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# GLOBALIZATION EQUITY AND JUSTICE IN SMALL NATION STATES

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#### ABSTRACT

The effects of globalization on smaller nation Caribbean states have not been thoroughly examined, and the trade performance of these states has not been evaluated since the WTO came into existence. In this paper, we report on a study that conducted a comparative analysis of selected Caribbean nation states with other countries at different stages of development to determine their levels of performance from 1990 to 1995, the period before the WTO began full operation, and the period 1996 to 2002, the period after globalization. The selected Caribbean countries were Cuba, Haiti, Dominican Republic, Jamaica, Trinidad and Tobago, and Suriname. The measures for comparison are changes in GDP per capita, capital investment as a percentage of GDP, foreign direct investment, current account balance, trade balance, export services, infant mortality, literacy rates, and agricultural and service labor force change. We also compared the economic and social performance of these countries with those of selected countries of North America, South and Central America, Europe, Asia, and Africa. The economic performance of the Caribbean states varied and compared favorably with other developing economies and developed economies, but the socioeconomic indicators worsened for Suriname and other nation states. The current account and the trade balances were negative for Cuba, Haiti, Jamaica, Dominican Republic, Guyana and Trinidad and Tobago, in spite of their positive changes in GDP per capita since the WTO came into operation. No factors provide evidence of how well the countries are likely to perform in the

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future with the implementation of the WTO. In general, the Caribbean states performed worse before, rather than after, the implementation of the WTO. Model results show that the Caribbean states should concentrate on the export of services and the increase of the agricultural labor force to stimulate significant economic growth. The factors influencing the growth of other regions vary, but export of services seemed to have a general effect on economic growth. In terms of social indicator improvement, countries in Asia and Africa should reduce infant mortality while North America and South America could benefit from improvement in literacy rates.

Keywords: Caribbean states, regression analysis, globalization, equity.

#### **1.0 INTRODUCTION**

The term "globalization" is one of those catchwords that stirs highly controversial debates in economics and the social sciences. Globalization means the removal of trade barriers to allow the unimpeded flow of goods and services from country to country and to make closer integration of national economies 2002). (Stiglitz The institutional complexity underlying globalization is highly misunderstood. Though, the process of globalization has the potential to alleviate poverty in the developing world, the management of globalization (including the international trade agreements that have played such a major role in removing these barriers) has been a source of contention. The term globalization has a wide range of social, economic, and cultural appeal in national societies. and in the

international community. The concept of globalization and the installation of institutions through the World Trade Organization (WTO) to implement the process have given rise to opposing societal forces, with camps that are for free trade and those that are against. The opposing groups have been engaged in bitter dialogues that result in physical confrontations often which times warrant national and international interventions. Here we will examine whether the alleged deleterious of globalization. economic effects especially on small nation states such as those in the Caribbean, are substantiated by economic and social indicators.

Though the term globalization is used in a narrow sense to mean the reduction of trade barriers, it has a legal twist and refers to legal and *de facto* denationalization. This reference of globalization to denationalization and

common (global) goods indicates that the process of globalization affects the role of the state as the main actor in international relations (Tietje 2002). Hence, the WTO, allied with a group of international corporations with excessive market and economic power, govern the world's commercial and economic activities. The democratic legitimacy of these organizations is often in question (Zampetti 2003).

In the age of globalization, international relations are not primarily concerned any more with the coordination of competing state interests, but with the conservation, distribution, and protection of global public goods. Global governance, therefore, is a legal concept that tries to identify and to describe the process and the actors dealing with global public goods, such as global economic welfare, human rights, or protection of the environment. The commission on Global Governance has thus convincingly defined global governance (Tietie 2002).

The historical simplistic view of globalization as a steady, progressive, beneficent integration of the global economy is both inaccurate and misleading. It is inaccurate in that it ignores the contradictory way in which globalization has been visited upon various regions of the world, and it is dangerous in that it ignores the real effects of greater openness on real people (Schneider 2003). If we take the situation of the "Great Catfish War," the

conflict where the Vietnamese catfish producers were criticized for dumping catfish in the U.S. market after they were encouraged to increase production for economic development through U.S. technical assistance (The New York Times 2003), and the past crisis faced by smaller Caribbean states dependent on banana exports for their survival when they were brought to the world court for selling bananas in a protected market, we may understand the effects of globalization on poor people in Asia and the Caribbean. While free trade may result in a flow of cheaper goods that may benefit producers and consumers, efficiency and market access may constrain producers and consumers of impoverished nations from capturing some of the surpluses derived from free trade. We may also begin to understand that small nation states may have little jurisdiction over their own property rights and may be unable to use these rights in business and economic negotiations.

The proponents of globalization often put forward a list of economic benefits that free trade is likely to generate based on basic economic models. They believe that "openness" in trade is economically advantageous, in the sense that net benefits to society are increased. They also suggest that trade is beneficial for poverty reduction in the developing countries (Bannister and Thugge 2001a). Commitment to an outward-oriented trade policy indirectly

assists the poor since they are vulnerable to inflation. An open trade regime permits imports of technologies and processes that can help the poor. Trade liberalization can also facilitate antipoverty programs and social policies implemented either by the government or by non-governmental organizations by making products and technologies used in these programs more generally available and cheaper (Winters 2000). Trade liberalization results in increased supply of inputs available to a nation, and will also enable the economy to get around constraints placed on access to such plant variety under protection (Romer 1994).

Those who are anti-globalization, on the other hand, have suggested that it is socially maligned on several dimensions and disfavors the poor (Bhagwatti and Shrinivasan 2002). Their argument is that trade accentuates, not ameliorates, and that it deepens, not diminishes, poverty in both the rich and the poor countries. It is also emphasized that some of those who lose from trade reform are the poorest from society (Stiglitz 2002, Bannister and Thugge 2001b). The central effect on poverty is assumed to come from the effects of real wages of the unskilled workers, endowed with labor but limited human organizational and financial capital. Though trade expansion is associated with economic growth and poverty reduction, the poor usually do not have the economic means to participate in

investments during robust and sustained economic growth.

The anti-free trade group, which is often vociferous, does not have the types of economic models to show the negative effects of globalization as the economists do. The group is usually socially conscious and concerned about those who are dislocated from their livelihoods through the closing of plants and businesses and through price increases. They point out from case studies the inequities resulting from trade liberalization. The economists often show from general equilibrium models that the poor are the ones to benefit.

Small nation states, like those that belong to the Caribbean Common Market (CARICOM), do not have market power to control the revenues derived from international trade. These countries are economically vulnerable because of their trade dependence. Their trade dependence ratios (trade/GDP) range from 76 in the islands to 186 percent in the mainland states (Girvan 1997). These countries are bound to be affected by decisions made by the WTO. In this paper, we use macro economic variables and a sample of random countries to conduct a comparative analysis and to determine whether poorer countries, like the CARICOM members, and countries dependent on agricultural trade performed better or worst than the richer countries after the implementation of the WTO.

#### **1.1 Theoretical Framework**

Economists often use a simple partial equilibrium model to show the net benefits of trade. In most cases they fail to show the underlying assumptions, or consider the negative effects of trade on those households, poor, or small nations that are likely to suffer from trade liberalization. The poorer nations do have certain characteristics that make them vulnerable to risks and external shocks. They are heavily dependent on trade, have little reserves, heavy unemployment, low growth rates, low diversity of exports and have high external debt to export ratio. Those nations more often than not are characterized as labor surplus economies. Citizens of these small nation states can be seriously and permanently damaged by economic shocks. Severe shocks can turn transitory poverty into a permanent phenomenon. Even a transitory loss of income can cause the poor to loose opportunities to acquire human capital through education, health care, and nutrition; and thus affect their ability to get out of poverty in the future (Bannister and Thugge 2001b). Trade barriers are often used to improve wages for unskilled labor or labor who would not be employed under a free trade regime. Hence once free trade is adopted of individuals a number gain employment while others loose their

employment. In the absence of safety, net segments of society suffer due to loss of income.

A number of economists believed that international trade acts as a conduit as well as an impetus for the flow of knowledge, and hence will lead to faster diffusion of knowledge and hence, to faster per capita output growth (Ben-David and Loewy 2000). Greater per capita output will result in increased income to the poor and hence greater GDP growth rate in labor surplus economies.

If labor is in elastic supply in those small nations, as noted in the Arthur Lewis economic development model, then it is expected that growth will pull reserve of labor into gainful а employment. Here we are assuming that trade has a positive influence on growth, and growth is able to reduce poverty. If growth is modeled in a way such that it does not affect a segmented pool of the dependent subsistent poor, on agriculture, non-tradable goods are rampant, and that the inhabitants of those areas are not linked to the mainstream, or in inner cities that are structurally delinked from the main city where growth is occuring, then growth will pass the poor by. Growth in agricultural output designed for export might further immiserize the developing countries where most of the poor are working on tiny plots alongside corporate farms producing goods whose prices fall because of the larger farms

advances in implementing the Green Revolution technologies. Further, those poor Caribbean states that depend on export based resources for early development might be faced with problems of environmental sustainability due to long term raw material exploitation for export.

Since developing countries are labor-abundant. freer will trade encourage workers to gravitate towards higher wages. As Winters (2000) has stated, one is not sure whether within these countries the less-skilled workers are the most intensively used factor in the production of tradable goods. While most of the unskilled workers might be employed in agricultural enterprises, it might be difficult for them to make adjustments to work in an industrial setting.

The Stolper-Samuelson (SS) theory predicts that a rise in the relative price of a commodity leads to a rise in the real return to the factor used intensively in producing that commodity. Thus for a small economy with a highly protective structure, liberalization will result in a rise in the relative price of unskilled products labor-intensive and а consequent increase in the real wage for unskilled workers. As the market for labor-intensive products expands, so demand for unskilled labor will rise, leading to higher returns to unskilled labor in general. According to the SS trade liberalization theorem, in developing countries should draw more unskilled workers into employment and increase their real wages (Bannister and Thugge 2001).

Macroeconomic data show that while countries are affected by the global interchange of goods and services, and their trade/GDP ratios have increased, there have often been distributional issues and falling wages. Some countries have seen their market shares of exports decline while others that have increased market quantities have experienced a fall in total revenue due to competition and falling prices (Kaplinsky 2001). The removal of the preferential treatment on bananas did result in a fall in the demand for the services of many unskilled workers. The employees in those industries, where protection was removed encountered difficulties in finding new ways to earn leaving from already depleted а resources. The removal of the trade barriers affected the structure of the market and the whole economy. While it may be argued that these are isolated cases where short term adjustments after an economic shock did not take place in a timely manner, there may be reasons to suspect that the smaller nations did not perform as well as the larger nations after the implementation of the WTO. We used aggregate data to show that smaller nations may have been more susceptible to dislocation of trade barriers and may not have progressed as they should have since the implementation of the WTO. We also

examined the effects of certain economic and social indicators on these countries' economic and social performances before and after the implementation of the WTO.

#### **2.0 METHOD**

Since cross country regressions are a poor way to approach the imbalance among rich and poor countries, we selected groups of 26 countries from North America and Europe, Asia, Africa. South and Central America and the CARICOM, and examined their growth before and after the WTO (Bhaghwati and Srinivasan 2002). With cross-country studies, the choice of the period of sample and of proxies will often imply many effective degrees of feedom that may affect the validity of the results. We evaluated these countries by regional groupings and tried to compare the economic and social performance of the CARICOM and Central American states with that of the larger, more powerful nations. We used economic and social indicators (Real GDP growth rate, debt service as a percent of exports, current account as a percent of exports, trade balance, capital investment as a percentage of GDP, literacy rate, infant mortality per 1000, service force percent contribution to GDP. and percent agricultural workforce) to determine whether these indicators significantly influenced GDP growth rate before and after the

implementation of WTO (1990 to 1995 and 1996 to 2002). Tables and figures were constructed to examine the changes before and after the implementation of the WTO.

#### 2.1 Regression analysis

A simple model to examine the effects of socio-economic indicators on GDP growth rate and GDP per capita was developed. The model enabled us to capture both the time and cross country effects in each group of countries. The model is written as:

$$y_{it} = \sum_{k=1}^{P} x_{itk}$$
  $_{k} + \mu_{it}$ ,  $i = 1..., N, t = 1,..., T$ 

where:

y is the dependent variable, x is a vector of independent variables,  $\mu$  is the error or disturbance term, N is the number of cross sections, T is the length of the time series, k is the number of exogenous or independent variables.

Problem arises based on the assumptions made about the linear relationships between the dependent and independent variables and the variance-covariance of the vector of the error term,  $\mu$ . We assumed a homogeneous relationship between y and x over all time periods and over all cross sections. This assumption may be violated since

the  $\mu$  is composed of the effects of numerous individually unimportant, but collectively significant variables that have been omitted from the analysis (Nerlove 1971). The effects may be specific to the individual observations, specific to the time period, or both. We may assume that  $\mu$  can be decomposed into three parts:

$$\mu_{it} = v_i + \lambda_t + \varepsilon_{it} \tag{2}$$

such that

$$E\mu_{i} \ \mu_{i'} = \begin{cases} \sigma_{\mu}^{2} & i = i', \\ 0, & i \neq i', \end{cases}$$

$$E\lambda_{t} \ \lambda_{t'} = \begin{cases} \sigma_{\lambda}^{2} & t = t', \\ 0, & t \neq t', \end{cases}$$

$$E\varepsilon_{it}\varepsilon_{i't'} = \begin{cases} \sigma_{\varepsilon} & i = i' \text{ and } t = t' \\ 0 & otherwise \end{cases}$$

where  $v_i$  represents the individual effect,  $\lambda_t$  the period effects, and  $\varepsilon_{it}$ ? the remainder and the cross effects between  $v_i$  and  $\lambda_t$ .

Cross-sectional, time series analyses were used to determine whether there were any changes in Real GDP per capita and Real GDP growth rate before and after the implementation of WTO. These models were developed:

GDP/PC = f(INV, FDI, DEBTSER, TRB, CACB, PCAG/GDP, ILLR, INFM, D) (3)

where:

GDP/PC- GDP per capita for country *i* in U.S. dollars;

INV- capital investment in country *i* as a percent of GDP from 1990 to 2002;

FDI- foreign capital investment for country i in U.S. dollars from 1990 to 2002;

DEBSTER- debt service of country *i* as a percent of exports from 1990 to 2002;

TRB- trade balance for country *i* in U.S. dollars from 1990 to 2002;

CACB- current account balance as a percent of exports for country *i* from 1990 to 2002;

PCAG/GDP- percent of agricultural contribution for country *i* from 1990 to 2002;

ILLR-illiteracy rate in percent for country *i* from 1990 to 2002;

IFM- Infant mortality/1000 for country i from 1990 to 2002;

D- dummy variable, D=0 from 1990 to 1995, and D=1 from 1996 to 2002.

#### **3.0 RESULTS**

The data in tables 1 through 5 show that the economic and social indicators of all countries produced mixed results of growth before and after the implementation of the WTO. Some of developing countries showed the their improvement in economic indicators but regression in their social indicators. The U.S. showed a marked and growing trade deficit while Canada

had a positive and growing trade surplus. The current account balance for Canada was improving while that of the U.S. was negative and becoming more negative. There were hardly any changes in the social indicators for the countries forming the North American grouping.

The Central American countries had mixed results. In general all countries had positive growth rates of GDP per capita. Nicaragua, Costa Rica and Mexico had positive growth rates. All countries had negative trade and current account balances, with Mexico, Costa Rica and Nicaragua experiencing improvements in their current account balances. Almost all countries except Panama observed improvements in their infant mortality rates. There were no noticeable changes in literacy rates.

The European countries displayed mixed economic growth. Germany had a positive and growing FDI, a reduction in debt service, a weakening of the current account balance, and a positive and increasing trade balance. France had a positive change in foreign capital investment (FDI) and debt services and an increase in current account and trade balance. The U.K had positive FDI, a reduction in debt servicing, a declining, but positive, trade balance.

There is much variation in the figures for the Caribbean and South American countries. Jamaica experienced negative growth, had a decrease in inflation, an increase in unemployment, a decrease in percent debt to GDP, a worsening condition in current account balance and a decrease in trade balance. The Dominican Republic noted declines in its current account and trade balances.

The African countries experienced improved GDP growth rate throughout. Only Ghana had a slight decline in GDP growth rate. Ghana and South Africa had declines in current account balances. The results for the social indicators were mixed, with Botswana showing an increase in infant deaths per 1000. South Africa showed remarkable improvement in literacy and infant mortality rates during that period. Literacy rates increased from 64.5 to 82 percent and infant mortality rate declined from 58.2 percent to 51.3 percent.

The Asian countries experienced falling GDP growth rates after the implementation of the WTO. Their trade balances varied. Thailand experienced increasing trade balance, while Japan had a reduction in trade balance. Malaysia and China had improvement in trade balances while India had a deterioration of trade balance. All the Asian countries had a fall in their current account balances. The countries showed improvement in their infant mortality rates. There were only slight changes in the literacy rates.

#### **3.1 Regression results**

The regression analysis showed that the  $R^2$  varied from 0.21 for the Caribbean countries to 0.95 for North American countries. The  $R^2$  seemed to vary with the levels of aggregation and diversity among countries in terms of economic homogeneity (Tables 6 and 7). The factors influencing economic growth in Africa were exports services, the agricultural work force, and infant deaths. GDP per capita increased with the change in export services, but declined with the number of individuals in the agricultural work force and as the literacy rate increased. Though there seemed to be negative change in GDP per capita growth rate after the WTO the change was not significant (Table 6).

The North American countries' GDP per capita was positively influenced by the export of services, but negatively affected by debt services and infant death mortality. Each unit increase in debt service reduced the GDP per capita by 121.57 units. The increase in infant mortality during a one year period reduced GDP per capita by 1163.36 units.

The European countries GDP per capita was positively influenced by export services. The European countries seemed to benefit since the installation of the WTO, but the sign of the coefficient was insignificant.

The economy of the South American countries is positively related to the export of services and the increase of the number of people in the work force. The GDP per capita may be increased by a reduction in infant mortality and an increase in literacy rate. The South American and Central American region seemed to benefit with the implementation of the WTO.

Positive change in GDP per capita for Caribbean countries is related to positive changes in GDP per capita. In contrast to African countries, the number of people in the agricultural labor force in the Caribbean and South American countries was positively related to changes in GDP per capita growth. This means that one could add more people to the agricultural sector without reducing the level of GDP growth. However, the Caribbean countries have noted an economic downturn since the WTO came into operation.

The GDP per capita for the Asian countries is positively influenced by FDI the export of services and and influenced by infant negatively mortality. Infant mortality reduction during one year may have a \$174.27 increase effect on GDP per capita for the Asian countries. For the Asian countries, the GDP per capita also decreased on the average after the WTO came into operation.

#### 4.0 DISCUSSION

The data show that there are winners and losers in terms of changes in economic indicators after the

implementation of the WTO. In general Caribbean. Asian and the North American countries feared the worst in terms of GDP growth rates after the WTO. It is said, therefore, that globalization is not bad, but it depends on the way it is applied. Small countries as a whole are likely to gain and lose based on their economic stability before the WTO. Those countries that have reached economic stability and started to implement policy reforms in the context of their poverty reduction strategies have performed better than countries that are less advanced in their reform programs. Those that had not yet started with domestic reforms performed worst of all (Walkenhorst 2003).

A major consideration in terms of the effects of WTO on trade is the level of development of the country. The United States may seem to be doing the worst with large negative trade and current account balances, but most of its imports may be in the form of consumption of non-capital goods which other countries can regard as a stage of growth beyond consumption. The U.S. may also have achieved a level of growth that it may control without affecting the standard of living of its inhabitants. When one examines the data by country and region it may be confusing. It may be difficult to understand what each of the countries is going through and how they performed before or after the WTO. An evaluation of their performances may be due to the countries long-term planning goals established before or after WTO.

The regression analyses point out various areas where countries may place great emphasis if they want to obtain significant growth rates. While one may believe that the Caribbean countries should place emphasis on manufacturing and industries, the model shows that Caribbean countries should increase their agricultural work force and increase their export of services if they want to attain substantive economic growth. This may have some merit since there has been an exodus of individuals in the agricultural work force of those Caribbean countries that have concentrated on service exports. According to FAO and World Bank statistics the agricultural work force in the Caribbean declined from 25 to 21 percent from 1990 to 1997. The agricultural labor force in Sub-Saharan countries also declined from 71 to 67 percent during that same period, but it is still very large compared to the developed countries. As can be seen from the model, the Caribbean countries' growth rates depend heavily on services.

The export of services is important for all countries in all regions. This may mean that, in the future, there may be serious competition in the service export sector worldwide due to its effect on GDP growth.

The countries of Africa and Asia should be concentrating on the reduction

of infant mortality whereas the North American and South American countries may benefit significantly from improvement in their literacy rates. The African countries may gain by the reduction of individuals in the work force.

Caribbean countries The mav examine their agricultural sector and focus on labor employment because whatever growth that they experience from the export of services may be consumed through the imports of foods as we import more food than we export. Delgado et al (1998) and Mellor and Gavian (1999) argue that agricultural liberalization and productivity growth are so effective at poverty alleviation because their demand spill-overs are heavily concentrated on relatively localized activities in which the poor have a large stake, such as construction, personal service and simple manufactures (Winters 2000).

While countries may shift from agricultural production to increases in service output, they should examine their economic advantages not only in agriculture, but advantages in agriculture relative to the other sectors. They should also examine the linkages between agriculture and the rest of the economy, and the role agriculture plays in the total economy and global trade.

The problem is that with globalization, there are winners and losers, in most cases the smaller nations that are in the process of fostering

economic growth may suffer the most damage and over a longer period. If the losers of globalization cannot benefit from surpluses accumulated through trade liberalization, there is no reason to believe that a broad consensus in favor of globalization will emerge. There is no mechanism within the WTO for the wealth generated redistribution of through more efficient allocation of global resources or through monopoly power exerted by multinational corporations. Countries that benefit positively from trade protect themselves against outside invaders seeking to survive. The appellate body of WTO has indirect jurisdiction over the allocation of resources, but none over the accumulation and distribution of wealth attained through the use of global resources. The question that has not been answered by proponents of globalization so far is how the losers of globalization will be compensated if the nation states lose their tax base due to international increases in capital mobility? The Caribbean states have experienced mixed economic growth and their economic performance varied compared to the more industrialized countries. However, there is not much information on the loss of revenue due to globalization for these countries since most of them have shifted to agriculture to services.

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		Real GDP	Direct	Debt	Current	Trade	Infants	
Countries	Period	Growth Rate	Investmen	Service/X	account/X	Balance	Deaths/10	Literacy
	Average	(%)	t (\$bn)	GS (%)	GS (%)	(\$bn)	00	% рор.
United	1990 - 1995	2.16	39.04	27.6	-8.5	-126.77	8.8	97
Sates	1996 - 2002	3.26	167.58	26.57	-22.76	-332.43	7	97.71
Canada	1990 - 1995	1.76	5.99	26.76	-36.1	12.86	6.8	98.8
Canada	1996 - 2002	1.73	5.65	19.87	-25.6	13.63	5.71	84.43
Germany	1990 - 1995	3.98	4.19	15.97	-1.1	45.56	7.17	99
Germany	1996 - 2002	1.44	54.95	8.87	-0.86	79.31	5.29	99
France	1990 - 1995	1.13	18.41	25	0.52	0.86	6.67	99
TIANCE	1996 - 2002	2.37	38.66	21.53	6.1	13.28	5.43	99
United	1990 - 1995	1.28	18.57	34.08	-3.98	-21.69	7.67	99
Kingdom	1996 - 2002	2.64	62.73	2.69	-2.86	-38.43	6	99

Table 1: Socio-economic data for North American and European
countries 1992-1995 and from 1996 to 2002

Table 2: Socio-economic data for Central American countries
1992-1995 and from 1996 to 2002

		Real GDP	Direct	Debt	Current	Trade	Infants	
Countries	Period	Growth Rate	Investmen	Service/X	account/X	Balance	Deaths/10	Literacy
	Average	(%)	t (\$bn)	GS (%)	GS (%)	(\$bn)	00	% pop.
Nicaragua	1990 - 1995	1.23	0.03	98.28	-93.28	-0.41	59.5	61.17
Thicalayua	1996 - 2002	4.49	0.21	16.94	-59.99	-0.91	42	67.71
Honduras	1990 - 1995	3	0.04	34.87	-15.8	-0.14	53	73
TIUTIUUIAS	1996 - 2002	2.93	0.17	22.16	-12.73	-0.58	42.28	73.29
Panama	1990 - 1995	5.85	0.18	24.15	-1.5	-0.35	20.5	90.17
ranama	1996 - 2002	3.91	0.69	26.1	-4.28	-1	20.86	91.57
Costa Rica	1990 - 1995	0.24	0.24	21.5	-12.2	-0.47	15.83	92.5
	1996 - 2002	0.51	0.51	13.69	-8.53	-0.41	12.14	94.14
Mexico	1990 - 1995	2.08	6.1	30.3	-25.42	-8.16	37.17	89
WICKIGO	1996 - 2002	3.93	14.84	47.17	-7.89	-4.6	27.14	90

		Real GDP	Direct	Debt	Current	Trade	Infants	
Countries	Period	Growth Rate	Investmen	Service/X	account/X	Balance	Deaths/10	Literacy
	Average	(%)	t (\$bn)	GS (%)	GS (%)	(\$bn)	00	% pop.
Cuba	1990 - 1995	-6.17	0.35	0	-5.58	-0.71	11.17	95.33
Cuba	1996 - 2002	3.85	0.36	34.43	-31.99	-2.21	7.57	96.57
Haiti	1990 - 1995	-2.76	0	27.13	-7.37	-0.22	82.17	53
riaiti	1996 - 2002	1.3	0.01	14.83	-7.96	-0.55	73.29	45.86
Jamaica	1990 - 1995	1.87	0.13	25.85	-4.35	-0.58	25	95.83
Jamaica	1996 - 2002	-0.01	0.46	16.17	-10.31	-1.33	17.29	85
Dominica	1990 - 1995	2.6	0.21	12.42	-10.82	-1.34	56	83
n republic	1996 - 2002	6.5	0.79	5.99	-5.19	-2.88	45	82.57
Guyana	1990 - 1995	5.13	0.08	45.5	-25.08	-0.04	49.33	96.5
Guyana	1996 - 2002	2.49	0.05	12.71	-13.07	-0.06	47.14	98
Suriname	1990 - 1995	1.87	-0.04	19.82	5.2	0.1	33.33	92.5
Sumame	1996 - 2002	1.2	-0.03	9.26	-11.57	0.07	26.86	93.57
Trinidad &	1990 - 1995	1.45	0.28	25.03	8.62	0.69	19.17	95.83
Tobago	1996 - 2002	3.99	0.74	8.94	-2.31	0.15	17.86	97.71

### Table 3: Socio-economic data for Caribbean and South American countries1992-1995 and from 1996 to 2002

# Table 4: Socio-economic data for African countries1992-1995 and from 1996 to 2002

		Real GDP	Direct	Debt	Current	Trade	Infants	
Countries	Period	Growth Rate	Investmen	Service/X	account/X	Balance	Deaths/10	Literacy
	Average	(%)	t (\$bn)	GS (%)	GS (%)	(\$bn)	00	% pop.
Botswana	1990 - 1995	4.67	-0.02	2.65	8.22	0.33	42.33	73.17
DUISWAIIA	1996 - 2002	6.04	0.08	2.71	14.24	0.65	53.86	72.29
Ghana	1990 - 1995	4.13	0.09	19	-17.93	-0.4	74.17	60
Griaria	1996 - 2002	4.33	0.13	21.29	-15.37	-0.83	69.71	61.71
Nigeria	1990 - 1995	3.35	1.1	22.82	1.97	4.57	92	57.5
Nigena	1996 - 2002	3.16	1.28	14.44	0.16	5.36	77.14	57.57
South	1990 - 1995	0.6	0.29	10.38	3.47	5.35	58.17	64.5
Africa	1996 - 2002	2.71	2.24	12.17	-2.93	3.53	51.29	82

		Real GDP	Direct	Debt	Current	Trade	Infants	
Countries	Period	Growth Rate	Investmen	Service/X	account/X	Balance	Deaths/10	Literacy
	Average	(%)	t (\$bn)	GS (%)	GS (%)	(\$bn)	00	% pop.
Thailand	1990 - 1995	9.03	1.97	12.28	-16.85	-5.48	37	93.67
mananu	1996 - 2002	1.43	3.97	17.67	5.86	7.49	31.14	94.71
Japan	1990 - 1995	1.98	1.15	0	17.75	117.59	4.67	99
Japan	1996 - 2002	1.11	6.07	0.04	17.77	101.66	4	99
Malaysia	1990 - 1995	8.9	4.17	7.02	-6.6	1.77	22.33	83.17
malaysia	1996 - 2002	4.14	3.4	6.2	4.86	14.98	22	84.14
China	1990 - 1995	10.65	19.36	10.28	6.68	6.3	48.67	75
Unina	1996 - 2002	8.1	42.7	8.67	9.41	37.29	39.14	50.86
India	1990 - 1995	5.25	0.67	28.95	-13.23	-4	87	45.33
inula	1996 - 2002	5.54	2.59	16.8	-4.71	-10.99	63.43	51.43

### Table 5: Socio-economic data for Asian countries 1992-1995 and from 1996 to 2002

 Table 6. Regression of GP per capita growth rate on economic and social indicators for

 Africa North America, South and Central America and Europe

	North A	merica	South-Centr	al America	Europe	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	27334.99	31896.3	-1839.77	1854.0	-11440.6	17681.9
Export of services	103.74*	11.46	297.94*	52.62	104.01*	36.61
Debt services	-121.57*	40.26	3.74	2.43	-38.55	68.60
Capital Investment	-30.38	275.9	-43.31	15.45	483.20	313.3
Services work force	-156.62	181.2	24.11	15.17	181.26	204.9
Agricultural work force	412.54	749.8	43.98*	18.47	-303.33	918.2
Infant deaths	-1163.36*	494.9	-38.40*	15.84	1042.52	615.0
Literacy rate	74.82	335.5	33.40**	17.76		
Dummy variable	-3222.79*	1031.5	367.88*	182.8	287.06	1839.1
R <sup>2</sup>	0.9	95	0.6	55	0.:	55

\*significant at 5% level; \*\*significant at 10% level.

	Africa		Caribb	bean	Asia	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	6689.73*	1401.5	-3919.13	3443.5	8656.54	6970.9
Foreign direct investment	-19.35	31.83	1066.77*	534.4	154.66*	36.96
Export of services	248.97**	133.4	59.66	164.8	486.76*	41.78
Debt services	-8.48	4.40	0.68	6.2	65.45	84.91
Capital Investment	14.64	9.63			-97.78	60.07
Services work force	-11.39	11.47	78.79*	25.42	-55.96	62.87
Agricultural work force	-74.68*	26.34	33.01	24.15	-174.27*	66.89
Infant deaths	-8.88*	3.78	7.60	22.16	5.29	54.89
Literacy rate	-15.30	9.66	14.81	25.84	40.16	61.26
Dummy variable	-98.56	86.60	-459.72**	265.4	-4145.42*	864
<b>R</b> <sup>2</sup>	0.3	9	0.2	1	0.8	5

## Table 7: Regression of GP per capita growth rate on economic and social indicators for Africa, the Caribbean and Asia

\*significant at 5% level; \*\*significant at 10% level