THE NEW BILATERAL REGIONAL FREE TRADE AGREEMENTS IN THE AMERICAS

CAN THE SMALLER ECONOMIES OF LATIN AMERICA AND CARICOM BENEFIT?

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ABSTRACT

Regional Trade Agreements have proliferated in the past two decades. Most recently the United States has spearheaded a drive for comprehensive bilateral free trade agreements with a number of countries including with those of Latin America. The bilateral free trade agreements are WTO plus, very comprehensive and extremely similar in their structure and content. It can be easily argued that the new bilateral negotiations are in fact a gradual piecemeal approach to a single free trade agreement with the rest of the world through an approach whereby countries are added on a gradual basis. The bilateral agreements will eventually converge to an overall encompassing multilateral one giving credence to the consequent improvement in welfare hypothesized by free trade advocates. From our point of view, however, the content of these free trade agreements raise important issues and concerns for the smaller economies of Latin America and CARICOM. The paper examines the main features of the new bilateral free trade agreements giving particular emphasis to their investment provisions. It also examines formally the conditions required for smaller economies to benefit from free trade in goods, services and free capital mobility. On the basis of this analysis the paper presents a discussion of some of the main implications of the new free trade agreements for Latin American and CARICOM smaller economies.

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1.0 Introduction

Regional Trade Agreements have proliferated in the past two decades.[2] Regional agreements cover preferential trade areas (PTAs) free trade areas (FTAs) and customs unions (CUs) between two or more trade partners. PTAs, FTAs and CUs grant preferences among its trade members and as a result are not compatible with the 'centrepiece' of the World Trade Organization (WTO), the most favoured nation (MFN) clause.

Since its inception the GATT and later the WTO accommodated the different regional agreements in three ways. These included allowing the granting of trade preferences from developed to developing economies, by accepting the Enabling clause and by recognizing the consistency of PTAs, FTAs, or CUs with Article XXIV of the General Agreement on Trade and Tariffs (GATT) and Article V of the General Agreement on Trade in Services (GATS). Articles XXIV and V have become the main vehicle to accommodate PTAs, FTAs and CUs within the rules established by the multilateral trading system.[3]

According to mainstream economic theory free trade creates 'welfare gains by allowing consumers and firms to purchase from the cheapest source of supply and by ensuring that production is located according to comparative advantage.' In other words, free trade allows

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2 Currently more than 200 regional trade agreements have been noted by the World Trade Organization (WTO, hereafter).

3 Article XXIV authorizes customs unions and free trade zones as an exception to the principle of non-discrimination. Free trade zones are expected to remove barriers to trade with respect to the essential of the trade, which originated in the constituting members of the customs union or free trade areas. What is meant exactly by the essential of trade is not defined in the legal texts. In addition, Article XXIV also states that country members may maintain trade restriction among members of a trade agreement on the basis of GATT's articles XI, XII, XIII, XV and XX. Finally, Article XXIV seems concerned with avoiding the trade deviation effect of free trade areas or customs unions and explicitly states that in order to avoid trade deviation, tariff and/or other trade measures should be established at a level, which in their aggregate, does not make these more restrictive than those previously imposed by the individual members.

the operation of the principle of comparative advantage by suppressing the discrimination between the existing sources of supply.

In contrast, by granting preferential market access to its signatory members, FTAs shift the discrimination between the existing sources of supply. However, FTAs are consistent with the principles of multilateral trade as long as they are trade-creating arrangements and thus welfare enhancing. In fact, the welfare potential of an FTA varies directly with its size. The greater the size of an FTA, the greater is its welfare creating potential. The maximum benefits of a free trade area are generated when the size of a Free Trade area approaches that of the World.

In the Americas the drive for FTAs is spearheaded by the United States. The United States has engaged in a series of negotiations leading to the signing of free trade agreements mostly with developing countries, including several Latin American economies. Since the completion of its first free trade agreement with Israel in 1985, the United States has signed or is in the process of negotiating free trade agreements with twenty six countries.[4] The United States has completed free trade agreements with Canada and Mexico (NAFTA, 1994), Jordan (2001), Chile (2004), Singapore (2004), Australia (2005), Morocco (2006), Bahrain (2006), Central America and the Dominican Republic (CAFTA) (2006).[5] The countries with which the United States has pending free trade agreement negotiations include, among others, Panama, Oman, Thailand, United Arab Emirates, Thailand and South Korea. FTA negotiations are also envisaged for the Andean Group (Colombia, Ecuador and Peru).[6]

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4 See, Office of the United States Trade Representative (Benefits of Trade – June 2006).

5 The years in parentheses refer to the implementation date of the FTAs. In the case of CAFTA, with the sole exception of Costa Rica, to date all Central American countries and the Dominican Republic have ratified the free trade agreement.

6 The negotiations with the Andean Group were launched in 2003 with Bolivia as an observer country. In December 2005, the United States and Peru concluded their negotiations.

There are several reasons for securing bilateral trade agreements. For one thing the multilateral negotiations make progress at a very slow pace as attested to by the most recent World Trade Organization ministerial meetings. The broader regional initiative for the Americas, the Free Trade Area of the Americas (FTAA) which began in 1992 and was planned to be implemented by 2005, has thus far stalled.

In addition, while the United States exhibits very low average tariffs applied on most imports, other countries apply comparatively higher tariffs on imported goods from the United States. Such is the case of Latin American countries.

As an example, the average effective tariff for selected manufactured products (including metals, motor vehicles, petroleum products, transport equipment, and wood) of Central American countries is equal to 7% while that charged for the United States is close to 0%. The Central American average effective tariff rate on selected agricultural products equals 13% while that of the United States is 2%.

In this sense, from the point of view of the United States the free trade agreements are meant to 'level the playing field'. Central America and the Dominican Republic benefit from special duty preference programmes, such as the Caribbean Basin Initiative and the Generalized System of Preferences. CAFTA will allow the United States to trade on the same footing with Central American countries and the Dominican Republic.

This paper analyses the content, rationale and potential implications of these bilateral FTAs for the smaller economies of Latin America and CARICOM. It is structured in five sections. Following the introduction, the second section examines the main features of the new bilateral free trade agreements. The third section gives particular emphasis to the investment chapter. The fourth section analyses formally the conditions required for smaller economies to benefit from free trade in goods, services and free capital mobility. The final sections centers on the implications of the new free trade agreements for Latin American and the smaller economies of CARICOM.

2.0 Main Features of the Bilateral Free Trade Agreements

The agreements signed and/or negotiated in the 21st century are modelled after the Chile-US FTA.[7] The agreements comprise the standard chapters dealing with trade in goods, in particular agriculture, textiles and apparel, services and investment. The agreements also include chapters on environment and labour. Apart from particular issues pertaining to implementation procedures for specific products, the provisions of all the bilateral FTAs are in most cases very similar, if not identical (as explicitly illustrated by the investment and environment chapters).[8]

This section deals with the FTAs provisions on trade in goods and services. Given its importance the investment chapter is analyzed separately in the section that follows.

All provisions in the free trade agreements are meant to be WTO-plus, that is, they are intended to be an improvement (that is, they have a greater degree of free trade orientation) over the existing multilateral ones.

Trade in goods is governed by the principle of non-discrimination and provides for the phasing out of and elimination of tariffs between the signatory countries. While tariffs are for the most part programmed to be eliminated with the entry into force of the agreements, the text also contemplates the phasing out of selected products over a specified period.

The Singapore-US FTA eliminated most tariffs and contemplated a phase out period of three to ten years for selected products. In the same vein, following the entry into force of the Australia-US FTA, duties on 99% of all tariff lines on industrial and consumer goods were suppressed.

CAFTA countries have free access to the United States market for 99% of their products due the existing preferential trade arrangements

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7 The exception is the Jordan-US FTA. It is also important to note that the Chile-US FTA is in turn a perfected and expanded version of NAFTA.

8 The provisions in the investment chapters for three FTAs which are currently in force, those of the United States and CAFTA, Chile and Singapore are basically the same.

which will be maintained and expanded under the FTA.[9] For its part the United States will be able to export to Central America and the Dominican Republic 80% of its consumer and industrial goods duty free. Finally, after three years of the entry into force of the US-Chile FTA, 97% of all Chilean products enter the US market duty free.

The bilateral FTAs allow tariff phase out periods mostly in agriculture. In the case of the Australia-US FTA, duties are maintained on Australian sugar and dairy products. The CAFTA FTA contemplates different phase-out periods for different products and countries ranging from the present to the next 20 years. In some particular cases the phase out period will be impacted through the implementation and expansion of existing tariff-rate quotas and safeguards.[10]

Following WTO rules and guidelines, free trade agreements do not allow signatory member countries to apply export subsidies but they permit the imposition of safeguards. In the particular case of CAFTA, Chapter 3 of the agreement allows the imposition of a 'transitional agricultural safeguard mechanism' allowing a country to impose a temporary additional duty on specified agricultural products if imports exceed an established volume 'trigger' that is, safeguards are applied when the imports of a given product experience import surges. The

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9 For textiles and manufacturing the CAFTA text provisions grant duty free treatment to apparel using yarn and fabric from the United States, Central America and the Dominican Republic. In this regard the DR-CAFTA agreement expands the CBI legislation, which in its most recent form allowed duty and quota free treatment for apparel and textile products assembled in Central America from United States inputs. The treaty also contemplates that the provision of reciprocal duty free access for all goods should be retroactive to January 1, 2004. This retroactive provision will benefit every company doing business in Central America and the Dominican Republic. It also includes a cumulation rule whereby a limited amount of inputs from Mexico and Canada will qualify for duty free treatment. The cumulation rule is subject to a 100 million annual dollar cap, which can expand to 200 million dollars.

10 According to the text of the CAFTA agreement tariff rate-quotas will be administered "in a manner that is transparent, non-discriminatory, responsive to market conditions and minimally burdensome on trade and allows importers to fully utilize import quotas."

safeguard cannot be applied for a period exceeding four years and can be used once during the transition period.

Safeguards are also applicable in the case of manufacturing. As an example the CAFTA agreement introduced a manufacturing safeguard to protect Central America and the Dominican Republic from import surges.

The provisions on services are derived from the WTO General Agreement on Trade in Services and NAFTA. The provisions include sections and in some cases chapters on general measures pertaining to cross-border trade in services and specific chapters on financial services, telecommunications and electronic commerce.[11] As well, an important corollary aspect of trade in services is that of the protection of intellectual property rights which apply particularly to entertainment arts, and software. The protection of pharmaceutical data is currently an element in the negotiations of the implementation of the Chile-US FTA.

Contrary to WTO legal texts, the services provisions require the granting of national and most favoured nation treatment (i.e., non-discriminatory treatment) to service suppliers of contracting parties. The WTO General Agreement of Trade in Services (GATS) texts permit the imposition of 'discriminatory subsidies.' However, within the framework of the bilateral FTA, these measures are not allowed once the agreement enters into force.

In some cases the bilateral FTAs also 'prohibit the parties from requiring firms to establish a local presence as a condition for supplying a service on a cross-border basis.' Finally they also bar specific types of market access restrictions to the supply of services.

According to the general principles of the labour chapters included in the FTAs, the signatory parties agree to recognize and protect the labour principles contained in the ILO declaration (1998). The parties recognize and accept each other's right to establish their own laws

11 The Australia-US FTA is the first to include 'provisions for the facilitation of electronic signatures.'

and to implement fair, equitable and transparent procedures in the enforcement of their own laws.[12]

The labour provisions establish a mechanism for dispute settlement and a Labour Affairs council to oversee the Chapter's implementation and to provide a forum for consultations and cooperation on labour matters. Cooperation priorities and financing are discussed generally in a separate annex to the said chapter.

The environmental chapter is based in general terms on the North American Agreement on Environmental Cooperation. In the case of CAFTA the text provides, in addition, a 'process for public submissions on environmental enforcement matters.'

As in the case of labour, the text provisions establish an Environmental Affairs Council to oversee the implementation and operation of the environmental provisions. The text contemplates a public submissions process, which is a way to guarantee the inclusion of the points of view of civil society, on matters related to the environment. Each party has the right to establish its own environmental laws, exercise discretion in regulatory, prosecutorial and compliance matters, and to allocate enforcement resources. In terms of procedural matters the text establishes that judicial administrative proceedings should be available to sanction or remedy the violations of its environmental laws and that such proceedings are to be fair, equitable, transparent and open to the public.

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12 It is important to note that in the case of NAFTA, labour was not initially included in the trade negotiations. However, labour concerns, due in part to illegal immigration, prompted the signing of a supplemental agreement to NAFTA, termed the North American Agreement on Labour Cooperation (NAALC). NAALC established a national administrative office which acts as a focal point for labour concerns and for the coordination of cooperative work programes. Also the NAALC created a tri-national Commission for Labour Cooperation and reviews public submissions on labour laws. See, The United States Office of the Trade Representative, Annual Trade Report, 2006.

3.0 The Investment Chapter

The investment chapter and its provisions are without doubt one of the most important pillars of the FTAs.[13] It seeks to provide protection for foreign investors or more to the point, 'a secure, predictable, legal framework for foreign investors.' The chapter is also one of the more controversial ones. Several features of the investment chapters are worth detailing.

First the definition of investment is broad enough to cover tangible and intangible assets (property rights are considered an investment). Second, the investment chapter generally accords foreign investors national treatment and most-favoured national treatment. Both national and most-favoured nation provisions refer to the equality of treatment accorded to national and foreign investors in "like circumstances".[14] The term 'like circumstances" is, however, broad and difficult to define and delimit.

Third, the level of generality of the investment chapter is enhanced by the call for minimum standard of treatment for foreign investors. The minimum standard of treatment means that covered investment should be treated according to the canons of customary international law. In turn,

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13 Bilateral Trade Agreement and the Investment chapters of the FTAs are meant to encourage investment flows in the context where foreign direct investment should fill the shortfall in official aid. This is particularly relevant for smaller economies. For an analysis of bilateral investment treaties and their impact on development policy, see Bilateral Investment Treaties and Development Policy-Making. Luke Eric Peterson. International Institute for Sustainable Development. November 2004.

14 See articles 10.2, 15.2 and 10.3 of the US-Chile, US –Singapore and US-CAFTA free trade agreements. See also, U.S.-Chile Free Trade Agreement. The American Journal of International Law, Vol.97, No3., (July, 2003), pp. 696-699.

customary international law is defined as including 'fair and equitable treatment" and 'full security and protection".[15]

Fourth, the investment chapter explicitly de-links investment flows from performance requirements. These include, among others, exports of a given level or percentage of goods and services; a given level or percentage of domestic content; a certain level of foreign exchange inflows, or transfer of technology.

The most controversial provisions of the investment chapter are those related to the issues of expropriation and compensation. The free trade agreements prohibit direct or indirect expropriation (or nationalization). Direct expropriation is a well defined term which refers to the nationalization, transfer of title or seizure of private property by the host government.[16]

However, the term indirect expropriation (or nationalization) can be interpreted in different ways.[17] The legal texts mention the phrase "indirect expropriation by measures equivalent (or tantamount) to expropriation or nationalization."[18] In order to determine whether

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15 'Fair and equitable treatment" includes the obligation not to deny justice in criminal, civil or administrative adjudicatory proceedings in accordance with the principle of due process embodied in the principal legal systems of the world. "Full protection and security" requires each party to provide the level of police protection required under customary international law. See articles 10.4, 15.5 and 10.5 of the US-Chile, US – Singapore and US-CAFTA free trade agreements. See also, U.S. Interpretation of Core NAFTA Investment Standards. The American Journal of International Law, Vol. 95, No.4, (October 2001), pp. 881-885.

16 See, Expropriation in International Law by Professor B.A. Wortley. Mimeo. July 1947.

17 In some court cases the term 'creeping expropriation', which is a form of indirect expropriation , is also utilized.

18 The issue of indirect expropriation was amply debated in the case of Metalcad Corporation *vs.* Mexico and Mexico vs. Metalcad Corporation in 2001 within the NAFTA framework. The tribunal that analysed the case decided that the term expropriation meant "not only open, deliberate, and acknowledged takings of property…but also covert or incidental

an action constitutes "indirect expropriation" it needs to be assessed on a case-by-case basis. The evidence includes, among others, the economic impact of government action and the degree of interference of government action with investment-backed expectations.[19]

4.0 Can Smaller Economies Benefit from an FTA? A Simple Two-Country Model

The model is built on three different but compatible approaches The first is encapsulated in Kaldor's notion of cumulative causation and its development in the work of McCombie and Thirlwall (1994) and McCombie *et. al*., (2002). The second follows the Balance-of-payments constraint approach to growth as developed by Thirlwall (1979) and McCombie and Thirlwall (1994).[20] Finally, the third strand is that of the technological gap approach to growth.

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interference with the use of property which has the effect of depriving the owner of the actual or expected benefits of property…"See, Dodge, W.S. (2001) Metalcad Corporation v. Mexico. ICSID Case No ARB (AF)/97/1.40 ILM 36 (2001), and Mexico *v.* Metalcad Corporation, 2001 B.C.S.C. 664. The American Journal of International Law, Vol. 95, No.4. (Oct., 2001), pp. 910-919.

19 The exceptions include the case where expropriation or nationalization is carried out, among other reasons, for a public purpose, in a non-discriminatory manner, or in accordance with due process of law.

20 Thirlwall and McCombie (1994) and León-Ledesma (2002) extend the Kaldorian cumulative growth model to include the technological gap approach. For conceptual purposes the cumulative and technological gap approach are viewed as two different approaches to growth (See, Castellaci, 2001). See McCombie J.S.L and A.P. Thirwall, (1994) Economic Gowth and Balance of Payments Constraint (New York: St Martin's Press**);** McCombie, J.S.L., M. Pugno, and B. Soro (2002) Productivity, Growth and Economic Performance. Essays of Verdoorn's Law. Palgrave, MacMillan: New York.McCombie, J.S.L. and A.P. Thirlwall, (1999) "Growth in an international context: a Post Keynesian view" in Johan Deprez and John T. Harvey Eds. Foundations of International Economics. Post Keynesian Perspectives pp. 35-90. Routledge: New York; Ledesma-León, M.A. (2002) *Accumulation,*

The cumulative causation approach views growth as being internally generated. Technological innovation through the growth of embodied or disembodied productivity generates growth in demand which feeds back into productivity growth. The growth linkage between productivity and demand is explained by terms-of-trade effects, increased income and expenditure, and changes in income distribution. The linkage from demand to productivity is explained by returns to scale, specialization and the size of the market, embodied technical progress and learning by doing (Castellaci, 2001). Within this approach growth in generated internally through innovation activity.

The approach disparages the notion of equilibrium and thus convergence and stability. However, it does not deal with technological spillovers or international diffusion that can occur through trade linkages, that is, it does not address the issue of country interdependence. This is one of the main hypotheses of the technological gap approach.

The technological gap approach asserts that a country's growth rate depends on the level of its technological development. It also states that a country that has a lower technological level relative to the world innovation frontier can increase its rate of growth through a process of 'catching up' or imitation. Finally, the absorptive capacity of the latter depends on its "ability to mobilize resources for transforming social, institutional and economic structures" (Fagerberg and Verspagen, 2001, p.11).[21] The technological gap recognizes that all countries are not alike, that the levels of development are an important determinant of growth and welfare and that not all countries benefit to a similar extent from trade and the transmission of trade linkages.

Innovation and Catching-up: An Extended Cumulative Growth Model. Cambridge Journal of Economics, 26, 201-216; Castellacci, F. (2001) *A "Technology-gap Approach to Cumulative Growth": Toward an Integrated Model. Empirical Evidence for Spain, 1960-1997*. Paper presented at the Druid Academy Winter Conference, Copenaghen, January 18-20/2001.

21 See Fagerberg, J. & B. Verspagen, (2001) Technology-Gaps, Innovation-Diffusion and Transformation: An Evolutionary Interpretation. TIK Working Paper No.11/01.

The third approach, the balance-of-payments-constraint approach, asserts that trade, trade linkages and growth performances cannot be understood or analysed in real or 'barter' terms. Trade and growth are intimately linked to the architecture and workings of the existing international financial order. The architecture and workings of the existing international financial order is the main constraint to economic growth and development.[22]

International trade flows are not carried in real, 'barter' terms but in money terms and more precisely in terms of the international reserve currency (or currencies). Countries can only build their economic infrastructure and develop by importing capital and raw materials, inputs as well as technology, if they can acquire the reserve currency, which the great majority of countries cannot issue. As a result countries' export potential must be commensurate with that of their import capacity.

As a result, over the long run countries must maintain equilibrium in the balance of payments or at least in the basic balance. Countries can only grow over the long run at rates of growth compatible with their external position. In this sense countries are said to be balance-of-payments constrained.

Within this framework money is not neutral. A process of technological catch-up through imitation derived from a process of cumulative causation cannot occur if economies do not have the means to obtain the reserve currency. More to the point, the extent to which countries can benefit from a 'catch-up' process depends on the extent to which they can access international liquidity. In this sense, contrary to mainstream theory, in our approach monetary factors provide the framework for the workings and development of real forces.

The model postulates the existence of two economies, a developed economy and a developing economy. By definition, the developing economy is also the smaller economy. The developed economy is termed the leader (denoted by the subscript l) and the developing economy is the follower economy (denoted by the subscript f).

The leader has higher levels of productivity and is technologically more advanced. The follower economy is assumed at this stage to be

22 See, Davidson (1992), pp. 93-96 & Davidson (2002), pp. 158-161.

closely linked to the leader economy. Furthermore it is assumed that the leader economy issues the international reserve currency, which is by definition also used by the follower economy. As a result the follower country is balance-of-payments constrained while the leader country is not.[23]

The model begins by defining the technology gap (G_p) between both the leader and the follower economy (P_l and P_f respectively) in logarithmic terms such that the rate of growth of the gap (g) can be expressed as the difference between the rates of change of the productivity of the leader and follower country respectively (Thirlwall and McCombie, 1994; Targetti & Foti, 1997).[24] That is,

$$G_p = L_n (P_l/P_f \qquad (1)$$

$$g = p_l - p_f \qquad (2)$$

The rates of productivity growth in the leader and follower economies are equal to the sum of the rates of growth of autonomous (exogenous) and induced productivities, that is, they are modelled according to Verdoorn's Law.[25] The interpretation of the autonomous and

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23 Countries are balance-of-payments constrained in the sense that "their performance in overseas markets, and the response of the world financial markets to this performance, constrain the rate of growth of the economy to a rate which is below that which internal conditions would warrant" (McCombie and Thirlwall, 1999) p.49.

24 Targetti, F. and A. Foti, (1997) *Growth and productivity: a model of cumulative growth and catching-up*, Cambridge Journal of Economics, Vol.21, 27-43.

25 McCombie *et al*. 2002, p.1. Verdorn's Law is a "statistical relationship between the long-run rate of growth of labour productivity and the rate of growth of output, usually in the industrial sector." (Ibid). This relationship was formulated by the Dutch economist P.J. Verdoorn (1949) and was restated as a law by Kaldor (1966). See, Verdoorn, P.J. (1949) 'Fattori che Regolano lo Sviluppo della Produttivita del Lavoro' Industria.

induced coefficients adopted in this paper is that of Dixon and Thirlwall, 1975, and McCombie and Thirlwall, 1994.[26]

As stated by McCombie and Thirlwall (1994), p.464, autonomous productivity depends on "the autonomous rate of disembodied technical progress, the autonomous rate of capital accumulation, and the degree to which technical progress is embodied in capital accumulation." For obvious reasons, the rate of growth of autonomous productivity in the leader economy is greater than that of the smaller country (i.e., $p_l > p_f$).

For its part, induced productivity is captured by the parameter λ, also known as the Verdoorn coefficient. Again, as stated by McCombie and Thirlwall *(Ibid)*, it is a function of "'learning by doing', the degree to

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Translated by A.P. Thirlwall in D. Ironmonger, J. Perkins and T. Hoa (eds) (1988) National Income and Economic Progress: Essays in Honour of Colin Clark, London: Macmillan. Kaldor, N. (1966) Causes of the Slow Rate of Economic Growth of the United Kingdom. An Inaugural Lecture, Cambridge: Cambridge University Press.

26 Soro (2002) pp.45-53 considers three interpretations of Verdorn's Law. The first two were suggested by Verdorn and are based on complementarity and perfect substitutability of the factors of production. The third one which is the one adopted in this paper follows the Kaldorian interpretation. A key component of Kaldor's interpretation is the existence of increasing returns to scale. Following Young (1928) Kaldor subscribed to a macroeconomic rather than microeconomic concept of increasing returns. See Soro, Ibid and Chandra and Sandilands (2005). See, Soro (2002) Fattori che regolano lo sviluppo della produttività del lavoro Fifty Years On", in J. McCombie, M. Pugno and B. Soro (Eds.), *Productivity Growth and Economic Performance. Essays on Verdoorn's Law*, Palgrave – Macmillan: New York, 2002, Chapter 3, 37-63; Chandra, R. and R.J. Sandilands, (2005) *"Does modern endogenous growth theory adequately represent Allyn Young?"* Cambridge Journal of Economics, Vol.29, No.3., May 2005, pp.463-473; Young, A. (1928) 'Increasing Returns and Economic Progress' Economic Journal; Dixon, R.J. and A.P. Thirlwall, (1975) 'A Model of Regional Growth Rate Differences on Kaldorian Lines' Oxford Economic Papers, July.

which capital accumulation is induced by economic growth (y_l and y_f for the leader and follower economies respectively) and the extent to which technical progress is embodied in capital accumulation."[27]

Formally,

$$p_1 = p_{1a} + \lambda_1 y_1 \qquad (3)$$

$$p_f = p_{fa} + \lambda_f y_f \qquad (4)$$

Note that, as formulated, Eqs. (3) and (4) capture the presence of increasing returns due to the greater specialization induced by economic growth.[28] In turn, a greater degree of specialization entails a greater rate of growth which permits the expansion of the potential for specialization. Hence the process described by Eqs. (3) and (4) is cumulative.

As stated earlier, the follower economy is balance-of-payments constrained, that is, its rate of growth has to conform in the long run to the rate of growth consistent with balance-of-payments equilibrium. Such is not the case of the leader economy because it issues the international reserve currency.

Following ample empirical evidence on the balance-of-payments constraint literature (Thirlwall and McCombie, 2004), the model postulates that income effects predominate over substitution effects and that the long term-rate of growth of the follower economy (y_f) is determined by Thirlwall's Law. That is, the long term-rate of growth of the follower economy (y_f) is determined by the long-term rate of growth of the leader economy (y_l) multiplied by the ratio of income elasticity of demand for the follower country exports by the rest of the world (π) to its income elasticity of demand for imports (ξ). Formally,

$$y_f = y_1 (\pi/\xi) \qquad (5)$$

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27 A value of λ>0.5 indicates the presence of increasing returns.

28 This means that increasing returns derive from specialization rather than scale. This is the point of view of Alwyn Young and Nicholas Kaldor. See Young, A. (1990) *Nicholas Kaldor's notes on Allwyn Young's LSE Lectures 1927-29,* Journal of Economic Studies, vol. 17, no.3/4, 18-114.

Successive substitution of Eq. (5) into Eq. (4) and of Eqs. (3) and (4) in Eq. (2) yields the following expression for the rate of change of the productivity gap,

$$G = (p_{1a} - p_{fa}) + \lambda_1 y_1 - \lambda_f(\pi y_1/\xi) \Leftrightarrow \quad (6)$$

$$(p_{1a} - p_{fa}) + y_1 (y_1 - \lambda_f(\pi/\xi)$$

Equation (6) shows that the rate of change of the productivity gap over time will depend on two factors: (i) the differences in autonomous productivities; (ii) the rate of growth in the leader economy; (iii) the difference between the Verdoorn coefficient in the leader country and that of the follower country augmented by the ratio of the export to import elasticities. Contrary to other approaches found in the literature, relative prices do not play a role in the workings of Verdoorn's law. [29]

According to Equation (6) as long as $\pi > \xi$, the rate of growth of the productivity gap will increase (due mainly to the fact that $p_{la} > p_{fa}$ and $\lambda_l > \lambda_f$) leading to a process of divergence and the follower country will not catch up to the leader economy. This result holds for any given level of the rate of growth of output in the leader economy.

Moreover Equation (6) shows that when the rate of growth of output approximates zero, the rate of growth in the productivity gap *(g)* is equal to the difference between the autonomous productivities. Positive rates of growth of output of the leader economy (y_l) increase

29 The approach adopted in this paper follows the Post-Keynesian tradition of emphasizing income over substitution effects (Davidson, 1992, p.22). In this sense relative prices do not play a role in the determination of the long-run rate of growth of output or the productivity gap. See Dixon and Thilrwall (1975) and León-Ledesma (2002) for a different approach in which the effect of Verdoorn's Law is captured through its effect on relative prices. Relative prices determine exports, which, in turn, determine the rate growth of output. If the price elasticity in the export demand function is insignificant then Verdorn's Law plays no role whatsoever in the determination of the rate of growth of output. In other words, increasing returns and the process of cumulative causation are dependent on the workings of relative prices. Thus these models thus ultimately place the weight of the analysis on the validity of the axiom of gross substitution.

the rate of growth of the follower economy (y_f). This follows from Thirlwall's Law (Equation 5 above). But at the same time these increase the rate of growth of g (when $\pi>\xi$) (Equation 6 above).[30] As a result increases in y_l constitute an additional divergent force on g. That is,

$$dg / dy_1 = \lambda_1 - \lambda_f(\pi/\xi) \text{ since } \lambda_1 - \lambda_f \text{ and } (\pi/\xi) < 1 \qquad (7)$$

Within the framework provided by Equation (7) there is no inherent mechanism for convergence. Rather, the initial conditions (i.e., higher productivity in the leader country and higher value added of its exports relative to its imports) and thus the principle of absolute advantage determines the outcome of a free trade agreement between the leader and follower countries.

A closer approximation to finding a mechanism for convergence can be found by assuming that the difference in autonomous productivities between both the leader and follower economies is equal to zero $(p_{la} - p_{fa}=0)$. Under this hypothesis it can be shown that the rate of change of the gap will increase, decrease or be equal to zero according to whether the ratio of the Verdoorn coefficients between the leader and follower economies is greater, less or equal to the ratio of export-import elasticities. That is,

$$g \gtrless 0 \Leftrightarrow y_1(\lambda_1-\lambda_f(\pi/\xi)) \gtrless 0 \Leftrightarrow \lambda_1/\lambda_f \gtrless \pi/\xi \qquad (8)$$

In other words, excluding discrete changes in the Verdoorn coefficients, the closure of the induced productivity gap requires that

30 This result that can be infered from Thirlwall's Law. See, for example, Moreno and Pérez (2003). As shown here, this result presupposes that the autonomous and induced productivities in the leader economy surpass those of the follower economy. Moreno, J.C. and E. Pérez-Caldentey (2003). "The long-run relationship between export performance and economic growth in Central America: implications for trade liberalization and free trade agreements." ECLAC Review. 81, December 2003, pp.157-174.

the difference between induced productivity in the leader and follower economy be offset by improved external performance in the follower economy (that is, π must increase and/or ξ must decrease). The changes in these parameters can reflect purely demand factors or rather the effects of specialization, allocative efficiency and embodied technology.[31]

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31 There are three competing hypotheses in the balance-of-payments constrained literature regarding the determinants of the import and export elasticities. The first follows from Prébisch and Singer and relates the size of the elasticity parameters to the manufacturing and technological content of the exported and imported products. According to this reasoning the income elasticity of exports increases as external sales move up the value-added chain ladder from primary commodities, to labour intensive and resource-based manufacturing, to manufactures with low, medium and high skill and technological intensity. Developing economies have a lower export elasticity of income than labour intensive. In other words, the income elasticity of demand for their exports by the rest of the world is low and their income elasticity of demand for imports is high. The less developed countries, which export commodities subject to Engel's Law are especially prone to be in this category (Davidson, 1992). The main policy implication following the logic of Thirlwall's Law is that unless countries undergo a process of structural change that changes the elasticity parameters, the cleavage between developed and developing economies will widen over time and less developing countries are condemned to poverty. The second hypothesis states that while the income elasticity of demand for imports tends to remain more or less constant, the income elasticity of demand for a country's exports by the rest of the world varies over time with the level of development (Bairam, 1997). More specifically, the income elasticity of demand for a country's exports by the rest of the world is inversely related to the level of development and tends to decline with the level of development. As a result an increase in external demand or the expansionary phases of the world cycle (or that of main trading partners) have a positive effect on developing countries' external position.

The third hypothesis sustains that changes in the said income elasticities are brought about by shifts in commercial policy and/or through measures designed to transfer liquidity between countries. Changes in commercial policy involve changes in trade barriers (tariffs and quotas). Measures to recycle liquidity comprise the increase in surplus nations' imports and unilateral transfers from the surplus to the deficit nations (Davidson, 1992, p.153). Thus far the empirical work shows that the import elasticity of income rises with trade liberalization and that the export elasticity of income depends on what the market and consumers and producers are demanding at a certain time. Thus while the income elasticity of income

Up to this point the development of the model assumed that the Verdoorn Equations and more specifically the induced productivities of the leader and follower countries are independent of one another. However, when countries trade and become more integrated, their performance is influenced by each other's level of economic development, that is, interdependence generates spillover effects among countries. One of the most important channels of transmission of economic development is the diffusion of knowledge.[32]

Within the setting of the model presented in this paper the spillover effects of knowledge are transmitted from the bigger more developed economy (i.e. the leader) to the smaller less developed economy (i.e. the follower). The spillover effects are transmitted via the absorptive or learning capability of the follower. The absorptive or learning capability of the follower is limited by the extent of the productivity (or technological gap between both economies) (Nelson & Phelps, 1966; Abramovitz, 1986; Targetti & Foti, 1997; Rogers, 2004). The greater the absorptive capacity of the follower, the more powerful becomes the knowledge spillover effect.[33]

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depends on institutional factors which include changes in commercial policy as put forward by the third hypothesis above, there seems to be is no clear core factor determining the export elasticity of income. See, Bairam, E.I. "Levels of economic development and appropriate specification of the Harrod foreign-trade multiplier." Journal of Post Keynesian Economics, Spring 1997, Vol.19, No.3., pp.337-344; Davidson, P. (1992) International Money and the Real World. St. Martin's Press: New York.

32 See Helpman (2005), pp.60-69 & Rogers (2004), CJE, 28, pp.577-596. See, Grossman G.M. & E. Helpman, (1994) *Technology and Trade*. National Bureau of Economic Research. Working Paper No. 4926; Rogers, M. (2004) "*Absorptive capability and economic growth: how do countries catch-up?"* Cambridge Journal of Economics, Vol.28, No.4, pp.577-596, Helpman, E. (2004) The Mystery of Economic Growth. The Belknap Press of Harvard University Press: Cambridge.

33 According to Abramovitz (1979, 1986, 1995) countries can realize their catch-up potential if they exhibit 'social capability', 'technological congruence' and possess natural resource endowments. The term 'social capability' includes a wide variety of factors including social attitudes and political institutions, educational attainment, organizational and

Following Targetti and Foti (1997) induced productivity can be modelled as a non-linear function of the gap. Formally,

$$\lambda_f = a\,(1/G_o)\,(e^{-G/\theta}) = a\varphi\,(e^{-G/\theta}) \qquad (9)$$

where,

a = factor of proportionality.
$\varphi = (1/G_0)$ = inverse of the initial productivity gap and $0<\varphi<1$.
θ = policy parameter.

According to Equation (9) induced productivity in the follower country is proportional to the inverse of the initial productivity gap, that is, the greater (smaller) the initial productivity gap the lower is φ and, other things being equal, the weaker (stronger) is the spillover effect.

Equation (9) is also a function of the extent to which the follower economy is able to acquire and incorporate knowledge from the leader economy (i.e., the absorptive or learning capacity of the follower

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commercial skills, and adequate levels of infrastructure. 'Technological congruence' highlights the fact that technology in the leader economy may not always be appropriate for the follower economy (Verspagen & Los, 2002; Criscuolo & Narula, 2003). Absorptive capacity is defined by Dahlman and Nelson (1995) as: "the ability to learn and implement the technologies and associated practices of already developed countries." It is a concept narrower than 'social capability.' According to Rogers (2004) p.579, the absorptive or learning capacity depends on : "accessibility to overseas technology, learning ability, and the incentives or barriers to implementing new technologies." See, Abramovitz, M. (1995), "*The elements of social capability"* in Perkins, D.H. and B.H.Koo (eds.), Social Capability and Long-Term Growth, Basingstoke:Macmillan Press. Abramovitz, M. (1986), "*Catching up, Forging Ahead, and Falling Behind,"* Journal of Economic History, June 1986, 46(2), pp. 385-406; Verspagen, B. & B. Los, (1999) *The Evolution of Productivity Gaps and Specialization Patterns*. Mimeo; Cristolo, P. & R. Narula, (1999) A novel approach to national technological accumulation and absorptive capacity: Aggregating Cohen and Levinthal. Mimeo; Dahlman, C. and R. Nelson, (1995), "Social absorption capability, national innovation systems and economic development" in Perkins, D.H. and B.H.Koo (eds.), Social Capability and Long-Term Growth, Basingstoke:Macmillan Press.

economy).[34] This is captured by $e^{-G/\theta}$. The basic mathematical properties of Eq. (9) are listed below and Figure 1 plots the function.

$$Lim\ \lambda_f = 0 \quad and \quad Lim\ \lambda_f = a\,(1/G_o) \qquad (10)$$

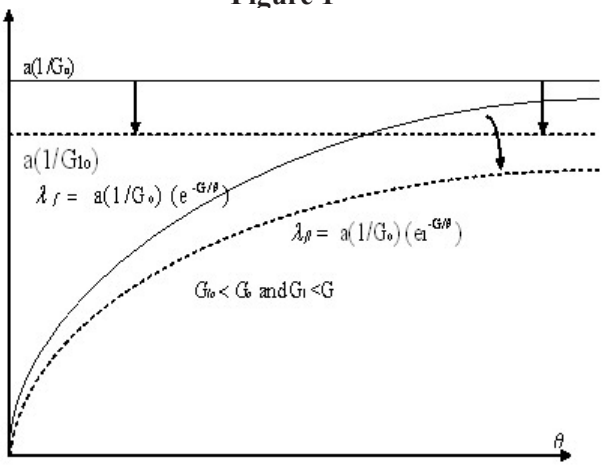
$$\theta \to 0 \qquad \theta \to \infty$$

$$\lambda_f^1\,(\theta) = a(1/G_o)\,(G/\theta^2)\,(e^{-G/\theta}) > 0 \text{ and}$$

$$Lim\ \lambda_f = \quad and \quad Lim\ \lambda_f = 0$$

$$\theta \to 0 \qquad \theta \to \infty$$

Figure 1



34 Absorptive capacity is defined by Dahlman and Nelson (1995) as: "the ability to learn and implement the technologies and associated practices of already developed countries." It is a concept narrower than 'social capability.' According to Rogers (2004) p.579, the absorptive or learning capacity depends on: "accessibility to overseas technology, learning ability, and the incentives or barriers to implementing new technologies."

Induced productivity is an increasing function of the parameter θ. The leader economy is bounded by the initial productivity gap *(Go)*. However, as ¸ increases, induced productivity tends to the limit *(1/Go)*. That is the extent to which the follower country is able to use its learning capacity to catch-up. It is actually the learning capacity's boundary. The greater the initial productivity gap the lower the 'learning capacity's boundary' (as shown by the difference between the straight continuous line (corresponding to *Go*) and the straight dashed line (corresponding to *G1o* and *G1o>Go*) in Figure 1 above). In a similar manner any increase in the actual gap reduces, for any initial size of the gap, the follower's induced productivity. This is also shown in Figure 1 above by the difference between the straight and dashed lines' induced productivities (λ_f and λ_{fl} respectively) which correspond to different levels of the gap (G and G_l respectively where $G_l > G$).

Substitution of Equation (9) into Equation (7) yields the following expression for the rate of change in the gap,

$$g = (p_{1a} - p_{fa}) + \lambda_1 y_1 - (a\varphi\, e^{-G/\theta}\, y1\, (\pi/\xi)) \quad (11)$$
$$(p_{1a} - p_{fa}) + y_1\, (\lambda_1 - (a\varphi\, e^{-G/\theta}\, y1\, (\rho/\xi))$$

Eq.(11) shows several important features of 'gap dynamics.' First, for any given level of y_l and of (π/ξ) the direction in the rate of change in the gap will depend on the difference in the rate of growth of autonomous productivities, the induced productivity of the leader and the extent to which the follower country can benefit from the spillover effects, which basically depend on its degree of adaptability or learning capacity.

Second, an increase in the leader's country growth rate (y_l) will produce both divergent and convergent effects on the follower country's ability to catch-up or its ability to narrow the gap. On the one hand, it will translate into an increase in the rate of growth of the follower country through the workings of Thirlwall's Law. The magnitude of the pull effect of the leader on the follower country will depend on the ratio of export to import elasticities (π/ξ). This will narrow the gap. At the same time it will widen the gap through its induced productivity effect $(y_l \lambda_1)$. Formally, by taking the derivative of the g with respect to y_l,

it can be shown that the path of the gap can be divergent, convergent or neutral. That is,

$$dg/dy_l = \lambda_1 - (ae^{-G/\theta}(\pi/\xi) \quad (12)$$

and

$$dg/dy_l > 0 \Rightarrow \lambda_1 - (a\varphi e^{-G/\theta}(\pi/\xi)) > 0 \Leftrightarrow$$
$$\lambda_l / (a\varphi e^{-G/\theta})(\pi/\xi) \quad : \textit{Divergent gap path.} \quad (13)$$

$$dg/dy_l = 0 \Rightarrow \lambda_1 - (a\varphi e^{-G/\theta}(\pi/\xi)) = 0 \Leftrightarrow$$
$$\lambda_1 / (a\varphi e^{-G/\theta}) = (\pi/\xi) \quad : \textit{Neutral gap path}$$

$$dg/dy_l < 0 \Rightarrow \lambda_1 - (a\varphi e^{-G/\theta}(\pi/\xi)) < 0 \Leftrightarrow$$
$$\lambda_1 / (a\varphi e^{-G/\theta}) < (\pi/\xi) \quad : \textit{Convergent gap path}$$

According to the set of Equations (12), growth in the leader economy (y_l) will narrow (widen; not affect) the rate of growth of the gap only if the differences in the induced productivities of the leader and follower economies are smaller (bigger; equal to) than the difference in the export elasticity of income relative to the income elasticity of the follower's import demand (i.e., $(\lambda_l/a\varphi\, e^{-G/\theta}) < (\pi/\xi)$; $(\lambda_l/a\varphi\, e^{-G/\theta}) > (\pi/\xi)$;$(\lambda_l/a\varphi\, e^{-G/\theta}) = (\pi/\xi)$).

The same result (i.e., the same relationships and conclusion) holds in general terms when $y_l > 0$. and under the assumption that for analytical purposes the difference in the rate of growth in autonomous productivities is equal to *0*. Under these assumptions, Equation (13) can provide a benchmark or criteria for convergence. That is,

$$g = y_I \left(\lambda_1 - (a\varphi e^{-G/\theta} (\pi/\xi) \right) \quad (14)$$

and

$$g > 0 \Rightarrow \lambda_1 - (a\varphi e^{-G/\theta} (\pi/\xi)) > 0 \Leftrightarrow$$
$$\lambda_I / (a\varphi e^{-G/\theta}) > (\pi/\xi) \quad : \textit{Divergent gap path.} \quad (15)$$

$$g > 0 \Rightarrow \lambda_1 - (a\varphi e^{-G/\theta} (\pi/\xi)) = 0 \Leftrightarrow$$
$$\lambda_1 / (a\varphi e^{-G/\theta}) = (\pi/\xi) \quad : \textit{Neutral gap path}$$

$$g/ 0 \Rightarrow \lambda_1 - (a\varphi e^{-G/\theta} (\pi/\xi)) < 0 \Leftrightarrow$$
$$\lambda_1 / (a\varphi e^{-G/\theta}) < (\pi/\xi) \quad : \textit{Convergent gap path}$$

Both sets of Equations (12) and Equations (13), point to the fact that no parameter (whether it be the learning capability or the elasticity of exports or imports) or no policy aimed at a single objective can guarantee convergence. As an example, policies seeking to increase the export elasticity relative to the income elasticity (say, policies to encourage activities producing goods with high income elasticity)[35] may turn out to be unsuccessful unless these manage to offset the differences in induced productivities (either through complementary policies that improve the 'learning capacity' or if the same policies have a positive effect of the 'learning capacity' of the follower country).

5.0 The New Bilateral Free Trade Agreements: Some Practical Implications for Smaller Economies

The bilateral FTAs are very comprehensive and similar in their structure and content and have for some chapters identical provisions. It

35 These may well be policies to increase efficiency gains.

can be easily argued that the negotiations are, in fact, a gradual piecemeal approach to a single FTA negotiation with the rest of the world through an approach whereby countries are added on a gradual basis. The bilateral agreements will eventually converge to an overall encompassing multilateral one, giving credence to the consequent improvement in welfare hypothesized by free trade advocates.

This approach simplifies the process of an FTA negotiation. However, it leaves developing countries in a weaker position. It is better to negotiate 'en bloc' than on a stand-alone basis. Developing countries are also lured into signing FTAs for fear of exclusion.

In spite of their limited time in existence the bilateral free trade agreements analysed have been in force for the most three years (as in the case of the Chile-US FTA) - the effects are claimed to be positive. Table 1, below, summarizes the effects of the bilateral FTAs currently in force on trade and investments and identifies the 'winning sectors.'[36]

Nonetheless, the content of the FTAs raises important concerns for the smaller economies of Latin America and CARICOM

First, the FTAs represent a significant step forward in the outright liberalization of the movement of goods and services. While, as mentioned earlier, the WTO texts ensure, except in exceptional circumstances, that trade in goods abides by free market mechanisms, they provide at the same time space for intervention in trade in services, a key area of economic development for smaller economies. The scope for policy intervention is, however, significantly reduced when both trade in goods and services are placed under market rules.

Policy actions are further constrained by full capital mobility and the type of protection clauses afforded to foreign investors such as those related to indirect (and creeping) expropriation contained in the FTAs investment chapters. Given the destabilizing possibilities associated with financial globalization, countries need flexibility to apply capital controls, rather than restrictive type policies, in order to avert unwarranted movements in interest and exchange rates and in output growth.

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36 Morocco and CAFTA countries are not included since the implementation date of the agreements is 2006 and data have not yet been made available.

TABLE 1. TRADE AND INVESTMENT EFFECTS OF UNITED STATES BILATERAL FREE TRADE AGREEMENT

Trade Agreement	Entry into Force	Trade Effects	Investment Effects	Benefitted Sectors a/
Jordan - United States	2001	United States exports have increased by 90% since the entry into force of the FTA	...	Auto exports (1700% increased). Rice exports (1100% increased). Corn exports (1600% increased). TV and radio transmitters (45% increased).
Chile - United States	2004	Exports from the United States to Chile totalled 3.9 and 5.2 US$ billion in 2004 and 2005. Trade between Chile and the United States increased by 35% between January-October, 2005 and 2006 and by 133% in relation to the same period in 2003. Since 2001 Chile has enjoyed a surplus with the United States equivalent to 3 billion dollars US$ for the period January - October, 2006.		

TABLE 1. TRADE AND INVESTMENT EFFECTS OF UNITED STATES BILATERAL FREE TRADE AGREEMENT - Cont'd

Trade Agreement	Entry into Force	Trade Effects	Investment Effects	Benefitted Sectors a/
Singapore-United States	2004	United States exports have increased by 25% since the entry into force of the FTA. The United States has a trade surplus of 5.5$ billion US with Singapore	Increase of 21.4% in Singapore investment in the United States one year after the entry into force of the FTA	Gas turbines (60% increase) Aircraft parts (45% increase) Parts for heavy machinery (59% increase) Video and audio cassettes (58% increase) Pharmaceutical products Organic chemicals
Australia-United States	2005	One year after the entry into force of the FTA Australian imports increased from 1.6 to 15.8 billion US$. This has contributed to 8.4 billion US$ trade surplus.	...	Heavy machinery (85% increased) Gas turbines (69% increase) Yachts and other pleasure boats (55% increase)

Note: ... denotes not available.

a/ The figures refer to United States exports. The percentage increases refer to the change between the pre ad post AFT implementation year.In the Case of Chile the figures refer to the rate of change between 2005 and 2003.

Source: On the basis of official information.

The provisions on indirect expropriation are very broad, leading to interpretations that in some cases have been found to be biased towards foreign investors (such as the Metalclad case in Mexico). It is important to accompany the provisions that protect foreign direct investors with those that limit their actions and that explicitly recognize and outline their due responsibilities.

Second, the FTAs raise questions related to enforcement and to dispute settlement mechanisms that must be addressed. These are two important sections of the agreement especially in the areas of investment and the environment.

In the particular case of the environment, the effective enforcement is characterized by a duality between the objective 'enforcement of environmental laws' and the discretion afforded to countries in the establishment of its own laws, their implementation and the allocation of enforcement resources. The difference in environmental standards between the United States and the countries with the FTAs is also an issue that needs to be addressed.

At the institutional level the FTAs contemplate the creation of an Environmental Affairs Council that oversees the implementation and operation of the chapter. However, the FTAs do not specify the working mechanisms of the Council and how it will deal with the discretion afforded to the signatory countries. The dispute settlement is explicit but has an associated cost, which in the case of less developed economies and especially smaller economies can be a significant financial burden.

The incorporation of public submissions and the creation of an environmental cooperation commission in case of failure to enforce environmental laws are certainly important. The question remains as to the degree to which it can be an effective instrument. In the well known case of case of the North American Agreement on Environmental Cooperation the enforcement of rules has clashed with the discretionary power that countries generally have under such agreements.

Third, the FTAs are said to allow smaller economies such as those of Central America and the Dominican Republic to secure the benefits they receive through preferential market access such as the CBI, CBERA and the Generalised System of Preferences. However, since the FTAs are advocated on reciprocal market access and on the principle of non-discrimination (Most Favoured Nation clause), smaller economies actually lose, de facto, their preferential status.

Reciprocity means that both the United States and any other FTA signatory country must, over a reasonable period of time, eliminate tariffs. Since the United States provides free (or near) market access for most of its imports, the burden of reducing and eliminating tariffs and that of the concomitant adjustment for the economy is placed on the developing economy. The principle of non-discrimination means that any third world country that signs a free trade agreement with the United States is bound to receive the same market access as any other country that has an FTA in force with the United States.

As such the FTAs suppress the notion of preferences, or of special and differential treatment which is important for smaller economies, or the notion of 'size and levels of development' which is a main guiding principle of the FTAA negotiations.

Finally, according to the model presented there is no mechanism that guarantees the optimality of free trade, the convergence between countries or in fact that ensures a known outcome. The final outcome of free trade may depend on a variety of parameters and variables. It may even be shaped by history, crucial decisions and unforeseen events.

6.0 Conclusion

Our model argues that the growth impetus of the leader economy has both a convergent and divergent effect on the follower country. The convergent effect works through two channels, the adaptive capacity and Thirlwall's Law. The divergent effect works through the induced productivity-cumulative causation mechanisms.

In addition it asserts that all the follower country can do is take advantage (through spillover effects) of the productivity gains of the leader country. The extent to which the follower country can profit from spillovers depends on its adaptability, that is, its learning capacity, its ability to earn reserve currency and on its initial conditions including its stock of reserve currency. As a result, monetary policies that soften the existing balance-of-payments constraint can be as important as educational policies aimed at improving human capital.

The model states that within an FTA the follower and smaller economy can narrow the gap only if the difference in the elasticities ratio is greater than the difference in the induced productivity coefficients. Countries gain nothing in terms of convergence by improving their net

export potential unless it offsets the induced productivity differential. This is a key point that should, from our point of view, constitute a basic guideline for economic policy design and trade negotiations.

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