's tariff is assumed to be common to all members of the regional trading arrangement. With increasing costs in the union, all producers in the region are able to price up to the tariff-inclusive price on extra-regional exports. The regional market can be viewed as an extended (protected) domestic market, and intra-regional sales can be treated as domestic sales. In the case of a competitive regional trading arrangement where globally-efficient production exists or where protected regional production can meet regional demand at constant cost over the relevant range, the rate of effective protection will tend to be lower. In the extreme where globally efficient producers lie within the union (under competitive market conditions) and the external tariff is wholly redundant; effective protection in extra-regional sales will range from zero (if $t_i = 0$) to a negative rate (if $t_i > 0$).

The conclusion to be drawn from his analysis is that the structure of effective protection and trade regime bias for members of regional trading blocs depends on both the structure of nominal protection and on the characteristics of the regional trading group. In the case of a regional grouping of small developing countries subject to increasing costs and a low probability that cost competitive production exists within the region, one would anticipate greater trade regime (anti-export) bias, than in the

case of a competitive, constant cost *union*, even for the same structure of external tariffs. We now turn to an examination of some empirical evidence on the structure of effective protection and trade regime bias for CARICOM.

IV. Trade Regime Bias in CARICOM

The existence of regional trading arrangements means that actual protection may diverge from potential protection because the production cost or price of other regional producers is likely to be unobservable on an across-the-board basis. It is necessary therefore to combine the standard techniques for quantifying effective protection with a qualitative assessment of the type of conditions that prevail within the region. In what follows the structure of protection is modeled on the assumption that the uncompetitive or increasing cost union case applies in the case of CARICOM. We may defend this assumption on the basis of the size of this regional grouping and of its technological development.

Table 2 summarises the results of applying firm-specific input data[3] for a sample of 52 manufacturing firms in Barbados and nominal tariff[4] data for 1988/89 to extended versions of equations (3) and (4). Allowing for multiple tradeable inputs and non-traded inputs, the estimating equation[5] was of the form:

3. The data was collected during fieldwork in Barbados as part of a study commissioned by the Government of Barbados. Questionnaires, supported by follow-up interviews, were used to obtain detailed information on production costs(traded and non-traded inputs) and on sales(local, CARICOM and non-CARICOM).
4. Scheduled tariff rates, rather than collection rates, are reported here, since an important concern in the present study is with the potential impact on the common external tariff on trade regime bias. Estimates using collection rates are available from the author on request.
5. The manner in which non-tradeable inputs(Σa_{nj})influence effective protection depends upon how their prices alter as a result of protection. The procedure adopted here was to treat them as if they were tradeable with a zero tariff applied. This is often referred to as the Balassa method. The alternative Corden method treats non-traded inputs as value-added by primary inputs.

Table 2

Effective Protection by Sectors and Markets: Barbados (1988/89)

Sector	The Structure of Effective Protection[1](%)			
	in Domestic Sales		in Export Sales	
	v.v. Extra-Regional Imports[2] (1)	v.v. Intra-Regional Imports (2)	Intra-Regional Exports (3)	Extra-Regional Exports[3] (4)
(a) Processed foods & drinks	284(324)	284	284	–42(+11)
(b) Furniture & wood products	353(173)	353	353	–33(+17)
(c) Garments	207(464)	207	207	–34(+18)
(d) Metal & glass products	232(219)	232	232	–42(+41)
(e) Paper, printing & plastics	119(210)	119	119	–33(+23)
(f) Miscellaneous	99(150)	99	99	–30(+21)

Notes: 1. Averages of firm-level estimates.
2. Estimates based on international price comparisons to capture the effects of non-tariff barriers, such as the negative list quantitative restrictions and minimum CIF values, that Barbados operated at this time
3. Alternative estimate which makes allowance for compensatory export measures.

$$e_j = \frac{t_j(s_j) - \sum a_{ij} t_j}{1 - \sum a_{ij} - \sum a_{nj}} \qquad (4)$$

where $\sum a_{nj}$ = total share of non-traded inputs in the value of output at world prices.

The free trade technological coefficients (a_{ij}) in equation (4) are not directly observable from cost accounting information supplied by firms that are operating in a world where input and output prices are distorted by trade policy interventions. The observed, distorted coefficients (a'_{ij}) had therefore to be multiplied by $(1 + t_j)/(1 + t_i)$ in order to obtain estimates of the required a_{ij}. Rates of nominal output protection (t_j) and nominal input taxation (t_i) were calculated at the firm-level, by matching up firm's products and inputs with tariff lines. It was possible therefore to calculate an effective rate of protection by product line for each firm. In the case of multi-product firms it was necessary to allocate non-separable expenditures on

non-tradeables on a proportional basis (*i.e.* the share of each product in the total value of a firm's production) to each product.

The estimates in columns (1), (2) and (3) in Table 2 relate to different dimensions of the extended *domestic* market and are sector averages of the product level estimates. They relate to all external border taxes on imports, not just the scheduled customs duty ⟨see section II⟩. Note that the earlier analysis has established that under the conditions prevailing in CARICOM, it is the protection against efficient, extra-regional production that determines the protective structure against all sources of supply and within the region as a whole (if we assume common or similar protection against extra-regional imports throughout the region). For comparative purposes column (1) also reports in brackets an alternative set of estimates of nominal protection (capturing both tariff and non-tariff barriers) based on comparisons of Barbadian and international prices for samples of specific products. They suggest that the estimates of effective tariff protection tend in general to be downwardly biased, and that there is scope for reducing trade-regime (anti-export) bias through the reform of country-specific measures *i.e.* through the liberalisation of non-tariff barriers that are not constrained by Barbados' membership of CARICOM. It is quite clear from the results in Table 2 that there is currently substantial trade-regime bias. This is captured also in the summary indices of trade regime bias in Table 3, which report the application of the information in Table 2 to the formula for bias (B) in equation (1). ⟨The alternative indices (B_1 and B_2) should be viewed as limits on the range of bias that may be induced by the structure of effective protection: B_1 as a lower limit and B_2 as an upper estimate.⟩ In only one case does the index rise above 0.5: anti-export bias increasing as the index tends toward zero and further away from unity. Exports produced for extra-regional sales are absolutely disprotected by the tariff structure (*i.e.* by input taxation), where there are no compensating export incentives. In the case of Barbados there are general exemptions on specific intermediate imports and exemptions to specific producers. There are also selective export incentives available, such as a lower profit tax rate on profits from export sales. Allowance for these exemptions and an estimate of the nominal subsidy-equivalent of these measures results in the alternative effective rates of protection on export sales shown in brackets in column (4) of Table 2. These measures eliminate the

Table 3
Trade Regime Bias in Barbados (1988/89)

Sector	Alternative Bias Indices		
	Current		Hypothetical
	B_1	B_2	B_3
Processed foods & drinks	0.14	0.29	0.45
Furniture & wood products	0.15	0.43	0.51
Garments	0.12	0.38	0.40
Metal & glass products	0.17	0.44	0.48
Paper, printing & plastics	0.22	0.56	0.49
Miscellaneous	0.28	0.61	0.36

1. B_1 uses the highest estimate of e_m and the lowest estimate of e_x for each sector. B_2 uses the lowest estimate of e_m and the highest estimate of e_x for each sector. B_3 assumes a reformed structure of interventions based on common external tariffs ($t_j = 45\%$, $t_i = 20\%$) and the current export subsidisation levels.

absolute disprotection of exportables, but not the relative disprotection: as Table 3 shows substantial anti-export bias remains. ⟨This distinction between absolute and relative protection and disprotection has been emphasised in the work on true protection and shifting of the burden of protection between sectors, see for example Sjaastad [1980] and Greenaway and Milner [1987].⟩ Since duty-exemptions only tend to remove[6] absolute disprotection of exportables, and there are constraints on export subsidisation, then the lowering of protection in the regional market is required to lower anti-export bias. We have seen how the elimination of non-tariff barriers can lower the bias somewhat, but as Table 3 also shows the scope for lowering anti-export bias is also severely constrained by a common tariff policy within CARICOM. If we assume a common external tariff (CET) of 45% and an input tariff of 20% (along with the current incentives for exporting), then there remains significant levels of anti-export bias; the hypothetical B_3 index

6. Of course provision of exemptions on imported intermediate inputs does not eliminate all the taxation effects on intermediate inputs if locally produced inputs are also increased in price as a result of import restrictions.

ranges for 0.36 to 0.51 in Table 3.[7] CARICOM arrangements are designed to encourage regional import substitution and do therefore constrain the ability of Barbados to significantly reduce trade regime bias.

Table 4

Effective Protection by Sectors and Markets: Trinidad and Tobago (1991)

Sector	The Structure of Effective Protection[1] (%)		
	Domestic Market		Extra-regional Export Sales
	Current/all measures[2]	Hypothetical/ CETs only	Current
Processed foods	169.8	27.7	–7.4
Tobacco	94.5	37.0	–1.8
Beverages	120.1	44.7	–20.8
Garments	330.3	84.6	–10.6
Footwear	293.6	47.4	–3.4
Cosmetics	137.1	36.9	–4.7
Metal building materials	95.9	6.2	–9.0
Sugar processing	93.9	40.6	–4.5
Textiles	92.9	38.1	–4.2
Printing & publishing	66.3	27.4	–4.1
Chemicals	53.0	25.0	–4.5
Petro-chemicals	119.9	61.4	–5.3
Cement, concrete & glass	77.8	38.0	–4.7
Transport equipment	36.0	7.9	–1.2
Rubber products	261.8	66.5	–8.1
Electrical appliances	92.6	24.9	–2.1
Wood and wood products	47.7	20.2	–1.8
Furniture	203.4	62.0	–7.0

1. Averages of firm-level estimates
2. Nominal tariff equivalent of *QR* (derived from international price comparisons) or sum of *ad valorem* rate of all import-specific taxes if no *QR* used to estimate t_j in equation (12) in test.

7. The structure of CETs in CARICOM are currently not uniform, and range down to 30% on competing imports of final goods. But non-competing intermediate inputs are significantly lower than assumed here. In which case the hypothetical example does not overstate the role of CETs and of regional trading arrangements as a constraint on the lowering trade regime bias.

Table 5
Measured Regime Bias in Trinidad (1991)

Sector	Current/All Measures (B_1)	Hypothetical/CETs only (B_2)
Processed foods	0.34	0.73
Tobacco	0.50	0.72
Beverages	0.36	0.55
Garments	0.21	0.48
Footwear	0.25	0.66
Cosmetics	0.40	0.70
Metal building materials	0.46	0.86
Sugar processing	0.49	0.68
Textiles	0.50	0.69
Printing and publishing	0.58	0.75
Chemicals	0.62	0.76
Petro-chemicals	0.43	0.59
Cement, concrete & glass	0.54	0.69
Transport equipment	0.73	0.92
Rubber products	0.25	0.55
Electrical appliances	0.51	0.78
Wood & wood products	0.66	0.82
Furniture	0.31	0.57

By way as a cross-check for the above results we also report in Tables 4 and 5 comparable evidence for Trinidad and Tobago on the structure of effective protection in different markets and the resulting measured levels of trade regime bias. Again the sector averages are based on a sample of firm-level estimates, using firm-specific information on tradeable and non-tradeable inputs.[8]

Like Barbados, Trinidad makes use of quantitative import restrictions and other import-specific taxes (surcharges and stamp duty) besides CETs. We again use the effective protection rate in the *local* Trinidad market as representative of the effective rate in sales to the whole of the protected regional

8. The data was obtained from firm-level interviews and questionnaires, as in the case of Barbados ⟨see note 3 above⟩. The data was collected as part of a study commissioned by the Government of Trinidad.

market. Thus the information in columns (1) in Table 4 corresponds with that in columns (1), (2) and (3) in Table 2, and incorporates the effects of all tariff and non-tariff barriers on the nominal rate of protection (t_i) and any duty-exemptions affecting the term $\sum a_{ij}t_i$ in equation (4). The sample size and coverage is greater in the case of Trinidad than for Barbados, reflecting the greater size and diversity of the industrial sector in the significantly larger member of the CARICOM grouping. There is as a result rather more evidence of escalation of protection in the Trinidad results, as we move from intermediate and capital goods to consumer goods production. As a result there is greater variability between effective rates of protection in domestic sales and generally lower rates of protection overall. There are nevertheless some very high rates of effective protection in the *domestic* market for final consumer goods such as garments, footwear, furniture, rubber products and processed food. Given this, and the absence of compensatory export subsidisation with results in consistently negative rates of effective protection in extra-regional sales, then the actual trade regime bias as measured in 1991 (B_1 in Table 5) is substantial (albeit less than identified for Barbados) – the B_1 index was greater than 0.5 in only 6 of the 18 sectors in 1991.

With the harmonised structure of CARICOM CETs introduced in January 1991, it is possible therefore to simulate hypothetical effective rates of protection in domestic sales for Trinidad, on the assumption these instruments alone applied; that is that QRs, other import-specific taxes and duty-exemptions were eliminated. The results of this simulation are reported in column (2) of Table 4 and the revised trade-regime bias indices (B_2) are reported in Table 5. Clearly there is considerable scope for the reduction of anti-export bias in Trinidad through the reform of national-specific commercial policies; B_2 is greater than 0.65 in 13 of the 18 sectors. The residual or regional commercial policy source of anti-export bias is also rather smaller in the case of Trinidad than it is for Barbados. With common external tariffs, average effective rates of protection will vary within the region for instance, as the share of higher value-added activities varies across members of the grouping. In the case of the present comparison, import-substitution policies in the smaller Barbadian economy may well result in a higher proportion of low value-added activities than applies in the larger Trinidadian economy and therefore in a higher average rate of effective protection

(even with common external tariffs).

Nevertheless the results for Trinidad are still consistent with the hypothesis that *southern* regional trade arrangements can generate significant trade regime bias; the trade regime bias index (B_2) for CETs only is less than 0.75 in 12 of the 18 sectors.

V. Policy Implications of the Results

The evidence on the structure of protection in Barbados and Trinidad in intra-regional and extra-regional sales clearly shows that membership of a regional trading bloc can generate significant trade regime (in particular anti-export) bias. The results also confirm that the impact of customs union membership on trade regime bias depends upon the degree of tariff (and non-tariff) discrimination between members and non members of regional groupings, and upon the nature (size and efficiency) of the members of the grouping. It demonstrates, therefore, the potential constraint that membership of a regional trading arrangement such as CARICOM may impose upon policy reforms in developing countries aimed at liberalising trade and promoting exports. Like many other developing countries in the 1980s Barbados and Trinidad have been negotiating on trade policy reforms in the context of Structural Adjustment Programmes. The results in this paper show that there is scope for fairly significant reform of trade policy and lowering of trade regime bias that is not constrained by CARICOM membership. Quantitative and other non-tariff measures (currently set nationally and not on a CARICOM-wide basis) against extra-regional trade can be liberalised. Similarly there are some border taxes, other than customs duties, that can be revised and ultimately eliminated. The discretionary use of duty exemptions by individual members can also be constrained or eliminated. However the earlier results also show that the remaining common external tariffs are likely to induce significant trade regime bias, partly because of the escalating structure and level of these external tariffs but also because of the relatively uncompetitive nature of regional production relative to extra-regional production. Therein lies the potential incompatibility of objectives: the objectives of extra-regional export promotion through national trade policy reform and intra-regional import substitution through regional

policy formulation.[9]

The existence of this potential regional constraint on the ability of countries like Barbados and Trinidad to lower anti-export bias to desired or targeted levels might be used as an argument for withdrawal from or reduction of regional commitments. At a minimum it provides a rationale for countries seeking to press for liberalising-reform of common external tariffs and for countries to review how they wish to see the regional trading arrangement evolve. Widening of the effective membership through the negotiation of reciprocal arrangements with other trading groups may be one way in which the competitiveness of the region can be increased. We can see evidence of this taking place already, in the case of the initiatives underway to extend regional liberalisation within the Americas. These developments can be interpreted as a recognition that *exports* within small regional markets of developing countries may often be sales to an enlarged (though still relatively small) *domestic* market, there being little potential to penetrate competitive export markets. Developing countries are not likely to be able to emulate the EC experience in simultaneously promoting intra-and extra-regional export growth, without altering the size and composition of their regional trading arrangements. Mechanisms which in effect widen the membership and in particular allow free access to the regional market by at least some industrialised countries are ways of lowering anti-export bias.[10] This would be an alternative in the longer term to further unilateral trade liberalisation for countries like Barbados and Trinidad, and a means of moving towards freer trade through regional trading arrangements.

VI. Conclusions

Regional trading arrangements may induce trade regime bias, and act as a constraint on the removal of anti-export bias of the grouping through uni-

9. Prior to the liberalisation of trade policies in many developing countries, the problem of reconciling national and regional import substitution policies was seen as a constraint on the growth of intra-regional trade ⟨see, for example, Greenaway and Milner [1990]⟩.

10. Experience indicates that association agreements with the EC have been subject to extensive exemptions to access which restrict the liberalising effects.

lateral trade policy reform. The nature and extent of the trade regime bias will be affected both by the degree of geographical discrimination in regional trade policies and by the size and characteristics of the regional grouping. This paper shows that there are *a priori* grounds for expecting regional trading arrangements between small, developing countries to induce significant levels of anti-export bias. The empirical estimates of trade regime bias derived from the structure of effective protection in intra- and extra-regional sales for Barbados and Trinidad confirm these prior expectations. A large anti-export bias is identified for both countries given current policy conditions (when country- and CARICOM-specific measures apply) and for CARICOM common external tariffs alone. Extra-regional exports are likely to be constrained by the resulting structure of relative incentives, while intra-regional exports in CARICOM are likely to be a reflection of policy-induced regional import-substitution. Policy reforms aimed at lowering and ultimately eliminating anti (extra-regional) export bias in countries like Barbados and Trinidad are likely therefore to be severely constrained by regional obligations. In the absence of withdrawing from the regional commitments, members of regional trading groups like CARICOM can seek to lower the barrier to extra-regional exports through progressive lowering of the degree of discrimination (through reform of CETs) and through extending the regional market, in particular to include and improve the access of more efficient industrial and industrialising countries.

Of course if the aim of policy was simply to eliminate trade regime bias then developing countries could immediately achieve this through withdrawal from the regional trading arrangements and by adopting a free trade policy. This may not be politically feasible, and regional groupings may in any case be motivated by the pursuit of external and dynamic economies that are more likely to be achieved through regional import substitution policies than through domestic interventions.[11] The evidence would suggest that appropriate groupings and policies have been difficult to establish, and

11. The implications of regional grouping or integration also go beyond trade issues. Common rules of conduct and reciprocal commitments and obligations may enforce arbitrage among national institutions. This will tend to involve political, as well as economic, costs and benefits that need to be evaluated. For a discussion of these issues see de Melo, Panagariya and Rodrik [1992].

that the *dynamic* effects of regional integration have not been experienced ⟨see, for example, de Melo, Montenegro and Panagariya [1992]⟩. It must be recognised that the potential *dynamic* benefits of regional integration (scale and terms of trade effects) are also likely to be size-constrained. In which case members of *southern* regional trading arrangements cannot afford to dismiss the implications of the nature of regional trading arrangements themselves for the incentive to produce for the extra-regional market.

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