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LC/CAR/L.51
26 September 2005
ORIGINAL: ENGLISH

**LABOUR MARKET TRENDS
AND
IMPLICATIONS OF REGIONAL INTEGRATION**

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LABOUR MARKET TRENDS AND IMPLICATIONS OF REGIONAL INTEGRATION

1. INTRODUCTION

Labour markets represent the backbone of economic functioning, providing the means of survival to populations, with labour income ensuring the livelihood of workers and families alike. Labour is also an essential input into production – in many cases it is the main input, especially in service sectors which are dominant sectors in the Caribbean. As such, labour markets define economic well-being: in competitive economies labour is paid its marginal product. This implies that only productive labour prospers as higher productivity implies higher earnings, which in turn allows for higher consumption and a higher standard of living. The vitality and health of labour markets, therefore, play a crucial role in attaining and maintaining economic prosperity. Labour markets not only need an adequate match of supply and demand of labour – in terms of quantity as well as quality, but also in terms of being based on an institutional framework conducive to its smooth functioning. This requires inter alia a setting that regulates contractual agreements and protects the rights of workers, whilst not distorting hiring and firing decisions of firms.

For economies to thrive, the scope for employment must be enhanced so that benefits of increased prosperity accrue to all strands of the population, and not to the fortunate few employed. It is therefore important to monitor underlying developments of labour markets to ascertain that they are well-functioning. Recognizing trends in a timely manner is imperative to ensuring that adverse developments are addressed as soon as possible and detrimental effects are mitigated.

The role of labour markets has become even more important within an environment of increasing globalisation. To be globally competitive in production necessitates economies of scale.¹ Achieving economies of scale poses a major challenge to regions - not only to small economies, such as those to a large extent found in the Caribbean, but also due to geographic characteristics, where land-locked economies can be as equally disadvantaged as island economies. One natural response to these challenges has been an increased focus on deeper regional integration to foster intraregional trade and create stronger linkages among economies in the region.²

Overall, several main challenges facing the region can be identified. These pertain to: (a) unemployment; (b) education; and (c) labour mobility. These challenges are, however, intertwined; successfully addressing one will require tackling others. Thus, high unemployment – particularly amongst youths – is a consequence of the inability to supply school-leavers with

¹ Whilst competitiveness in general is a dynamic concept related in particular to economic policies and institutions governing an economy, labour availability plays an essential role. However, availability here not only pertains to quantity, but moreover to quality, especially in an increasingly knowledge-intensive surrounding.

² Whilst regional integration has, to all intents and purposes, been achieved in Western Europe and in the United States, it has witnessed a renaissance in Africa and in the Asian-Pacific, as well as in Latin America and the Caribbean.

skills that are required in the labour market. This inability is in addition mirrored in the fact that the region is witnessing inflows of skilled workers from abroad to fill the demand-driven gap. However, in contrast to this, one can paradoxically observe that a significant proportion of the limited skilled labour emerging from education facilities in the region migrate to other regions, resulting in significant brain-drain.

In fact, labour migration is a particularly relevant issue to the region in view of the envisaged Caribbean Community (CARICOM) Single Market and Economy (CSME).³ Several decisions have successively dealt with the free movement of labour among participants, notably Protocol II which amended the 'Treaty Establishing the Caribbean Community concerning the Establishment, Services and Capital', allowing for free mobility; free movement has led to intensified debate on the prospective effects of mobility on individual economies. However, whilst member States, in general, embrace the potential for development, they are also wary of potential negative effects that free labour mobility may bring about. To address these concerns, current legislature only foresees free migration for non-wage earners whereas migration of wage-earners is limited to certain occupational groups – skilled labour essentially.

This paper addresses the majority of the above-mentioned issues. Section 2 investigates the nature of Caribbean labour markets, presenting trends in variables characterising labour markets to identify where shortcomings lie. Section 3 analyses labour mobility in the region, differentiating between interregional and intraregional mobility and explains how increased integration can lead to increased labour mobility. Section 4 concludes.

2. Nature of Caribbean labour markets

From the outset, the region appears to have the ingredients required for a prospering labour market: its predominantly Anglophone influence combined with the proximity to the United States of America could be assumed to act as an engine to prosperity. However, to the contrary, the region has significant unemployment, with rates standing in the double digits for all but three of 13 countries, and being especially high for the female population.

This section presents labour markets in the Caribbean, explaining how unemployment manifests itself in the region, presenting data on the evolution of unemployment, how it is distributed across the population and how long people are affected by it, before trying to identify possible causes of unemployment. Although explanations put forward have used either countries' size (economic and/or geographic), as well as development status as 'natural candidates' to the problem, these arguments need to be presented and put into perspective when identifying potential bottlenecks to making employment more available to the populations in the region. This section then proceeds by presenting general trends relating to education and labour productivity and discusses the issue of labour relations and regulations in the region in general.

³ Although implementation of the CSME is behind schedule, Jamaica, Barbados and Trinidad and Tobago have agreed to lead the process by completing all required provisions as of 31 December 2004 to be fully CSME compliant as of 1 January 2005. All remaining CARICOM territories are due to complete the process by December 2005 so that the region-wide CSME can be launched on 1 January 2006.

Throughout this section, five member States in particular are presented in detail, where possible: Barbados, Belize, Jamaica, Saint Lucia and Trinidad and Tobago. These countries span a spectrum between the two poles that delimit the productive structures in the region: commodity-exporting economies and service-oriented economies. The nature of the productive structures ultimately defines the qualitative type of labour that is required. In such, Trinidad and Tobago is considered a commodity-exporting economy, with a strong petroleum industry, an important manufacturing industry as well as a strong construction and quarrying sector contributing a combined 46% of output. Barbados and Saint Lucia, as a member of the Organisation of Eastern Caribbean States (OECS), are service-oriented economies, with services contributing approximately four fifths of output. Jamaica has a strong service sector, important mining, construction and manufacture industries accounting for a third of output and hence must be considered to lie between the two poles. Belize is one of the few non-island member States in the region and considered to capture different underlying dynamics which may be at work in island and non-island economies.

Moreover, apart from differing with respect to their productive capacities, the five countries exhibit significant variations regarding their population size (with Saint Lucia having approximately 157,000 inhabitants and Jamaica having approximately 2.6 million inhabitants), yet still cover, in total, approximately 69.7% of the region's overall population. They also bear significant variations in terms of average income, ranging from approximately US\$3,700 per capita in Belize to approximately US\$16,000 per capita in Barbados. As such, any common conclusions to be drawn from the analysis of these countries is unlikely to result from commonalities relating to production structures and/or size and wealth, but may rather be attributed to inherent structural underpinnings common to the region in as far as such prevail.

2.1 The manifestation of unemployment

Overall trends in unemployment

Unemployment must be considered one of the most important economic challenges to member States, in particular, as high unemployment seems to be chronic to the region. However, unemployment must be viewed from multiple dimensions and cannot only be expressed in a single figure as it affects different cohorts as well as different sexes.

Many member States in the region are experiencing unemployment in excess of 10% (see Table 1). This is also true for the countries analyzed in greater detail in this study, which have witnessed diverging trends, as can be seen in Figure 1. Thus, following an increase at the beginning of the 1990s in Barbados and Trinidad and Tobago, unemployment has steadily declined since the mid-1990s and now stands at approximately 10.5% in Trinidad and Tobago and 10.3% in Barbados (2002), down from 19.8% and 24.3% in 1992, respectively. On the other hand, unemployment in Saint Lucia has not decreased significantly over the last decade; following a substantial increase during the second half of the 1990s (peaking at 21.8% in 1998), it now stands at 16.4% (latest figure: 2000), only 0.4% less than in 1993. In Jamaica unemployment has hovered around 15% with surprising consistency. Unemployment in Belize has remained relatively unchanged relative to 1993, standing at 10% in 2002 (9.8% in 1993). It increased, however, in the interim to 14.3% in 1998.

Figure 1 - Unemployment rate

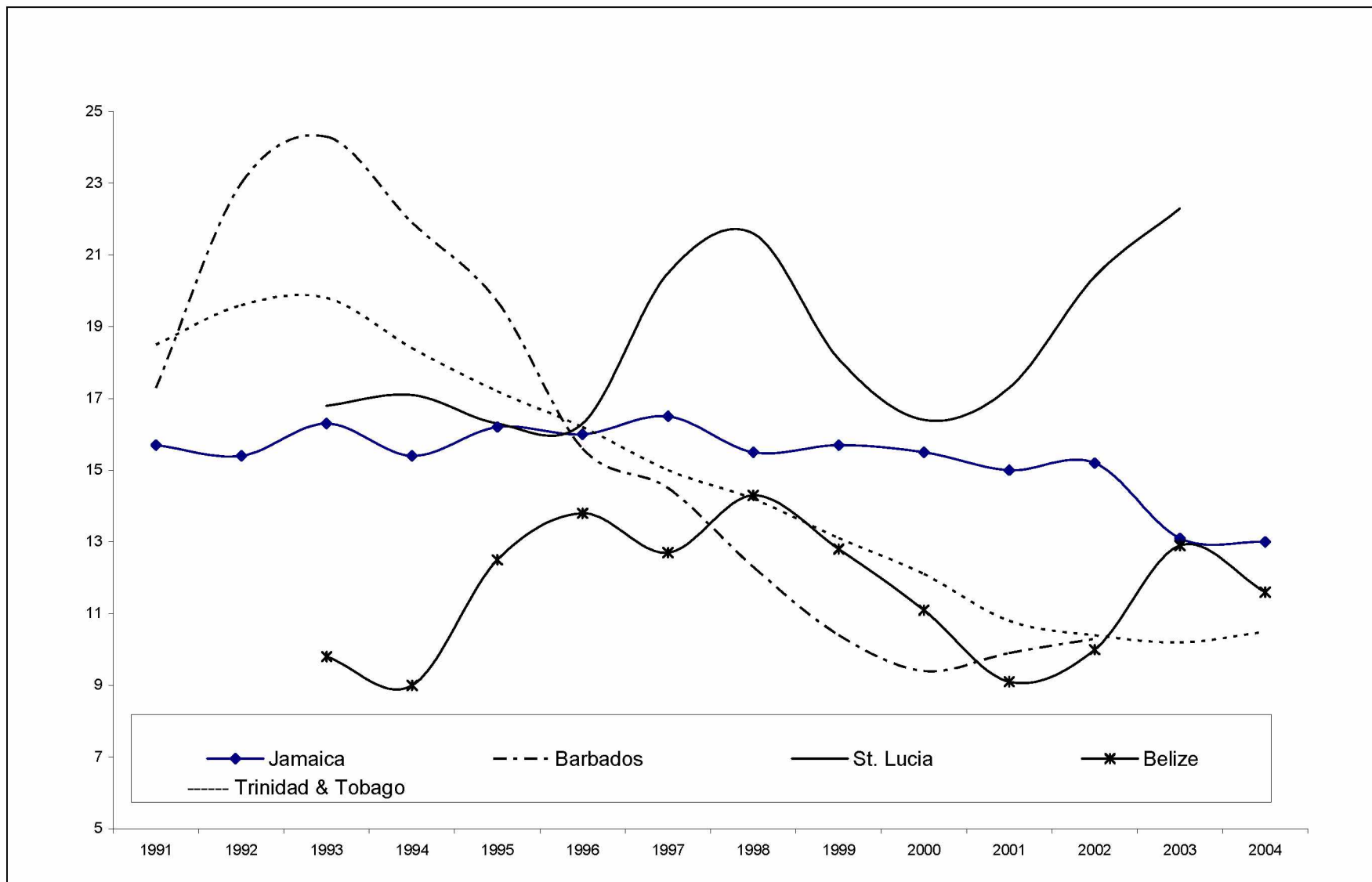


Table 1 - Unemployment rates across the region

	Country	Year	Male	Female	Overall
Service-based economies	Anguilla	2002	6.3	9.5	
	Antigua and Barbuda	1991	6.4	5.6	
	Aruba	1997	6.7	8.4	
	Bahamas	2003	5.9	9.6	
	Dominican Republic	2001	9.4	26	
	Grenada	1998	10.5	21.2	
	British Virgin Islands	1991	3.4	3.1	
	Barbados	2002	8.7	12.1	10.3
	Jamaica ⁺	2003	9.6	17.5	13.1
	Netherlands Antilles	2000	12	16.2	
	Saint Lucia	2003	17.2	28.1	22.3
	Saint Vincent & Grenadines	1991	18.4	22.1	
	Trinidad and Tobago*	2004	8.0	12.1	10.5
Resource-based economies	Belize	2004	8.3	17.4	11.6
	Dominica	1997	19.6	27.2	
	Guyana	1992	8.4	18.1	
	Suriname	1999	10	20	

*: Q2/03-Q2/04, under ILO's definition, overall use would be 7.5%.

⁺: official sources

Source: ILO, 2003 and official sources

Average unemployment rates, however, mask the fact that unemployment affects different segments of the population differently. In particular, unemployment has an important gender dimension as well as an important age dimension. Whilst female participation rates are traditionally lower than male participation rates, this tendency is particularly observable in the region. However, here too, different trends emerge: in service-oriented economies such as Saint Lucia and Barbados, the female participation rate is approximately a fifth lower than that of males, whereas in Trinidad and Tobago and Jamaica – economies with more manufactured output – the participation rate of females is more than a third lower.

Despite lower participation rates, females are particularly affected by unemployment: whilst female unemployment is more than 40% higher than male unemployment in Barbados (the latter running at 8.7% (2002 figures)), female unemployment is more than twice as high as male unemployment in Jamaica and Belize.

Employment growth and unemployment

Figures 2–5 show how the size of sectors, measured as a proportion of the total employed labour force changed during the 1990s as well as how unemployment changed across various industries in Jamaica, Barbados, Trinidad and Tobago and Saint Lucia. It also ranks the largest sectors according to size.

The underlying forces driving employment growth have differed amongst countries: whilst Trinidad and Tobago witnessed labour growth primarily in the larger sectors, Saint Lucia saw strong employment growth in relatively more minor sectors. In Barbados, employment growth was negative in the largest and smallest two sectors whilst three relatively important sectors saw extremely strong growth. In Jamaica the overall picture was mixed.

Several sectors were relatively vibrant between 1991 and 2002 in Trinidad and Tobago. The three largest sectors all saw increases in size coupled with decreases in unemployment. However, the largest relative increase in size of sectors took place in the smallest sector of the economy – in mining and quarrying. This sector grew by more than 50% whilst simultaneously witnessing a decrease in unemployment of more than half. Similarly, the financial sector grew by a fifth whilst unemployment decreased by half. Construction and transport, storage and communication also saw relatively stable increases in employment growth coupled with decreases in unemployment, pointing to the emergence of vibrant sectors (see figure 2). The only sectors which decreased were the primary sector (agriculture and forestry and particularly the sugar sector), as well as one of the companies' most important sectors – the petroleum sector.

In Barbados unemployment fell in all sectors between 1991 and 2002. The largest relative decline in unemployment took place in government services, which is the economy's largest employer: unemployment dropped by more than a half (from 7.2% to 3.1%). However, only three sectors, financial services, tourism and construction saw increases in employment growth coupled with decreases in unemployment rates, pointing to vibrant sectors. In the financial services sector employment more than doubled; in tourism it increased by a quarter (see Figure 3). Unemployment decreased by a fifth to 6.8% in the financial and business sector, in government services it decreased by more than half to 3.1%; this is also the largest sector employing more than a fifth of the labour force.

Jamaica witnessed a varied performance in terms of employment growth during the 1990s. Whilst several important sectors (in terms of total employment) witnessed employment growth, such as community, social and personal services (1.6%), wholesale and restaurants (17.8%) and construction (36.2%), others saw significant decreases, such as agriculture, mining and manufacturing (down by 21.9%, 12.3% and 31.6%, respectively). Despite the increase in employment growth, however, unemployment increased in wholesale, hotels and restaurants by 19.3% to 9.7%; in construction by over a third to 19.1%; in manufacturing by almost half (44.2%) to 19.6%; and in mining by almost a fifth to 8.5%. On the other hand, despite seeing a contraction of 21.9% in employment growth in the 1990s, unemployment in agriculture decreased by almost a half to 2.5%; the sector boasts in fact the lowest unemployment rate of all sectors. Unemployment was down two-thirds in utilities between 1991 and 2000 (see Figure 4).

A snapshot of Saint Lucia suggests that whilst the majority of sectors exhibited positive employment growth during the 1990s, three of the five largest sectors in terms of labour force (agriculture, public administration and manufacturing) witnessed declines in their share of overall employment (by 12.9%, 10.2 and 19.6%, respectively). These three sectors also saw increases in their unemployment rates between 1996 and 2000⁴, increasing to 29.8%, 7.5% and 16.1%, respectively. Whilst overall unemployment remained virtually unchanged between 1996 and 2000 (increasing, however, to 21.6% in 1998, see Figure 1), there were significant changes in unemployment rates according to economic sector. On the other hand, sectors such as wholesale, hotels and restaurants, construction, social and personal services and education seem to be vibrant sectors with employment growth going hand in hand with decreases in unemployment (see figure 5).

⁴ In terms of unemployment, detailed figures per sector are only available since 1996.

Figure 2 - Changes in the share of sectors to total employment/unemployment: Trinidad, 1991-2002

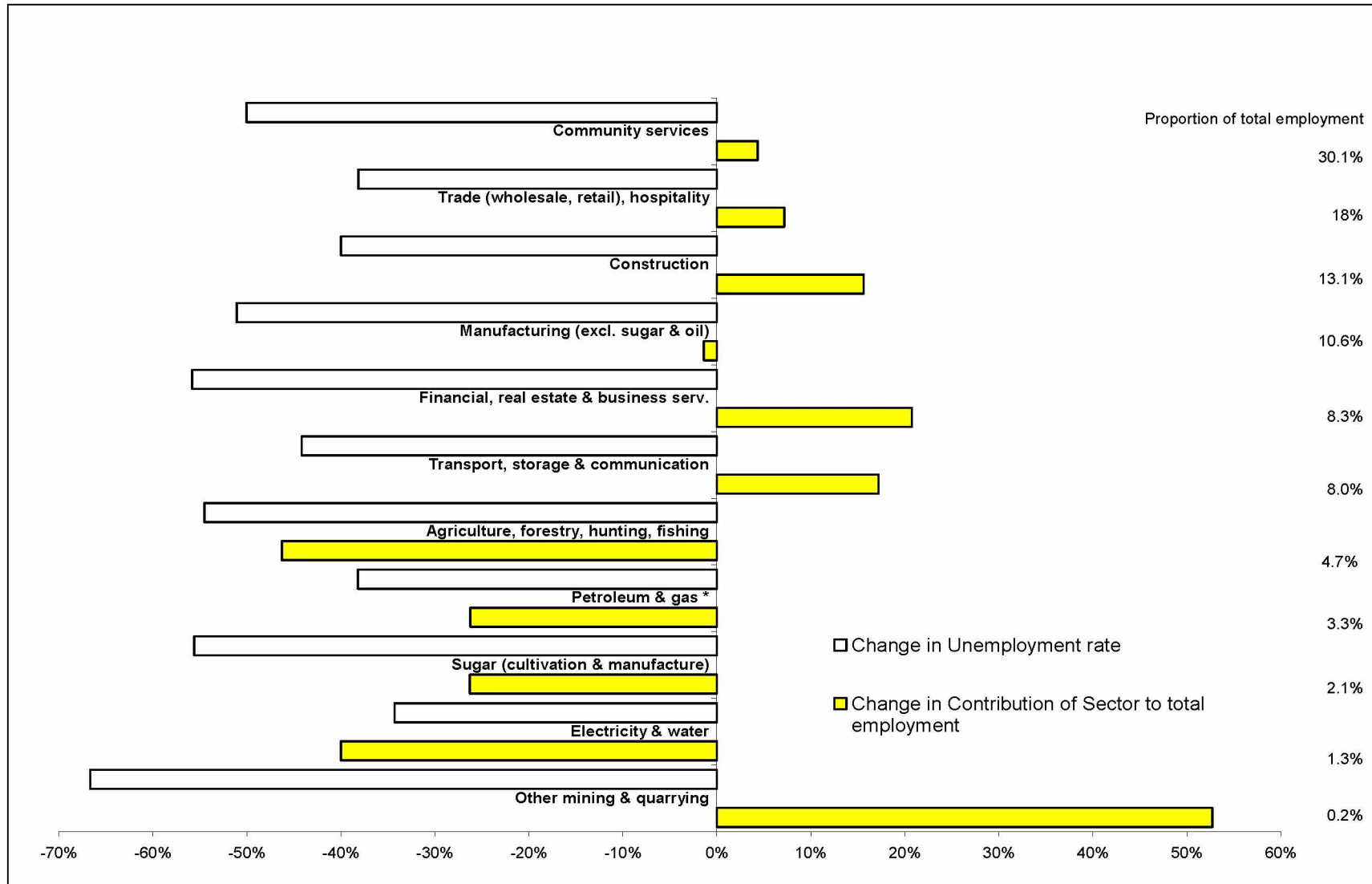


Figure 3 - Changes in the share of sectors to total employment/unemployment: Barbados, 1991-2002

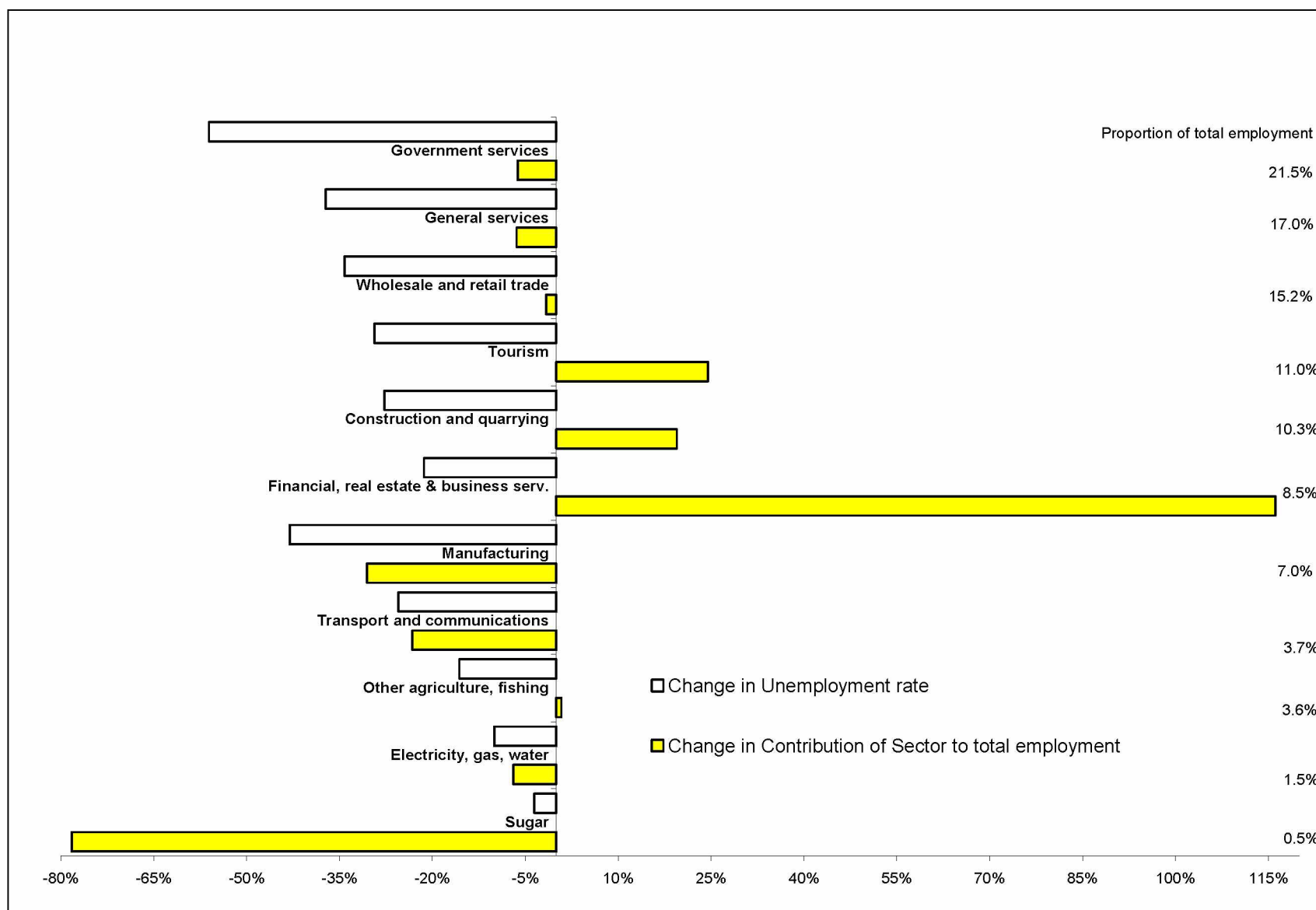


Figure 4 - Changes in the share of sectors to total employment/unemployment: Jamaica, 1991-2002

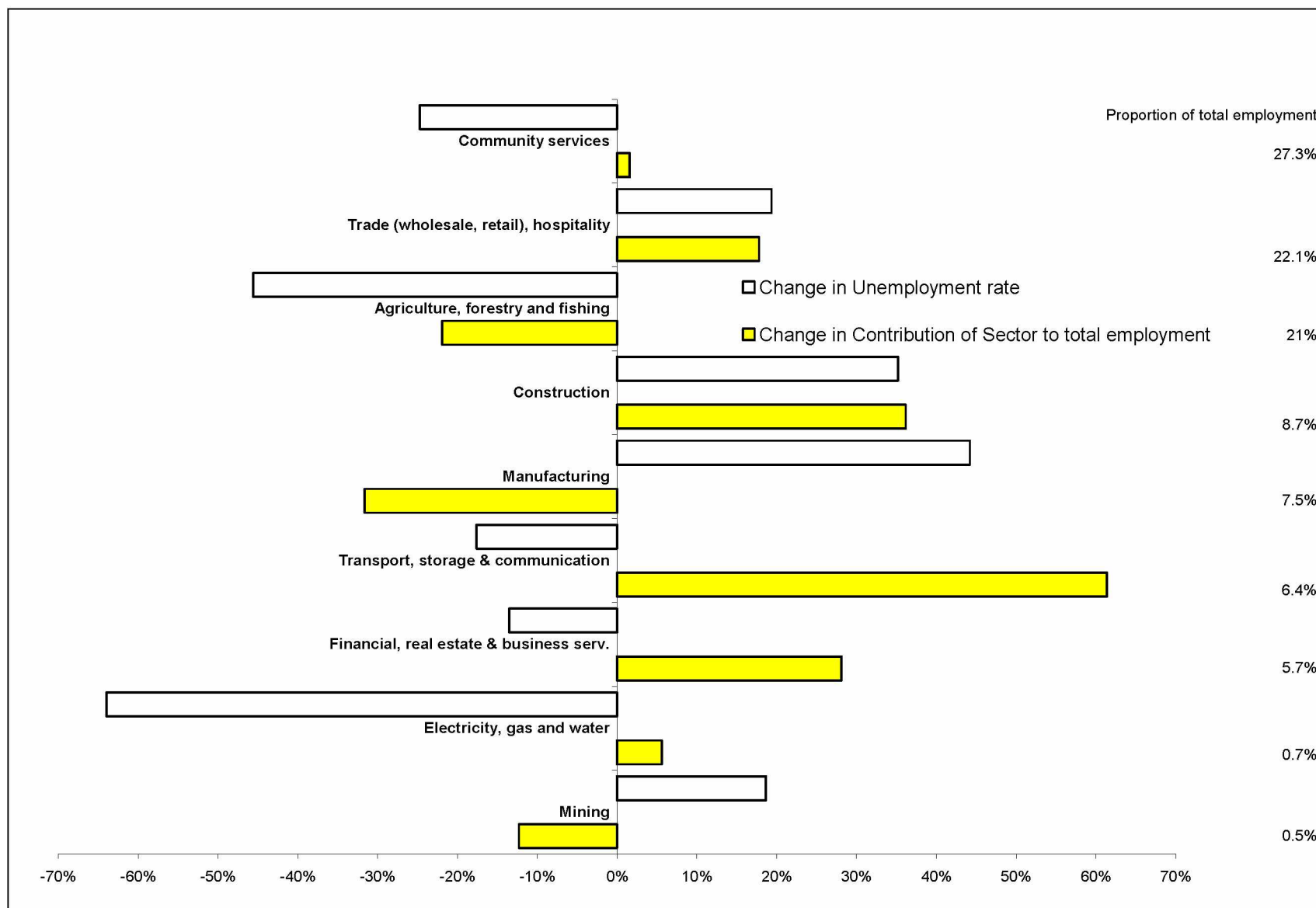
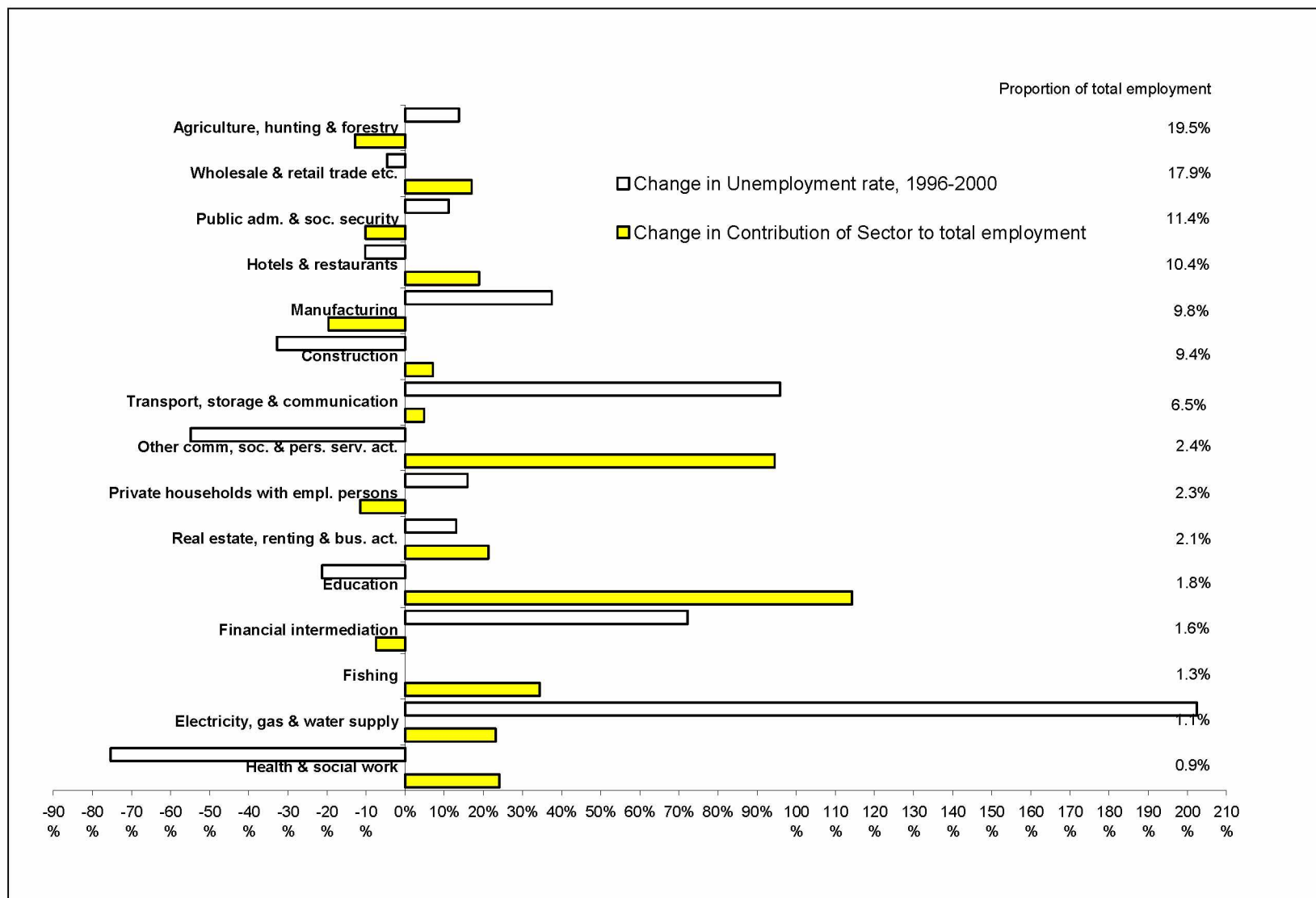


Figure 5 - Changes in the share of sectors to total employment/unemployment: Saint Lucia, 1993-2000



Youth unemployment

Unemployment affects different cohorts to different degrees; analysis of the age-structure of unemployed may thus reveal underlying factors pertaining to the fundamentals of the labour market. In particular, youth unemployment needs to be examined, as high rates of unemployment not only impinge on the youth gaining work experience at early stages – which affects their overall future competitiveness in labour markets – but may also point to a failure of the education system to equip young adults with the relevant skills required by domestic labour markets.

The age structure of the unemployed has changed in the five countries over the course of the 1990s. Thus, while the proportion of unemployed aged 55-64 increased in Trinidad and Tobago, Jamaica, Barbados and Belize, it decreased in Saint Lucia; in Trinidad and Tobago and Jamaica the increases were relatively small while in Barbados and Belize they were relatively higher: Barbados saw an increase of two thirds of the proportion of unemployed in this age group and Belize an increase of almost 50% (see Table 2). On the other hand, although there has been a decrease in the share of the youngest age group in unemployment – the 15-19 year olds – in all five countries, only Barbados saw a decrease in the age group 20-24.

Table 2 – Distribution of unemployment according to age cohort

	Trinidad		Jamaica		Barbados		St. Lucia		Belize	
Age\Year	1991	2002	1991	2001*	1992	2000	1993	2003	1993	2004
15-19	17.9	16.7	25.2	18.6	17.4	16.5	28.6	16.7	34.7	24.1
20-24	24.5	25.1	30.9	32.3	20.1	17.3	23.1	18.9	19.9	19.3
25-34	32.5	25.5	24.1	29.3	33.6	27.6	22.7	25.6	26.9	14.9
35-44	14.8	17.9	10	10.6	17.1	19.7	12.5	18.2	8.9	11.8
45-54	7.2	11.5	6	5	8.6	14.2	5	11.6	3.0	9.6
55-64	2.7	3	2.7	3	3.3	5.5	5.6	4.0	3.3	7.2
65 plus	0.3	0.3	1.1	1.5	0.3	0	2.5	4.9	3.4	4.7

Source: ILO, 2003, and official sources

Aggregating proportions shows that – although on a declining trend – in Jamaica every second unemployed is in fact less than 25 years old; in Belize and Trinidad and Tobago the proportion is slightly lower at 43.4% and approximately 42%, respectively; it is still a third for Barbados and Saint Lucia. More than a quarter of all unemployed are between 25 and 34 years old in all countries, which points to a structural deficiency of the economies considered: unemployment is not only high, but disproportionately high for young workers. This is clearly indicative that the skills that these workers have do not match those that are in demand.

The skill mismatch is even more apparent when considering not only the age structure of the unemployed, but rather the proportion of each cohort that is unemployed, i.e. at which age one faces which probability of becoming unemployed. In all five countries, the youngest cohorts in the labour force are the most severely affected by unemployment, with every second person aged 15-19 unemployed in Saint Lucia and Jamaica, every fourth in Barbados and Belize and every fifth in Trinidad and Tobago. Considering unemployment of the next cohort, the 20-24 year olds, more than a quarter are unemployed in Jamaica and Saint Lucia, every seventh is

unemployed in Belize, in Barbados one in ten is unemployed and in Trinidad and Tobago every sixth is out of work. In general, the probability of becoming unemployed decreases for the following cohorts; in Barbados it increases marginally for those in their mid-fifties (see Table 3).

Table 3 – Unemployment, percentage of active cohort affected

	Trinidad		Jamaica		Barbados		St. Lucia		Belize	
Age\Year	1991	2004 ⁺	1991	2001*	1992	2000	1993	2003	1993	2004
15-19	43.2	21.2	39.2	50.1	60.9	28	41.5	54.3	24.1	24.0
20-24	29.6	15.7	25.3	27.7	33.9	12.8	21.2	31.9	11.0	15.0
25-34	18.6	6.6	14.4	14	23.9	9.9	13.2	21.5	9.3	13.4
35-44	12.4	4.2	8.8	8.3	15.9	6.1	11.2	15.7	4.6	10.1
45-54	9.2	5	6.9	5.8	14.8	6.3	6.6	16.7	2.9	9.1
55-64	8.7	4.8	4.7	5.2	10	6.5	16.2	15.1	5.6	7.6
65 plus	2.9	2.5	2.9	4.1	4	0	11.3	17.6	7.5	6.7
⁺ : Q2/03-Q2/04										

Source: ILO, 2003, and official sources

Duration of unemployment

A further indicator of the severity of unemployment is captured by the duration of unemployment: the longer unemployment affects individuals, the more difficult it will be to re-integrate them into the labour market, as long exemptions from participation in the labour market lead to losses in professional qualification, be they real losses, or only perceived as such by potential employees. In addition, long-term unemployment has shown to manifest in psychological and behavioural changes and deformations of personality, depressive complaints and self-reported chronic disease. Moreover, high instances of long-term unemployment points to the failure to: (a) provide sufficient means for unemployed to gain new skills and retrain, with the aim of changing careers and gaining meaningful employment; or (b) create an environment conducive to the employment of labour. In particular, long-term unemployment may be indicative of past underlying sectoral changes in the economy, rendering large proportions of the labour force superfluous.

Data on the average duration of unemployment in the five respective countries suggest that Barbados has a dynamic labour market and Saint Lucia a stagnant one: more than 60% of the unemployed in Barbados have been so for less than six months; more than 80% have been unemployed for less than a year and only 1.4% have never held a position before. This suggests that long-term unemployment in Barbados is not a major concern to the unemployed and that employment is seemingly found fairly rapidly.⁵ In contrast to this stands Saint Lucia, where more than three quarters of the unemployed have been so for more than a year. This trend is disquieting, for all of the above-stated reasons and points to a structural issue of labour markets. In Trinidad and Tobago almost a quarter of the unemployed have been so for more than a year and every eighth has in fact never worked before, every second unemployed has been so for less

⁵ This observation is particularly interesting, considering that Barbados is the only country in the region that grants unemployment benefits to the unemployed: this would suggest that the availability of unemployment benefits does not necessarily lead to longer periods of unemployment.

than six months and close to two-thirds have been unemployed for less than one year. This stands in contrast to Jamaica, where almost a third of the population has never worked before and the same proportion has been unemployed for more than a year, suggesting that obtaining employment for labour market entrants is difficult and that finding reemployment is also an issue. Table 4 shows these figures.

Table 4 - Duration of unemployment, % of unemployed

	Latest obs.		Less than 6 months	6 to 11 months	1 year and over	Never worked	Not stated
Barbados	2002		61.9	21.1	12.9	1.4	2.7
Jamaica	2001		21.8	15.5	31.7	30.7	0.3
Saint Lucia	2000		20.3		77.9 ⁺		1.8
Trinidad and Tobago	2002		54.3	9.5	23.7	12.3	0.2
Belize	1999		20.9	23.9	53.8	..	1.9
⁺ : proportion of unemployed working more than 6 months.							

Source: ILO, 2003, and official sources

2.2 Root causes of unemployment

The manifestation of unemployment – in all its dimensions – is a concern to the region. Understanding its causes is a prerequisite to addressing possible deficiencies in regional markets and removing potential bottlenecks. One argument that has been put forward to explain high unemployment in the region sees geographic characteristics as an impediment to low levels of unemployment: the fact that micro-States by definition have small domestic markets infringes on firms to produce efficiently as they are unable to benefit from economies of scale. With the addition of high transport costs – often in combination with transport monopoly issues – this leads to high domestic price levels for inputs to production and accordingly relatively uncompetitive local production facilities. Geographic size, however, cannot be the driving force in the identification of causes of chronically high unemployment as other small economies have consistently managed to create employment opportunities for their populations: throughout the 1990s, for example, Singapore, Hong Kong, Mauritius and Luxembourg – all micro-States – have had unemployment rates of less than 5%. The failure of economies in the region to create sufficient employment must therefore lie elsewhere.

A further explanation may be that labour markets in developing economies have been found to differ significantly from those in developed economies due to structural differences; these being, inter alia, the importance of the agriculture sector in economic activity, the importance of self-employment as well as the irregularity of work activities of a large proportion of the labour force. Accordingly, the majority of labour markets are segmented in developing economies into a rural sector, an informal urban sector and a formal urban sector. Recognition of these structural differences led in the 1950s to the emergence of a new theory on *surplus labour* by Arthur Lewis: Lewis (1954) posited that labour markets in the Caribbean are characterized by *unlimited supplies of labour* in such that, given certain underlying assumptions, unemployment results from a low ratio of capital to labour in developing economies, rather than a low demand for labour, as posited by Keynesian economics in developed economies.

According to Lewis, there are essentially two principal sectors in developing economies: a subsistence sector (akin to the agriculture sector and/or the informal sector, as posited above) and a capitalist sector (akin to the formal urban sector). Due to efficiency wage considerations, the formal urban sector pays a wage premium to deter workers from shirking as well as reduce turnover costs to employers. According to Lewis, a surplus of labour will remain as long as the average product of labour in the non-capitalist sector (i.e. the subsistence sector) is greater than the marginal product of labour at full employment in the capitalist sector. Is this the case, part of the labour force will remain in the subsistence sector, where they can be considered to be underemployed as formally open unemployment does not exist in this model. The only way to reduce unemployment in such a labour surplus economy is to increase the capital stock, as this would lead to an upward shift in labour demand in the capitalist sector (see Box 1). This exposé contrasts with Keynesian economies, where excess demand for *goods* drives down the real wage (by increasing prices, with constant nominal wages), resulting thus in a movement *along* the labour demand curve.

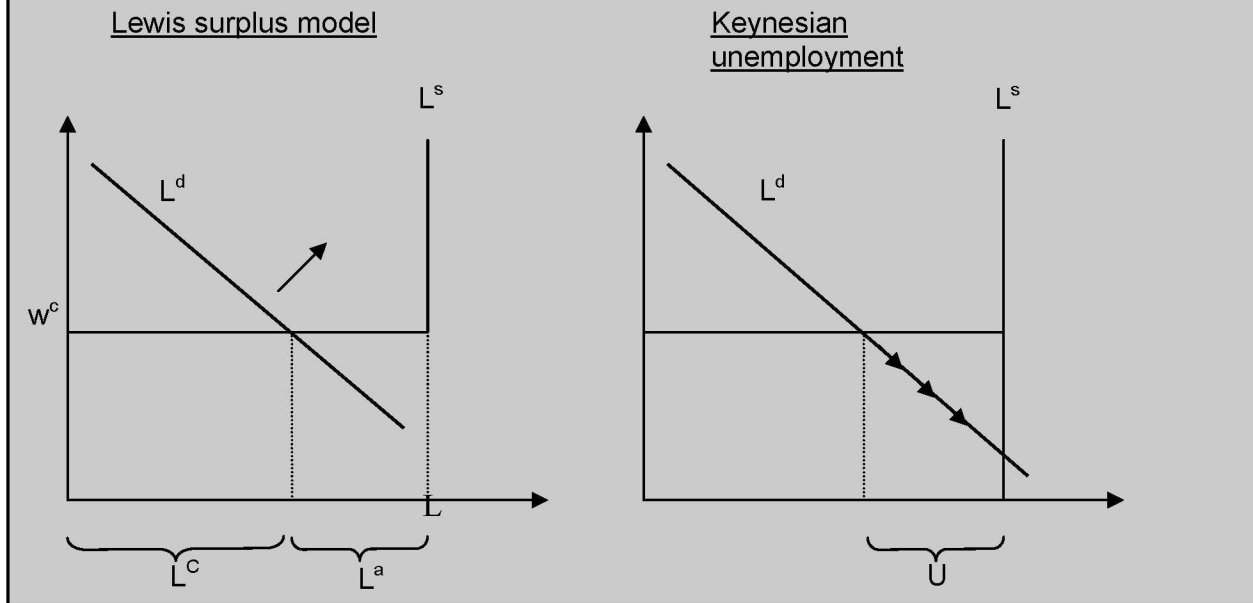
Overall, there is quite some evidence that economies in the Caribbean are in fact such labour-surplus economies. For one, labour markets have been found to be segmented. In addition, alongside unemployment, underemployment is a pervasive issue.

Segmentation and underemployment

Labour markets in the Caribbean are segmented into a formal and informal economy. In addition, there is some degree of labour market segmentation between the rural and urban sector as well as between the private and public sector, which is characterized by the existence of wage gaps, which would not usually arise in an efficiently functioning environment. Whilst the size and importance of the informal economy is notoriously hard to estimate, there is little doubt that it is significant in the region. In Jamaica it has been estimated to account for almost 35% of total employment, compared to an estimated 30% in Saint Lucia, 25% in Belize, 20% in Trinidad and Tobago and 10% in Barbados. Segmentation also manifests itself in discrepancies between wages in the rural and urban sectors – differentials that cannot be explained by differences in characteristics of the employed or of the sector. Although these differences are not too large – estimates for Trinidad and Tobago suggest differentials of approximately 5% - there are more significant differentials within the private sector, with unionized workers often earning significantly more than non-unionized workers, as well as between the public and private sector with estimates ranging from 12% (in Saint Lucia) to more than 35% in Trinidad and Tobago.

Box 1: The Lewis surplus model and Keynesian unemployment

In the Lewis model, the proportion L^C will work in the capitalist sector for wage w^C , which is larger than the subsistence sector wage; L^a will work in the subsistence sector. Underemployment can only be reduced by increases in capital, which will shift the labour demand curve (L^d) up. In contrast, in Keynesian economies unemployment exits (U in the right hand panel). Increasing demand for *goods* decreases the real wage by increasing the price level. Consequently, employment increases as one is moving *along* the labour demand curve.



In addition to the issue of unemployment, *underemployment* is a significant concern in the region as it is far more pervasive than *unemployment*. Following the International Labour Organization (ILO) guidelines of 1954, the majority of countries consider those as unemployed who are available for work *and* actively seeking work; those who are available, but are *not* actively seeking work are considered 'out of the labour force'. The literature has argued, however, that this classification may not be entirely relevant to developing economies where large rural sectors and inadequate labour market information, especially in these sectors, may result in large numbers of people who are available, but not actively seeking work due to for example, excessive search costs. This has been recognized by the ILO itself, which advocated a degree of flexibility where '*...conventional means of seeking work are of limited scope, where labour absorption is, at the time, inadequate, or where the labour force is largely self-employed...*' (ILO, 1983, page 11). Thus, Byrne and Strobl (2004) analyze how relaxing the actively seeking requirement impacts on reported unemployment rates; they do so using the example of Trinidad and Tobago where in fact authorities have introduced a more flexible definition of unemployment than the ILO, by including non-active job seekers who looked at some time during the preceding three months for a job, had not found one and still wanted to work (but were not necessarily currently seeking). Byrne and Strobl (2004) show that this category is behaviourally no different from those unemployed and seeking a job, whilst different from those out of the labour market; hence they should be included in unemployment statistics. Consequently, unemployment figures measured according to current ILO conventions understate

the phenomenon: for Trinidad and Tobago the difference was on average 3.6 percentage points for males and a full 7.2 percentage points for females.

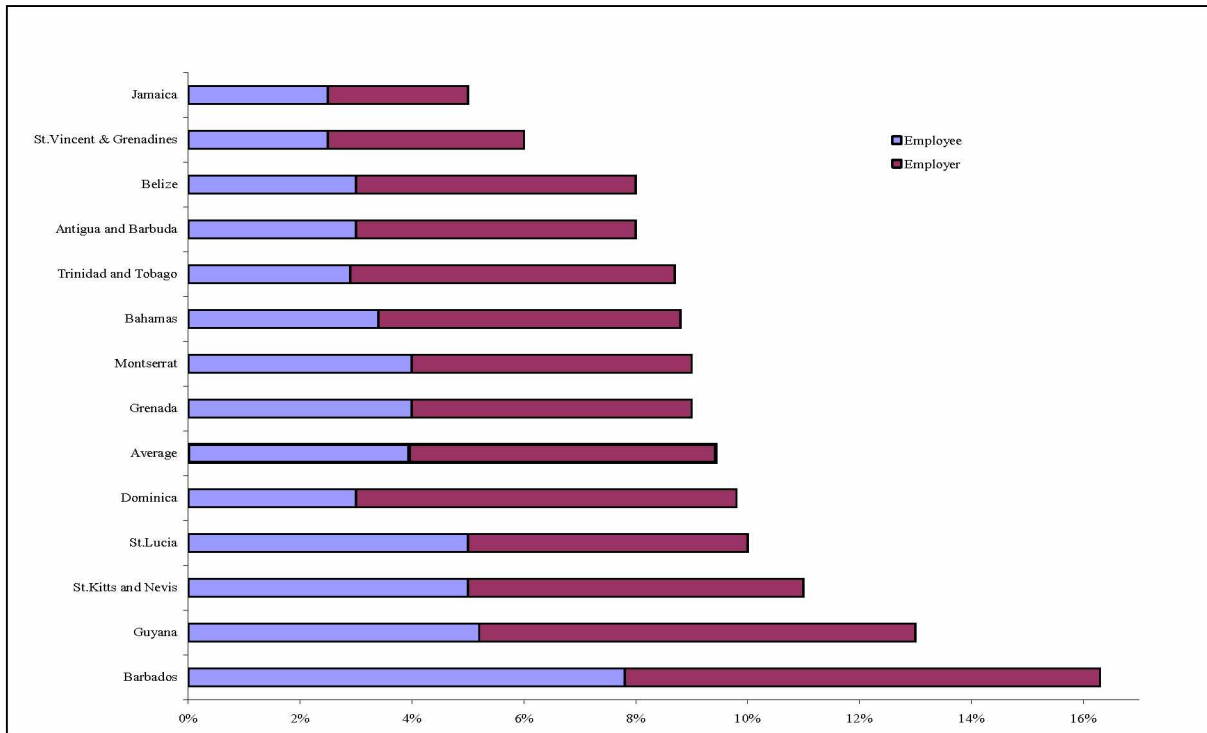
Unemployment and underemployment in the region may be due to the challenges posed by the structural changes of the last few decades – changes that have led to an increasing importance of services across the region, to the detriment of agriculture and manufacturing.⁶ The issue of high unemployment in the region is however likely to be twofold. For one, supply-side constraints such as the lack of (relevant) education of the labour force play a role: given the fact that the proportion of young people, amongst all unemployed, is high, one must question whether education systems in the region are sufficiently geared towards providing labour market entrants with the skills potential employers would like to see. In addition, demand-related factors affect labour markets. These factors can be related to labour market regulation, such as whether the regulatory framework is conducive to hiring or not, whether a high level of unionisation and/or wages (these possibly being interrelated) is reducing the incentive to create jobs, etc. The manifestation of these different constraints is presented below.

Demand-side constraints

High unemployment may be the outcome of demand-side constraints, which lead to an environment where firms and/or people are unwilling to hire workers. Such constraints may either be related to policy-driven aspects, such as labour market regulations, or by factors prevalent in the individual countries, such as a high degree of unionisation and a resulting, centralized wage-setting process. Labour demand can be affected both directly as well as indirectly through regulatory measures. Regulatory measures such as national insurance contributions, implementation of severance payments and minimum wages impact demand by increasing the cost of labour to employers; while measures relating to the regulatory side, such as the recognition of collective agreements, the regulation of the work environment to ensure work safety standards and the implementation of ILO work standards will affect indirect costs. However, on a practical level, the literature suggests that, in general, labour market distorting regulations are relatively small in the region compared to those in Latin American countries (Downes et al., 2003).

Regarding direct costs, all countries in the region have established social security systems to which contributions levied on employers and employees are mandatory (compliance is however another issue). Overall contributions range from 5% of wages in Jamaica (both employees and employers pay 2.5%, respectively), to 16.3% in Barbados (where contribution rates are 7.8% and 8.5%, respectively, see Figure 6). In addition, several countries grant severance pay to the employees upon termination of contracts; while in Barbados part can be recovered from the ‘Severance Payment Fund’ (to which contributions are, however, made), this is not the case in all countries. Minimum wages legislation has also been introduced in many countries in the region.

⁶ This is true for all countries except Belize, Dominica and Grenada. In Belize the agriculture sector has recently increased in importance; in Dominica and Grenada the manufacturing sector had been increasing of late. In the case of Grenada, however, Hurricane Ivan has destroyed large parts of the sector. Whilst the importance of manufacturing for Barbados seems to be higher than several decades ago, it is nevertheless also on a decreasing trend.

Figure 6 - Contribution rate to social security

However, research on member States in the region – in particular on Barbados, Jamaica and Trinidad and Tobago, indicates that despite the various labour legislative measures that have been introduced, the effect of minimum wage and national insurance payments on employment has been insignificant and in fact output growth has been the key determinant factor in creating employment in the region (Downes, Mamingi & Antoine, 2000). This also confirms earlier studies on the Organization for Economic Cooperation and Development (OECD) economies which find that labour market regulation is not the underlying cause of unemployment: Baker et al. (2002) conclude that *employment protection legislation has no systematic effect at all* [on unemployment].

Supply-side constraints

Given the importance of output growth and having concluded that demand-side factors are only one element leading to underemployment and unemployment in the region, one must deduce that supply-side constraints play an important role vis-à-vis unemployment. These are constraints that focus on the degree to which characteristics of the unemployed militate against any swift absorption into the labour market. It is important to understand the factors that have led to persistent unemployment, particularly in that large proportions of young people are unable to acquire meaningful employment opportunities.

A principle factor must be traced to the inability of education systems in the region to provide the relevant skills, especially since a number of professionals move to the region annually. Confirmation of this mismatch between regionally available supply and regional demand can be found considering the co-existence of high overall regional unemployment in general, and high youth unemployment in particular, and the fact that vacancies for skilled labour are often filled by professionals from outside of the region.

The importance of education can in fact not be overemphasized. More education has not only been shown to go hand in hand with higher earnings (Psacharopoulos, 1975), but has also been shown to result in healthier populations, more child care and reduced fertility rates. Today's society is increasingly based on knowledge and access to technology, and consequently places higher emphasis on education. Thus, literacy and technological skills have become a prerequisite for gaining employment and are key to increased prosperity.

The importance of education to the region has long been recognized. In 1990, CARICOM member States produced the *Regional Strategy for Technical and Vocational Education and Training*, charting the way for education in the twenty-first century. The Caribbean Group for Cooperation in Economic Development (CGCED) of the World Bank published the 'Caribbean Education Strategy' in 2000, providing an analysis of the education sector in its member countries. Several other documents have dealt extensively with the topic and governments in the region have in fact explicitly stated their aim to increase enrolment in tertiary education to 15% by 2005. Whilst an analysis of the current state of the education sector would be beyond the scope of this paper, this section provides some indicators of achievement characterizing the sector and shows how – despite the perceived importance of education in the region – the sector has yet to deliver on its pledges.

Education indicators

Indicators of education achievement do not draw a promising picture of the region in general, signalling that member States are not creating a solid human capital base for the knowledge economy.⁷ Overall, enrolment in the region is lacking compared to other developing regions. Although close to universal (net) primary enrolment has been achieved, several countries (e.g. The Bahamas, Dominica and Grenada) are somewhat lagging, with enrolments below 90%. In addition, several countries in the region still do not provide free secondary education. Net enrolment for the region drops to 70% at this level. Furthermore, there is a high variability in participation rates at upper secondary school levels; in fact, less than 30% of the total labour force possesses sufficient secondary level qualifications to enter into tertiary education or other positions requiring secondary level qualifications (WB 2000). Enrolment at the tertiary level in OECS member States is a mere 2%; enrolment for the CGCED at the tertiary level is approximately 9%, compared to 32% for Europe and Central Asia and 58% for high income countries. Much needs to be done to reach the stated goal of 15%.

⁷ The fact that recent research by Psacharopoulos et al. (2002) finds returns to schooling to be highest in Latin America, the Caribbean and Africa shows that much benefit can be gained as too little education is provided in these regions.

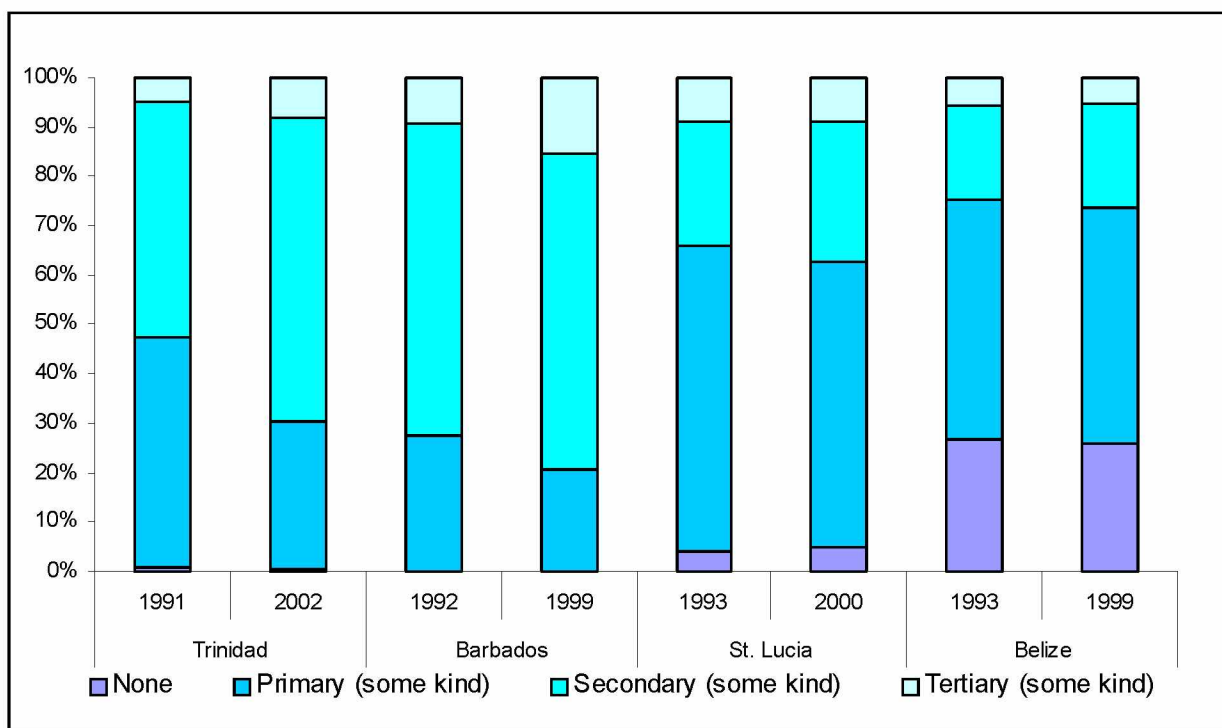
Nevertheless, some progress has been made: education attainment increased in the labour force during the 1990s, with a higher proportion of the labour force having secondary or some kind of tertiary education (see Table 5). Whilst this is an encouraging trend, the high proportion of the labour force in Belize and Saint Lucia with only some sort of primary education is unsatisfactory, especially if the region is to embrace the concept of a knowledge economy and hence rely to a large degree on human capital to increase its competitiveness (figure 7 shows the skill levels available in the workforce).

Table 5 –Labour force by educational attainment (in % of total labour force)

	Year	None	Primary (some kind)	Secondary (some kind)	Tertiary (some kind)
Trinidad	1991	1.0	46.3	47.6	4.9
	2002	0.3	30.1	61.9	8.0
Barbados	1992	0.0	27.6	63.4	9.2
	1999	0.1	20.4	63.3	15.4
St. Lucia	1993	3.8	60.5	24.6	8.7
	2000	4.6	56.8	27.6	8.9
Belize	1993	26.6	48.6	19.0	5.5
	1999	25.8	47.6	20.8	5.4

Source: ILO, 2003, and official sources

Figure 7 - Skills level



In fact, tertiary education is significantly correlated with lower unemployment both for Trinidad and Tobago as well as for Barbados (see Table 6).⁸ The fact that higher proportions of the labour force with only primary education are correlated with higher unemployment suggests that economies need more higher-skilled labour and that university graduates do not find it difficult to find jobs. Only attending primary school is far from sufficient for today's labour requirements.⁹

Table 6 - Correlations between education attainment and unemployment

	Primary (some kind)	Secondary (some kind)	Tertiary (some kind)
Trinidad	0.888 (0.000)	-0.888 (0.000)	-0.846 (0.000)
Barbados	0.905 (0.001)	0.524* (0.091)	-0.690 (0.029)
<i>Terms in brackets are one-sided significance levels</i>			
<i>* denote insignificance. Correlations are Spearman Rank.</i>			

Source: calculations based on data from official sources

Public expenditure on education in Barbados, Belize, Jamaica and Saint Lucia exceeds the average spent (as a proportion of GDP) than in high-income OECD countries by approximately 5.8%. Thus, the region spends relatively more than other more developed regions on education, yet is seemingly unable to reap the rewards of doing so. One reason may be due to the way this expenditure is targeted to different education facilities. Thus, apart from Belize, all countries mentioned above spend less than the 50% norm on primary education, which may explain part of the low education performance in the four countries.¹⁰ In Barbados, in fact, only a quarter of public expenditure on education is directed to primary education; secondary and tertiary education receive approximately a third each. Trinidad and Tobago spends a surprisingly small amount on lower secondary education compared to Barbados and Jamaica, which spend between a fifth and a quarter of education expenditure at the upper and lower level; Belize spends a low proportion on upper secondary education and the lowest on post-secondary education (see Table 7). This suggests that despite seemingly adequate funds overall – measured relative to GDP – expenditure on education needs to be more carefully targeted as a large proportion of unskilled labour, proxied by low educational achievements, particularly in Trinidad and Tobago and Belize, clearly limits the types of industries that countries can attract, diminishing their growth potential.

⁸ Although for Barbados the effect of higher secondary education is insignificant on unemployment, this may be due to the few valid cases (8).

⁹ All correlations for Saint Lucia were insignificant and not reported here. This is most likely due to the number of complete observations available (5). Also, data for Jamaica on proportions of labour force according to education attainment were not available.

¹⁰ See UNDP (2002), page 93 for this norm.

Table 7 - Public expenditure on education

	% of GDP	% of total govt. expen.	As a % of total educational expenditure: Educational expenditure in...					
			Primary	Lower Secondary	Upper Secondary	Secondary	Post-secondary non-tertiary	Tertiary
Barbados	6.2	16.7	25.8	17.6	15.7	33.3	3.98	30.4
Belize	5.9	18.2	54.4	24.8	7.6	32.4	2.0	9.7
Jamaica	6.2	11.4	31.3	21.6	12.4	34.0	9.2	20.2
Saint Lucia	7.5	20.9						
Trinidad & Tobago	3.9	16.6	44.6	5.0	27.0	30.1	3.3	14.9
<i>Source: UNESCO</i>								

The lack of quality labour in a country/region not only diminishes the growth potential of these economies, it also impedes upon the productivity of these industries. By doing so, it affects overall well-being in economies as higher productivity goes hand-in-hand with higher wages (in a competitive environment, i.e. an environment where rent-seeking is not possible) and ultimately defines an economy's growth path. Productivity is important as it ultimately defines competitiveness and hence the prospects of survival in an increasingly globalized world. In essence, higher productivity implies that for an identical amount of inputs, more output is created.

2.3 Productivity

Ideally, productivity is measured using output per hour or unit labour costs in different sectors to draw international comparisons as to how the Caribbean region fares vis-à-vis other regions. Due to the unavailability of data in general – in particular, recent detailed data on the amount of capital employed per sector and, more specifically, hours worked in various industries as well as wage rates per sector – only rough measures of productivity relating output per sector to workers are presented. In particular, labour productivity is defined here as the amount of GDP produced per sector, divided by the number of workers in that sector. Although this broad measure does not allow taking skill levels that workers have and capital employed into account, it nevertheless allows a crude presentation of productivity. The resulting measures are presented in figures 8-15 for the five case studies.

In Barbados the finance sector experienced a considerable decline in productivity, as did tourism and wholesale and retail trade – three important sectors of the Barbadian economy. Whilst the finance sector saw an increase in productivity towards the end of the 1990s, this followed a fall during the 1990s and was in addition followed by a large decrease in productivity at the beginning of the new millennium. Whilst the sugar sector saw a twofold increase in productivity since 1996 (and in fact almost a fourfold increase since 1993), most other sectors contracted or were stagnant at most.

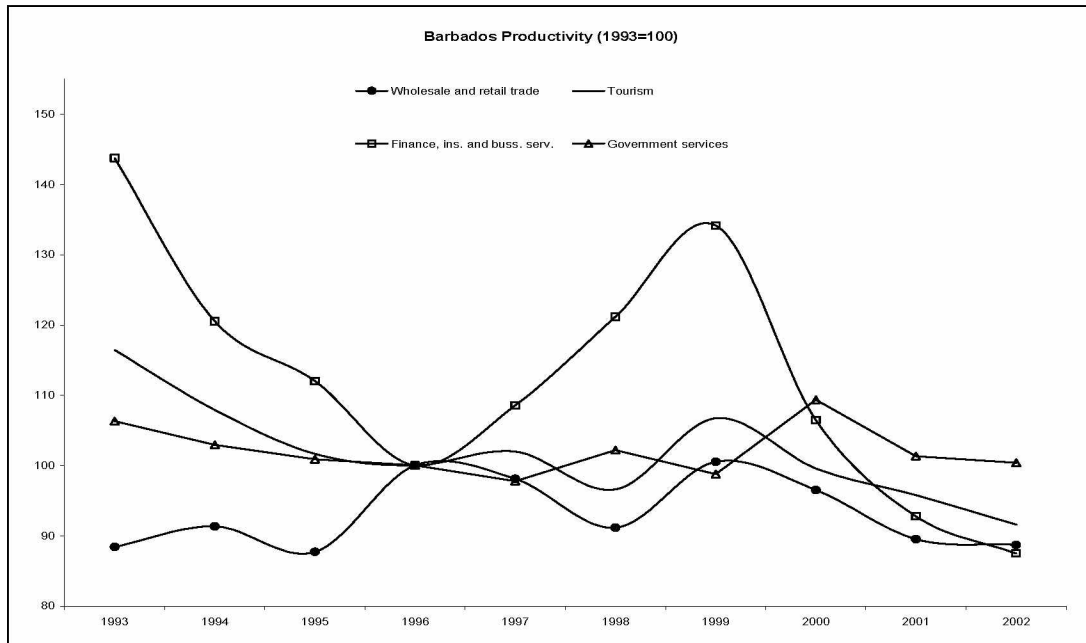
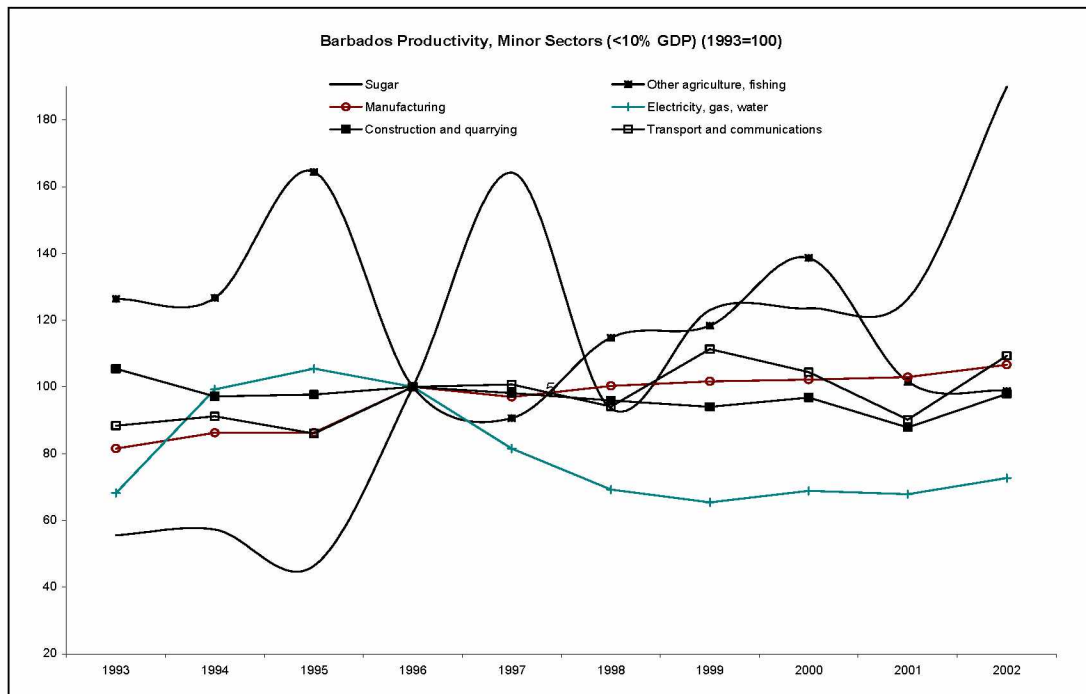
Figure 8: Barbados productivity (1993=100)**Figure 9: Barbados productivity, minor sectors (<10% GDP) (1993=100)**

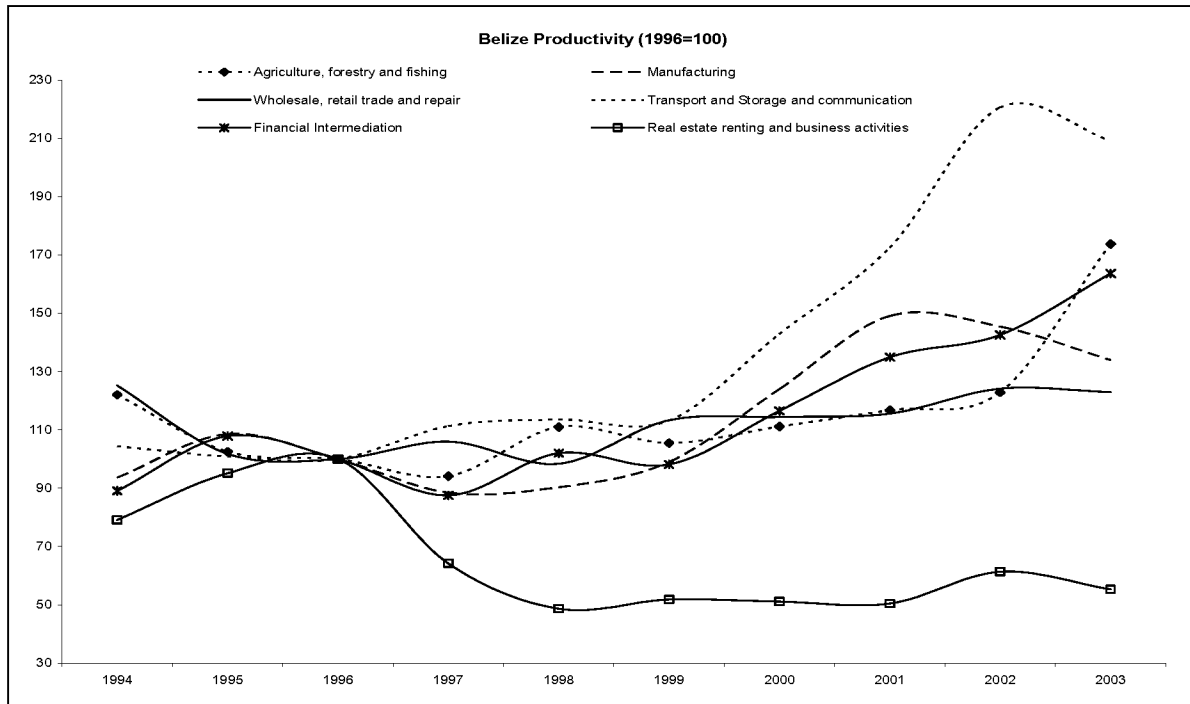
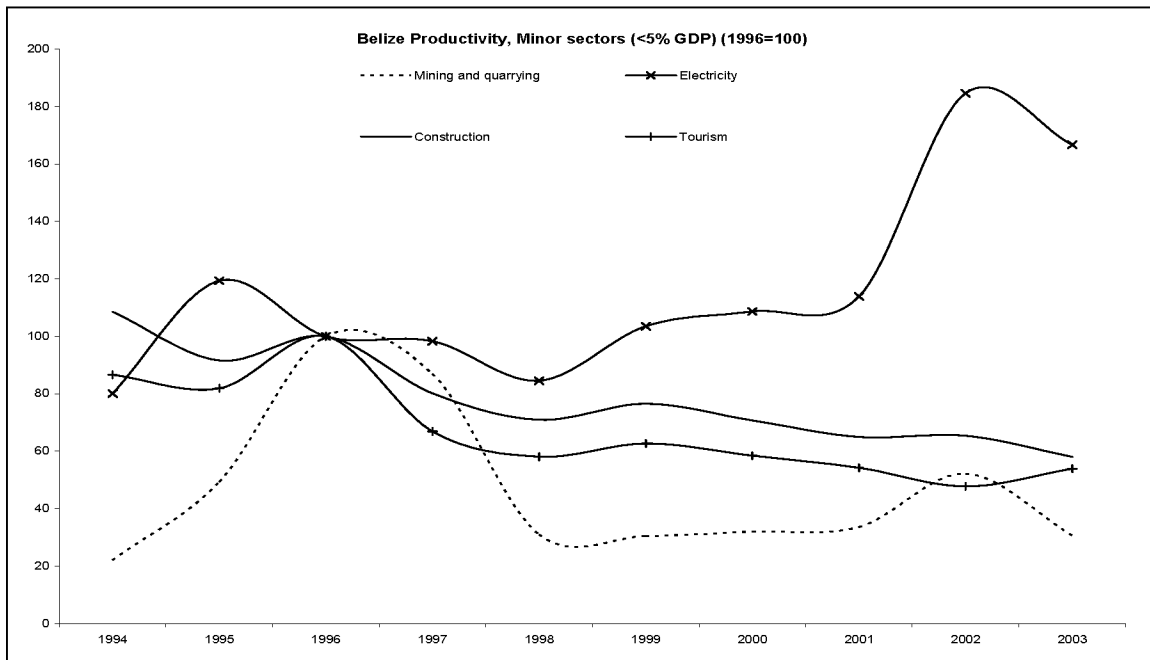
Figure 10: Belize productivity (1996=100)**Figure 11: Belize productivity, minor sector (<5% GDP) (1996=100)**

Figure 12: Saint Lucia productivity (1996=100)

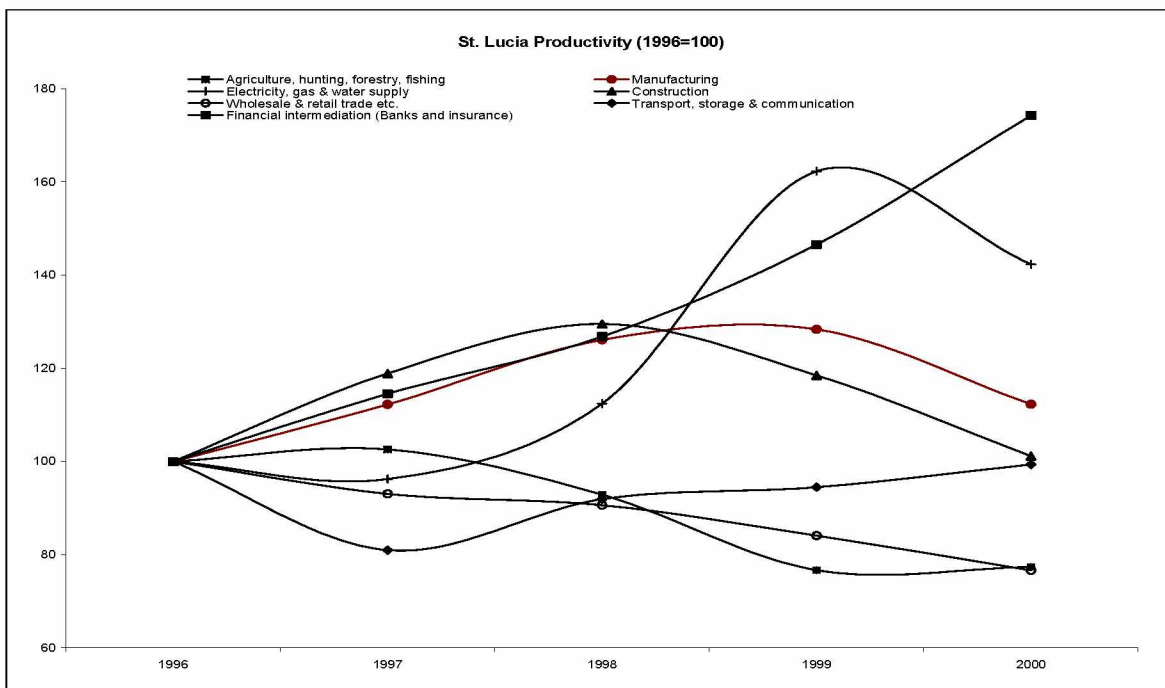


Figure 13: Jamaica Productivity (1993=100)

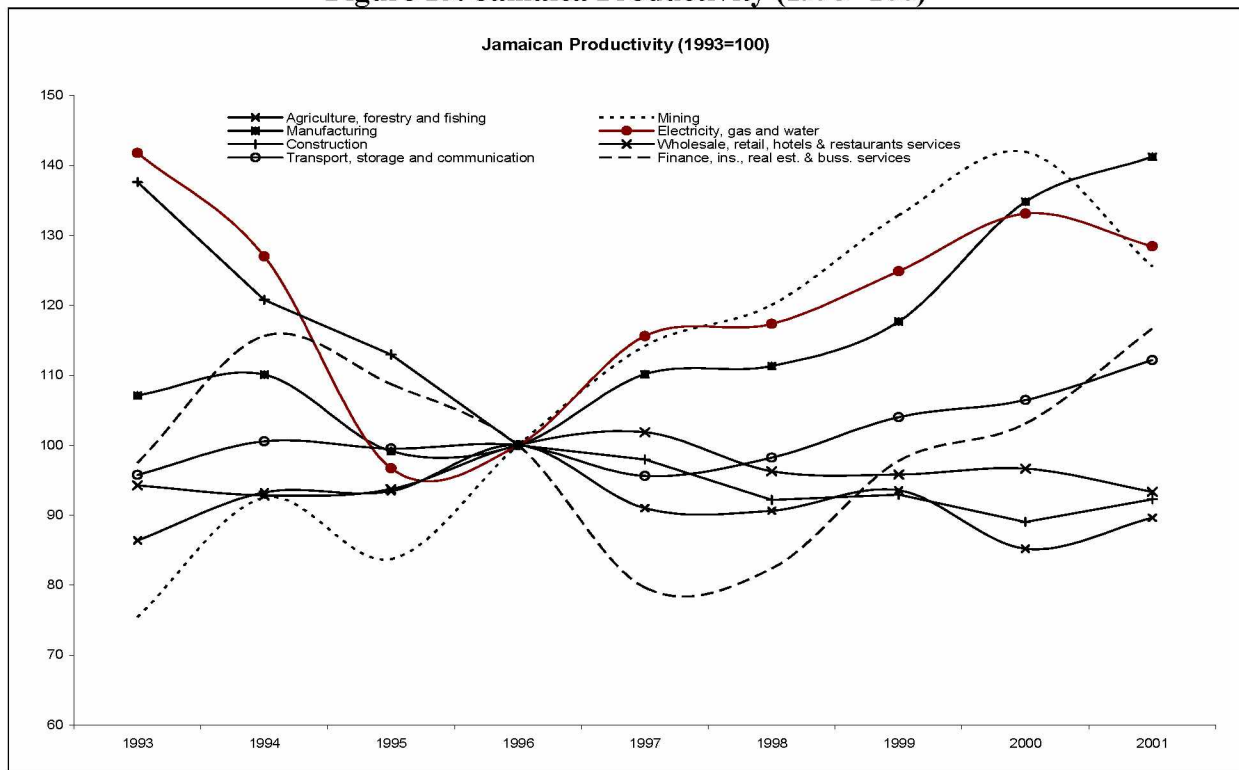
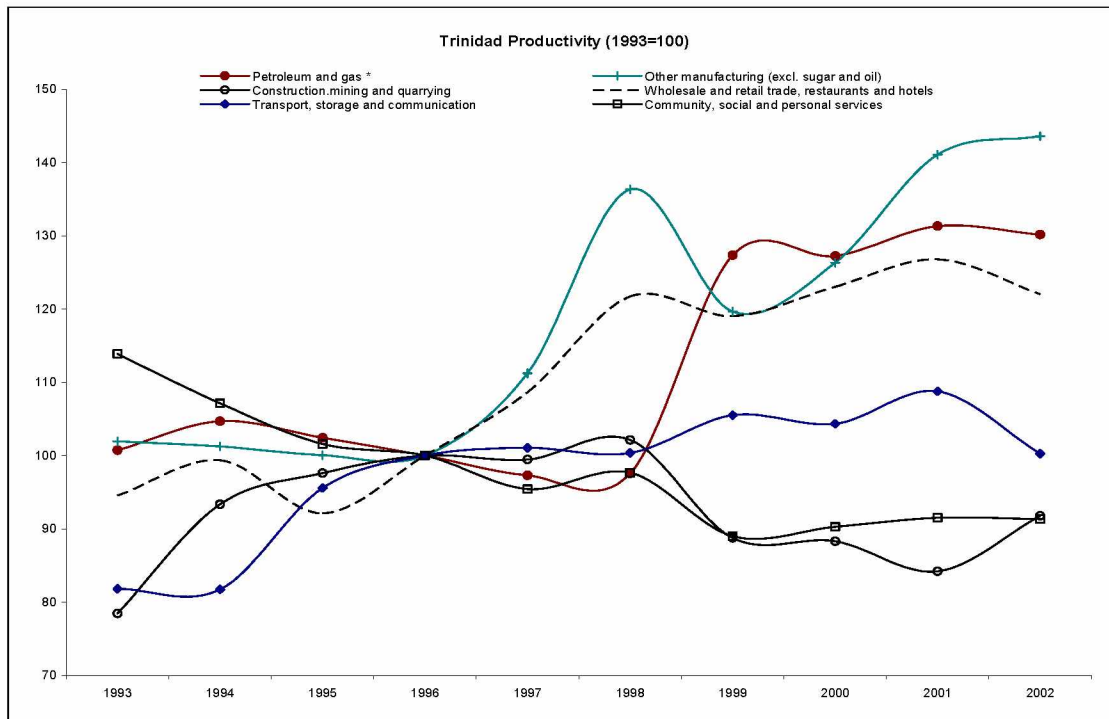
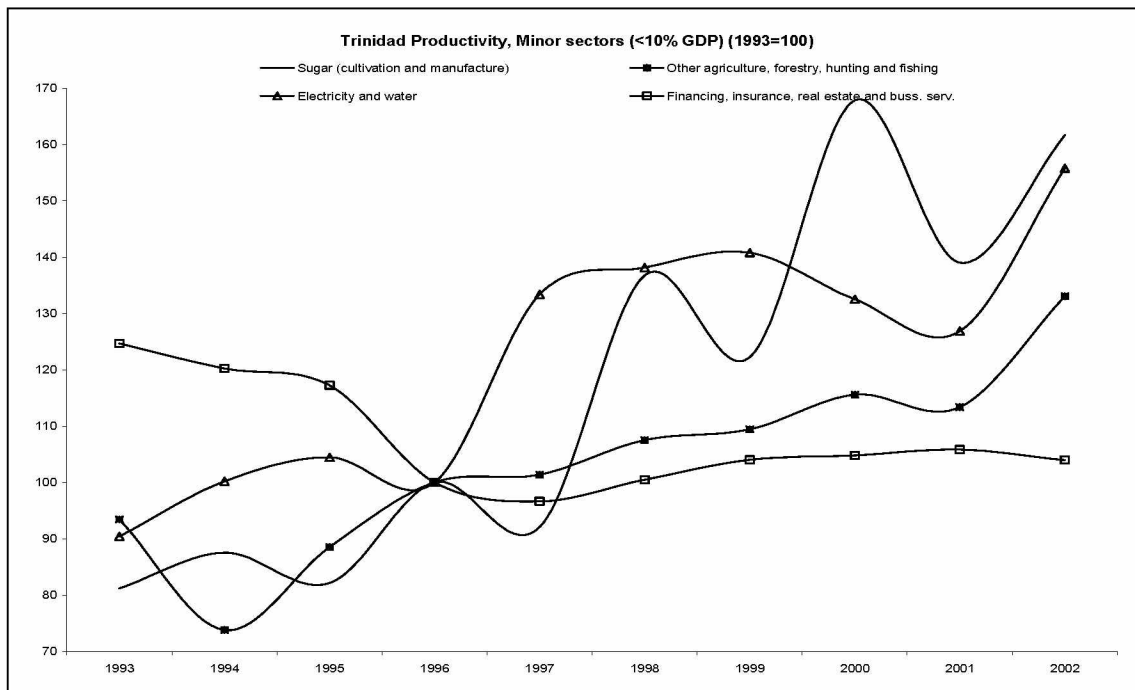


Figure 14: Trinidad Productivity (1993=100)**Figure 15: Trinidad productivity, minor sector (<10%GDP) (1993=100)**

In Belize productivity in most major sectors increased, with significant increases in transport and storage activities and the primary sector. The latter, in particular, has seen productivity gains in the sugar and the shrimp industries. In contrast, most minor industries (less than 10% of GDP) saw productivity declines other than the electricity sector, which no doubt benefited from increased co-generation due to productivity and output gains in sugar. In Saint Lucia the financial sector saw a significant increase in productivity as did electricity and gas. Whilst manufacturing saw a 12% increase, construction remained stagnant and agriculture and wholesale and retail trade decreased significantly.

In Jamaica, productivity declines were observed in construction, in wholesale, retail, hotels, restaurants, agriculture, forestry and fishing. These sectors are however the second, third and fourth largest sectors in terms of labour force in the economy. In addition, while agriculture saw a decrease in employment growth and unemployment during the 1990s, the others saw increases in the two. Productivity in agriculture and wholesale increased in the first half of the 1990s and saw a downturn in 1996 and 1997, respectively. In the case of construction, however, productivity declined considerably throughout the 1990s. Jamaica has also seen large increases in productivity, notably in mining and manufacturing; a large degree of volatility in productivity is observed in the financial sector.¹¹ In fact, according to the World Bank (1996), low labour productivity in Jamaica is inter alia due to deficiencies in the education and training system (p. 18). It has called upon Jamaica to improve its international competitiveness and productivity (World Bank, 2004).

In Trinidad and Tobago, productivity overall increased during the 1990s. Relative to 1996, however, construction and community services saw a decline in productivity, following a strong increase in the first half of the 1990s. Wholesale and retail trade and manufacturing have seen large increases in productivity, as has the petroleum sector, which in particular saw a significant boost in the latter half of the 1990s. Less significant sectors (i.e. contributing less than 10% of GDP) in particular have seen large increases in productivity; notably electricity and water as well as sugar (cultivation and manufacture). In the latter, productivity more than doubled during the 1990s. Surprisingly, productivity in the financial sector was relatively stagnant, increasing a mere 4% over the span 1996-2002, decreasing in fact more than a sixth between 1993 and 2002.

Overall, there seems to be no clearly identifiable trend in productivity common to the five countries: thus productivity increases in major sectors in Belize and Trinidad and Tobago stand in contrast to declining productivity in major sectors in Barbados and Jamaica.

The above presentation on unemployment in the region as well as the current quality of the labour force – i.e. a workforce that has limited skills, as signalled by the indicators on education – exemplifies that labour markets in the region face considerable challenges. These are

¹¹ Downes (2003) presents a detailed discussion on productivity in Jamaica, and provides estimates of productivity as a whole for the economy as well as for some sectors using the same approach – real GDP per employed worker – as presented here. Spanning 1991-2000, his results too show a decline in labour productivity in wholesale and construction, yet finds an increase in productivity in agriculture. In all instances – including the cases where results confer, the results presented here are considerably higher than in Downs (2003).

even more so amplified given the Small Island Developing States (SIDS) nature of all member States in the region in such that domestic markets are relatively small and segmented.

The region must seek a way to face these challenges: how to fill gaps in skills and how to tackle the problem of unemployment. One possible measure to bridge the gap in lack of human capital skills is the importation of labour skills: importation from outside of the region as well as exchange of labour skills within the region, in short, increased labour mobility.

3. Labour mobility

Capital and labour form the underpinnings of production processes and are linchpins to economic prosperity. Increasing development has led to greater importance of factor mobility as lifespans of technological processes have become shorter and shorter. Dynamic production processes have resulted in changing demand of skills in industries, with once sought-after skills being redundant in one sector, yet potentially still required in others.

To cater to this environment, factors of production need to be mobile, especially in an environment that is becoming increasingly globalized, as this has led to more competition. Consequently a geographic repositioning of labour-intensive vis-à-vis capital-intensive production has taken place; resulting from the availability of ever more efficient transport mechanisms, labour-intensive production processes are being shifted to more competitive regions.¹² In response to these dynamics, domestic labour forces need to adapt, be it through occupational mobility, i.e. mobility between jobs; geographic mobility, i.e. mobility across regions (national and international); or a combination of both. Workers must realise that lifelong careers in the same occupational setting for the same employer are becoming a thing of the past.

The importance of labour mobility is particularly relevant for a region comprised not only of small island economies, but also of economies that are vulnerable to common external geo-climatic events. These commonalities suggest that increasing the potential pool of labour by increasing the scope for mobility of labour should merit consideration as increased mobility would allow the region to better cope with these exogenous climatic events.

Migration from the region

On a global level the degree of labour mobility has changed significantly over the last half century due to immigration restrictions (see Box 2) – a development which must be contrasted to capital mobility, which to all extents and purposes has been attained.¹³

¹² Competitiveness can pertain to a number of dimensions; labour competitiveness can refer to e.g. labour market flexibility, wage costs, skills of the labour force.

¹³ A good proxy for capital mobility is the variation in capital flows, with a high variability signalling large changes in capital flows and hence a high degree of mobility. This has in fact been observed over the last decade: global foreign direct investment (FDI) increased from an average of \$311 billion for 1992-1997 to \$1,388 billion in 2000, yet has since decreased to almost \$560 billion in 2003. Such large variation in flows shows that it has become increasingly easy to move large sums of money at short notice. FDI flows to CARICOM member States peaked at approximately \$1.9 billion in 1999, accounting for slightly less than a third of global FDI, yet have since fallen to \$1.6 billion in 2003. However, two thirds of this amount on average goes to Jamaica and Trinidad and Tobago alone; with the inclusion of Bahamas and Barbados, this percentage increases to 86%.

Nevertheless, emigration from the region has been substantial. In fact, estimates of total migration from the Caribbean to Europe and North America during the second half of the twentieth century have been put at more than five million people. Suriname, Guyana, Haiti, Jamaica and Trinidad and Tobago have the highest emigration rates in the world, standing in excess of 80% for the first four. Overall, almost half of the 30 countries with the highest emigration rates are member States of the region. The severity of the situation is compounded even more when considering that, for example, the equivalent of 10% of Jamaica's current population alone emigrated between 1991 and 2001 (see Docquier and Marfouk (2004) for more details on these figures).

Whilst the sheer number is sufficient to cause shortages of labour in those economies affected, the fact that the majority of emigrants are highly skilled graduates compounds the gravity of the situation. This exodus of skilled labour, which is also partly a result of immigration policy in developed countries, is particularly harmful to the region as it creates major challenges to the development process of the region.¹⁴ As such, policy makers need to understand how to address the high emigration of skilled workers. One important channel will be by fostering development and encouraging intraregional migration.

¹⁴ The actually real economic effects on economies suffering from brain-drain are not clear-cut. Brain-drain can be detrimental to a nation the more the emigrating skilled labour benefited from subsidized (or free) education and schooling in the native country: society is penalized as it no longer is able to benefit from the education it provided to the migrant and will not recover its costs, where this benefit could have taken the form of higher tax payments due to higher revenue, or services rendered to society by the skilled individual. Thus, earlier literature viewed brain-drain as detrimental to those left behind (see e.g. Kwok and Leland (1982)). On the other hand, recent studies have suggested that the possibility of migrating when skilled may in fact foster higher enrolment in education systems and hence increase growth through the spillovers of higher enrolment. Furthermore, remittances of migrants are often substantial, especially within the Caribbean: remittances accounted for 12% and 17% of GDP alone in Jamaica and Guyana (figures for 2002, see Orozco, 2004). Migrants may also return to their native country in the future, bringing knowledge acquired abroad that was previously not available domestically. Overall, it is unclear from a theoretical basis whether the effects of migration of skilled labour results in an overall transfer of human capital from the native countries (see Docquier and Marfouk (2004) for an extended discussion).

Box 2: Changes in immigration policies to attract skilled labour

From a historical point of view restrictions on the movement of labor are a relatively new phenomenon. Prior to the mid 20th century large amounts of labour moved across continents: it is estimated that between the 15th and 20th century more than 11 million people were taken as slaves from Africa across the Atlantic to the 'New World' (see Lovejoy (2000)); between 1870 and 1914 more than 50 million people emigrated from Europe to America, largely freely, without any kind of restrictions.

The situation has since changed as nations have increasingly restricted immigration. Following probably one of the first restrictions on labour mobility to the Western Hemisphere in 1875 - direct federal regulation that prohibited entry of prostitutes and convicts into the US – others have followed (the Chinese Exclusion Act of 1882, prohibiting certain laborers from immigrating to the United States, the US immigration Act of 1907 to stem the flow of immigrants into the U.S. and the Alien Registration Act, requiring all non-U.S. citizens within the U.S. to register with the government). Consequently, labour mobility between nations has become more and more difficult. In addition, migration has changed in terms of quality: immigration restrictions have been introduced in many developed countries with the aim of attracting *skilled* labour rather than unskilled labour. Thus, for example, the US Immigration Act of 1990, and the American Competitiveness and Work Force Improvement Act of 1998 clearly targets skilled professionals, as does Australia's immigration policy since 1984, Canadian immigration policy and increasingly European policy, to name a few. Consequently it has become more and more difficult for those without skills to emigrate whilst this has not necessarily been the case for skilled professionals.

Review of the literature shows, however, that relative to the research on migration of (skilled) labour *from* the region, little work has been undertaken to investigate migration *to* the region or *within* the region. This gap needs to be filled for member States to be able to pool their labour resources to overcome their geographic restrictions and encourage migration *within* the region. Analysis of migration in/to the region as well as identification of sectors that are attracting these immigrants and the countries they are emigrating from is important in order to identify why locally available labour is unable to fill these positions, and to identify how the region, as a holistic entity, can tackle the brain-drain by developing incentives to retain skilled labour.

Migration within the region – Political framework

Policy makers in the region have recognized the necessity of adjusting the institutional framework governing the mobility of labour. In response to changes brought about by, inter alia, increased globalisation, the Tenth conference of CARICOM Heads of Government, held in 1989 in Grenada, resulted in the general agreement that deepening of the integration process in the region, in general, and that the establishment of a CARICOM – CSME, in particular, would be desirable to foster growth in the region.

A number of successive decisions have dealt with the free movement of labour in the region, the most recent being the provisional entry into force in May 1998 of the Protocol II Amending the Treaty Establishing the Caribbean Community concerning the Establishment, Services and Capital. This potentially increases the scope of those eligible for free movement in the region.¹⁵ However, while the treaty explicitly recognizes the need to address labour mobility

¹⁵ Free labour movement has not always been on the agenda of member States. In fact, Article 38 of the Treaty of Chaguaramas of 1973 explicitly avoids imposing any kind of restrictions or exemptions on labour mobility, stating that "Nothing in this Treaty shall be construed as requiring or imposing any obligation on a member State to grant

in the region, its provisions have differentiated between wage earners and non-wage earners. Whereas the latter group enjoys free labour movement – meaning that any (natural or judicial) person can set up a business and work on their own account in the CARICOM member States (the Treaty refers to this as the Right of Establishment), only certain wage-earning categories will enjoy the freedom of free labour mobility. In particular, wage earners that are university graduates, media workers, sportspersons, artistes and musicians are the persons that currently enjoy mobility (Article 46 of the Chaguaramas Treaty).¹⁶ Thus, only an estimated 10% of the community's population is currently able to benefit from the freedom of movement act (Wickham *et al.* (2004)).

While there is no immediate justification why *a priori* mobility should be limited to these certain wage-earning skilled occupational groups, there is little doubt that these limitations have been introduced in response to concerns of large migratory dynamics were general free labour mobility permitted. To address similar concerns in Europe, the European Union (EU) introduced a seven-year transition period before workers from the new members could work throughout the whole EU following the 1981 Greek accession and the 1986 Spanish and Portuguese accession as well as the 2004 enlargement. Overall however, intra-EU migration has been significantly lower than initially expected: in 1996 (latest date, Eurostat 2004), only approximately 1.5% of EU nationals were *resident* in another member state (including workers, dependants and retired people).

Although low migration within the EU could be attributed to cultural and particularly linguistic differences among member States, data on interstate migration in the United States paints a similar picture, showing low migration. Thus, according to the United States Census Bureau (2004), overall interstate migration only averaged 2.65% of the total population during the 1990s, slightly down from the average rate of the 1980s and 1970s (2.94% and 3.2%, respectively).

Concern that the creation of a single market economy could potentially lead to an inflow of labour, putting downward pressure on wages and ultimately leading to higher unemployment in the region, cannot be disregarded. However, one must gauge the potential of migration within the CSME by analyzing incentives for migration before drawing any conclusions as to labour movements. Unfortunately the reasons for migration are not well understood. Although labour conditions, such as insufficient employment opportunities, low wages or unfriendly working environments may lead to outward migration, economic conditions cannot be the sole explanatory variables as cultural and historical ties also play a yet-to-be-explored role.¹⁷ It is, for instance, unclear why some developing countries, such as many member States in the region, have high rates of emigration, while others do not. Countries such as Brazil, Argentina, Venezuela, China and India have large stocks of skilled labour, yet have low emigration rates (see Docquier and Marfouk (2004)). This may have to do with the fact that smaller countries

freedom of movement to persons into its territory whether or not such persons are nationals of other member States of the Common Market.”

¹⁶ In addition, the treaty does not specifically address modalities required by countries to obtain full labour mobility within the region – including a well-defined timeline for the implementation. Consequently, the scheduled launch date to establish and form the CSME in 2000 has passed; however, the CSME has been implemented between Jamaica, Barbados and Trinidad and Tobago since 1 January 2005.

¹⁷ Thus most migrants from Suriname went to the Netherlands, despite their geographic vicinity to the United States.

offer no *hinterland*, i.e. alternative industries or even competing industries, for workers to migrate to, making emigration the only viable option.

As the CSME has not been implemented across the region and as free wage-earning labour mobility (albeit, limited to skilled labour) has not been introduced, it is too early to draw conclusions from migration dynamics in the region. Nevertheless, an analysis of migration flows will enable identification of common trends. After presenting a brief synopsis of migration to the region, this section proceeds by investigating recent immigration to Belize, Barbados, Jamaica, Saint Lucia and Trinidad and Tobago.

3.1 Migration: The Caribbean

Prior to the West Indies Federation of 1958 there were virtually no immigration restrictions in the Anglophone Caribbean due to the fact that countries were administered by the Colonial Office, bearing absence of sovereign status for individual islands. Thus, migration between States in the Caribbean is historically less documented. Since independence legal immigration is somewhat better documented; over the last four decades it is estimated at approximately 500,000 (Guengant, 1996).

During the 1990s, the total migrant stock increased by 64,100 people to almost 389,800 in the non-Spanish Caribbean. The Cayman Islands, Anguilla, British Virgin Islands, Aruba, United States Virgin Islands and the Netherlands Antilles (all Non-Independent Caribbean Countries, NICCs) have the highest proportion of migrants in the region, in each case more than a quarter of their population, suggesting that economic wealth and close ties to developed countries provides an incentive to migrate. Given the small population sizes of most member States, even low numbers of non-nationals can quickly translate into a significant proportion of the population: a very small migrant stock of approximately 4,100 in Anguilla still results in more than every third person there being of foreign origin (see Table 8).¹⁸

¹⁸ Equally, four of the five largest countries hold the four lowest proportions of migrant stocks relative to their population sizes.

Table 8 - Data on population and migration

Country	Population (‘000s)		Migrant Stock (‘000s)		As % Population	
	1990	2000	1990	2000	1990	2000
Anguilla	8.5	11.4	2.4	4.1	28.0	35.6
Antigua and Barbuda	62.7	64.8	12.0	15.9	19.2	24.5
Aruba	65.9	100.6	14.4	31.0	21.9	30.8
Bahamas	255.2	304.2	26.9	30.0	10.5	9.8
Barbados	257.2	267.5	21.4	24.5	8.3	9.2
British Virgin Islands	17.2	23.6	7.6	8.4	44.0	35.5
Cayman Islands	26.3	38.2	12.9	15.0	48.9	39.1
Dominica	71.4	70.6	2.5	3.7	3.5	5.3
Grenada	90.7	93.5	4.3	7.9	4.7	8.5
Guadeloupe	390.7	427.9	65.9	83.2	16.9	19.4
Jamaica	2,368.9	2,576.1	17.4	12.5	0.7	0.5
Montserrat	10.7	3.7	2.0	0.2	18.8	4.9
Netherlands Antilles	187.7	215.3	38.5	54.6	20.5	25.3
Saint Kitts and Nevis	41.9	38.5	4.0	4.3	9.6	11.2
Saint Lucia	131.4	147.8	5.3	8.1	4.1	5.5
Saint Vincent & the Grenadines	105.8	113.3	4.0	7.5	3.8	6.7
Trinidad and Tobago	1,215.2	1,294.4	50.5	41.5	4.2	3.2
Turks and Caicos Islands	11.6	16.7	2.1	2.7	18.3	16.2
United States Virgin Islands	104.2	120.9	31.5	34.8	30.2	28.8
<i>Caribbean</i>	<i>5,423.3</i>	<i>5,929.0</i>	<i>325.6</i>	<i>389.8</i>	<i>6.0%</i>	<i>6.6%</i>

Source: Data on Population and Migration from the 2000 revision of world population prospects:
Revised 10 September, 2002

Aruba, the Cayman Islands and the Netherlands Antilles saw particularly large relative changes in their migrant stock (114.6%, 71.4% and 41.9%, respectively). Despite increases in migrants, five saw a decline in the proportion of migrants relative to their populations: the Bahamas, British Virgin Islands (BVI), Cayman Islands, Turks and Caicos Islands and the United States Virgin Islands (USVI).¹⁹ Overall, only three countries saw significant declines in their migrant stocks during the 1990s (Montserrat by 91%, for obvious reasons related to the recent volcanic eruption; Jamaica by 27.9% and Trinidad and Tobago by 17.9%). Notably, migration mainly took place to high income service economies.

3.2 Emigration to Barbados, Belize, Jamaica, Trinidad and Tobago and Saint Lucia

Information in this section is based upon data on work permits issued. Use of this data by definition excludes *illegal* immigration and does not consider dependants. While illegal immigration is relevant for several countries in the region, it has been excluded from the analysis. For one, reliable data on these are not always available. In addition, it is most likely that illegal immigration, to a large extent, affects informal labour markets and unskilled positions.

¹⁹ These figures must be considered keeping unemployment rates in the respective countries in mind: high unemployment rates coupled with increasing migrant stocks points to a shortcoming of regional labour markets, i.e. the inability to provide regional citizens with jobs.

Immigration has increased in all five countries over the last years. The last four years of available data (see Table 9) show that overall migration to Trinidad and Tobago increased by 42% (2000-2004) while migration to Belize increased 70%.²⁰ In Saint Lucia the corresponding increase was almost 250% (2000-2004), while Barbados witnessed an increase in 163% (1999-2003). Jamaica saw an increase of 77% during the respective time period.²¹

Table 9 - Change in work permits issued, last five years

	2000	2004	% increase
Barbados ⁺	1093	2871	163%
Jamaica	2182	3861	77%
Saint Lucia	150	520	247%
Trinidad	2038	2894	42%
Belize ⁺	1935	4564	136%
⁺ : 1999 and 2003			
<i>Source: ECLAC from official sources</i>			

While this increase is common to all five countries, migration from within the region to these five member States, however, varies. Thus, Belize has a small number of workers from the region relative to the overall number of foreign workers. This is no doubt due to the geographic distance from other Anglophone Caribbean countries as well as due to the fact that the economy is largely agriculture-based and therefore draws its harvest workers from neighbouring countries. Thus, workers from the region represent less than 3.5% of overall workers.²² Similarly, few workers from the region migrate to Trinidad and Tobago – the proportion is less than 2.5% of the total. This may be due to the productive capacity of the country in terms of its dependence on natural resources in that it requires a large number of skilled personnel. It may also be due to the lack of skilled labour available in the country, as outlined above. Immigration from the region to Jamaica is significantly larger, with regional workers representing almost 7.1% of overall foreign workers in the country. In contrast to these low proportions, regional immigration to Barbados and Saint Lucia stands out, with 64.4% (2003) and 30% respectively (2004) of foreign workers coming from the region. (See Figures 16-20).

²⁰ Data on Belize excludes ‘Special (Agriculture) Temporary Employment Permit’. These permits are granted largely to seasonal crop workers from neighbouring countries. As these permits are of seasonal nature, they are not included in the analysis unless noted. The number of these permits has however increased significantly over the last few years, due to strong performance of the agriculture sector, from 1,935 in 1999 to 4,564 in 2003, an increase of 136%. In fact, these permits outnumber regular work permits by a ratio exceeding 4:1.

²¹ In Jamaica there are a large number of work permit exemptions: in 2003 (latest data), these exceeded the number of work permits granted by 13%. Of these exemptions the majority (51%) were due to persons covered by a 14 (or 30) day clause, more than a quarter (28%) were to ‘persons employed by statutory bodies/government’. Less than 1% was to CARICOM nationals fulfilling the requirements of wage earners.

²² This excludes once again ‘Special (Agriculture) Temporary Employment Permits’. The respective proportion is less than 1.3% (for 2003 – the last year for which both figures were available) if this type of permit is included to the overall total figure.

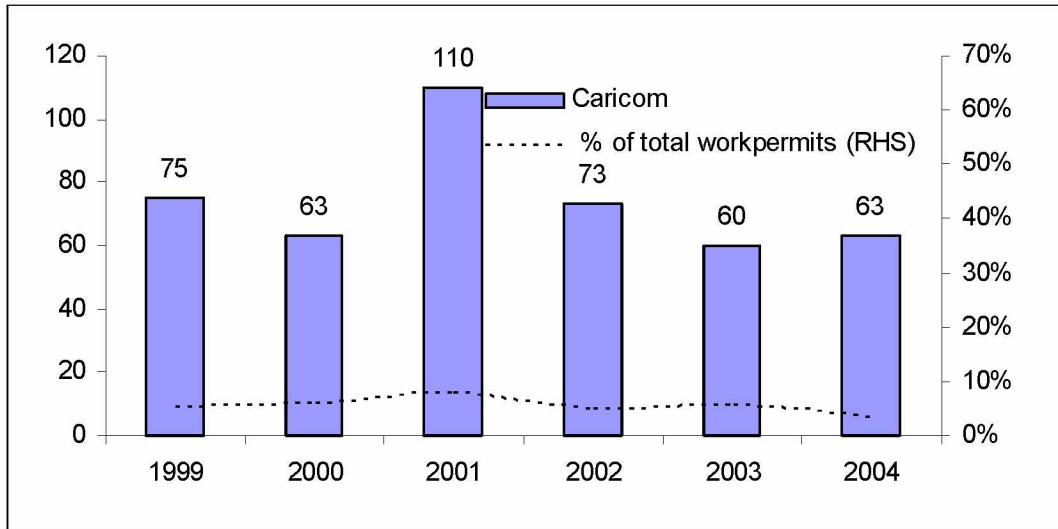
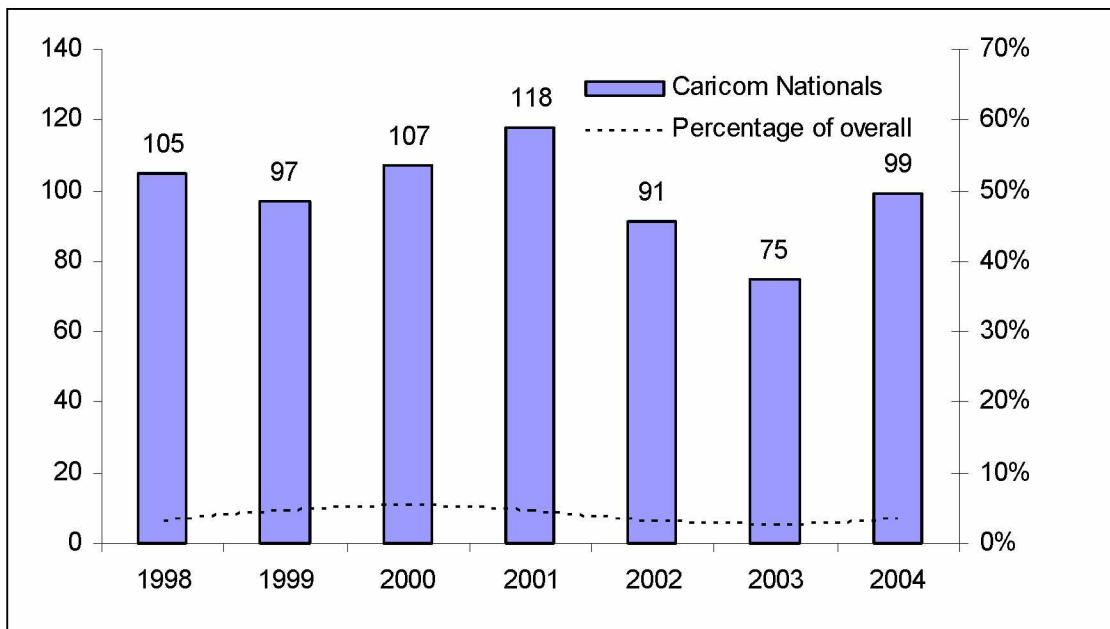
Figure 16: Immigration to Belize from CARICOM**Figure 17: Work permits issued, Trinidad and Tobago**

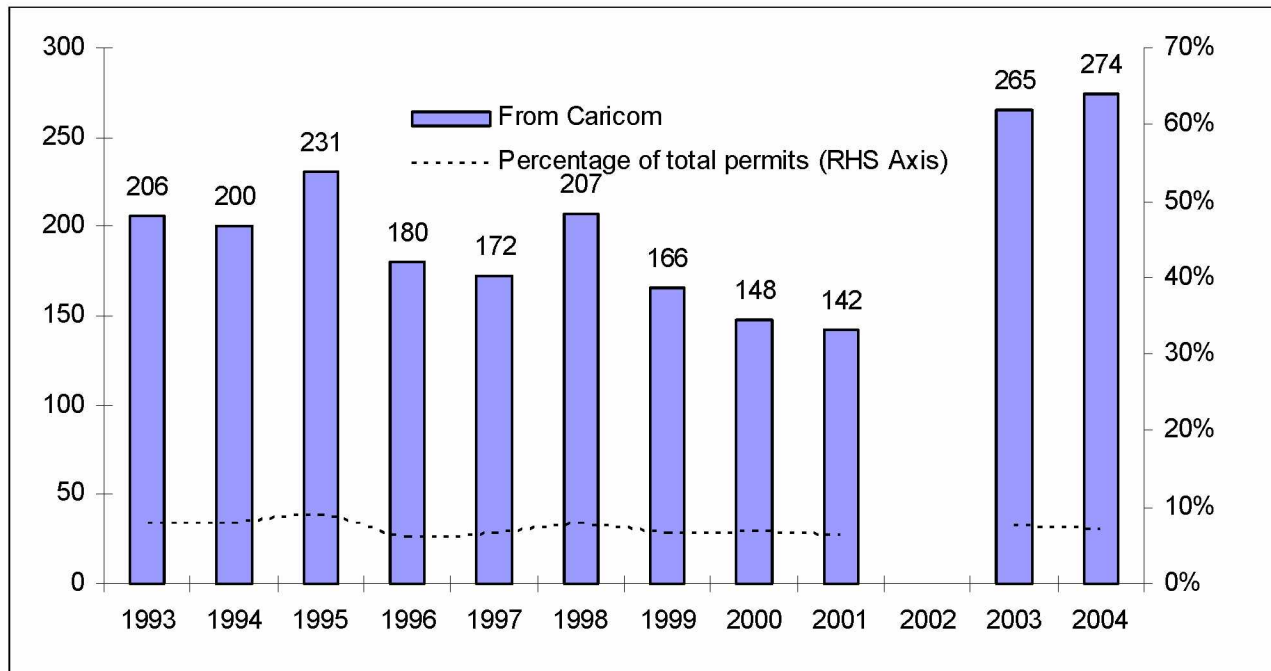
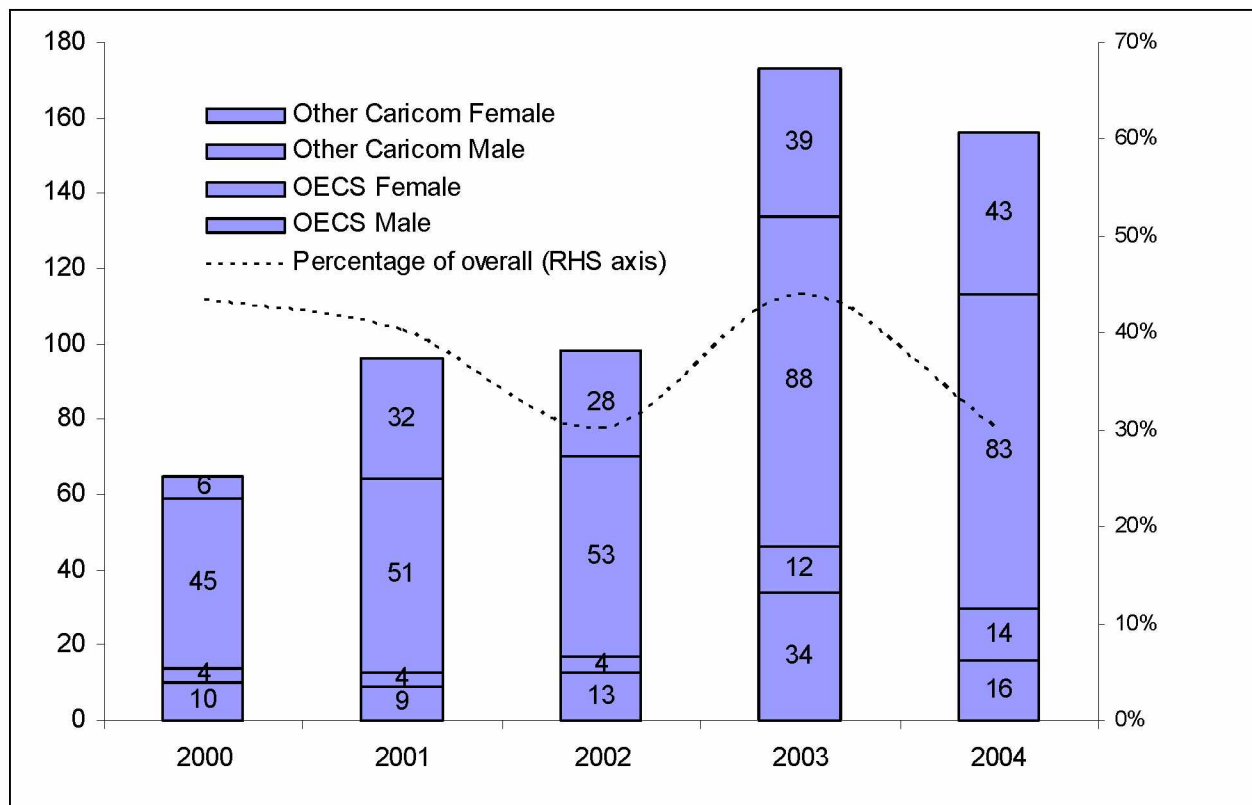
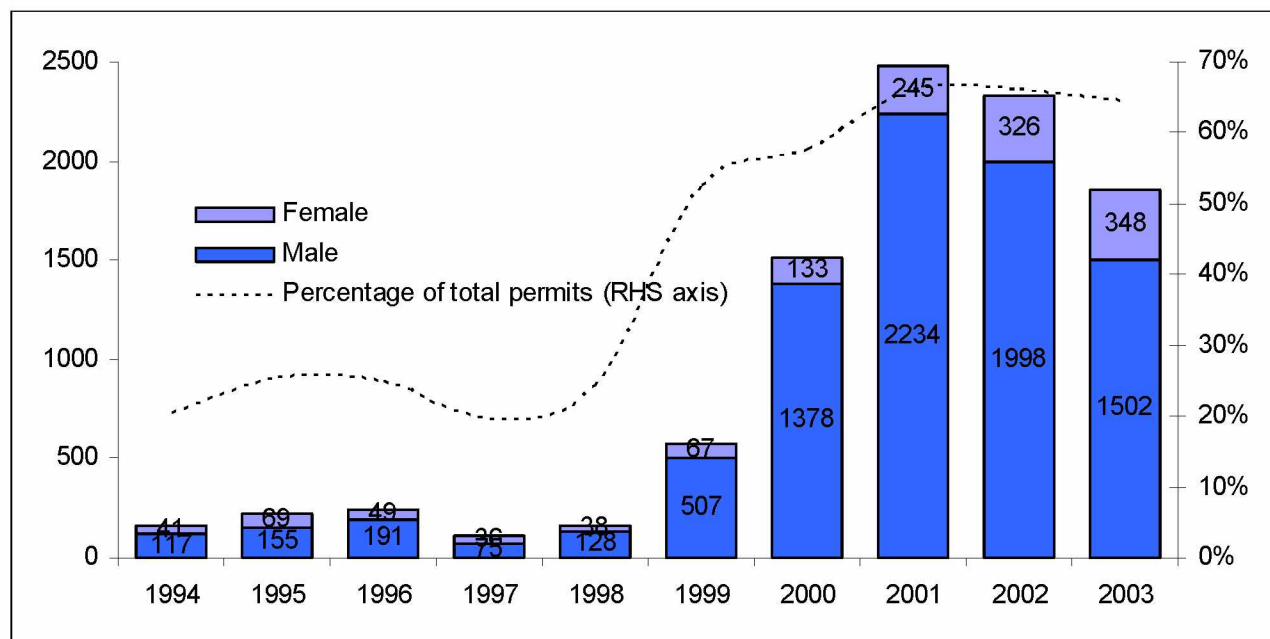
Figure 18: Immigration to Jamaica from CARICOM**Figure 19: Immigration to Saint Lucia from CARICOM**

Figure 20: Immigration to Barbados from CARICOM

Relative to overall migration, intraregional immigration to Barbados (1999-2003) and Jamaica (2000-2004) increased relatively (increasing a third and a tenth, respectively more than overall migration); this trend was not observed in Saint Lucia and Trinidad and Tobago. While migration from the region nevertheless increased by 140% in Saint Lucia (2000-2004), it, however, decreased 7% in Trinidad and Tobago (2000-2004). In Belize it remained relatively flat in nominal terms, yet decreased significantly relative to the overall permits issued. Figures 21-23 show which countries the workers came from.

Close inspection of the data reveals that the majority of workers to the five countries are in the higher-skilled categories. In Belize more than half (53%) of work permits are issued to the first three groups of general occupation aggregation, i.e. the professionals.²³ In Jamaica 89% of foreign workers are in these three occupational groups and in Saint Lucia, this group accounts for 93% of overall foreign workers. However, in Belize elementary workers and service workers are also important categories, representing 14% and 11%, respectively, of all work permits respectively; in Jamaica 11% of permits are issued to craft and trade related workers. In Trinidad the picture is similar, with 72% of work permits issued between 1998 and 2004 to highly skilled people. This clearly indicates that unemployment in the region is not due to lack of labour demand. Rather, it signals a mismatch between the skills available in the labour force and the

²³ Occupations are aggregated into 10 different general occupations. There being: 1) Members of the Executive and Legislative Power, State Senior Officials and Managers of companies; 2) Scientific and intellectual professionals; 3) Technicians and associate professionals; 4) Clerks; 5) Service workers and shop and market sales workers; 6) Skilled agricultural and fishery workers; 7) Officers, operators and craftsmen of mechanical arts and other crafts; 8) Plant and machine operators and assemblers; 9) Elementary workers; and 10) Other.

skills required by industry as: (a) many skilled workers are leaving the region; whilst (b) many skilled workers are simultaneously entering the region.

Figure 21: Work permits from CARICOM to Barbados, 2004

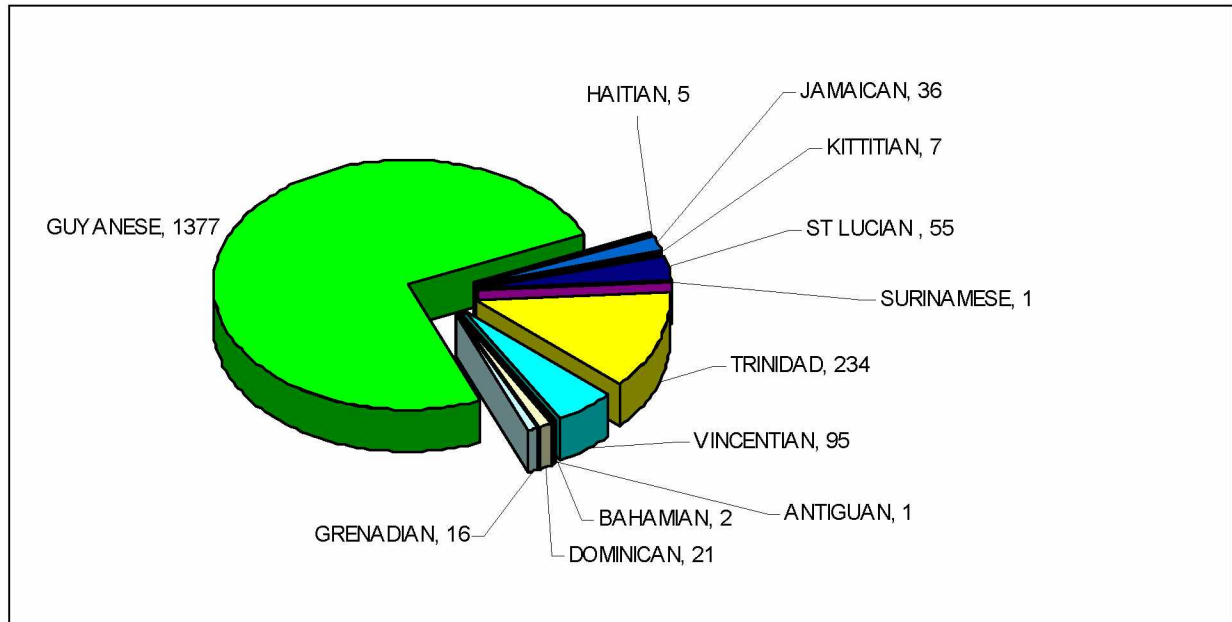


Figure 22: Work permits from CARICOM to Trinidad and Tobago, 2004

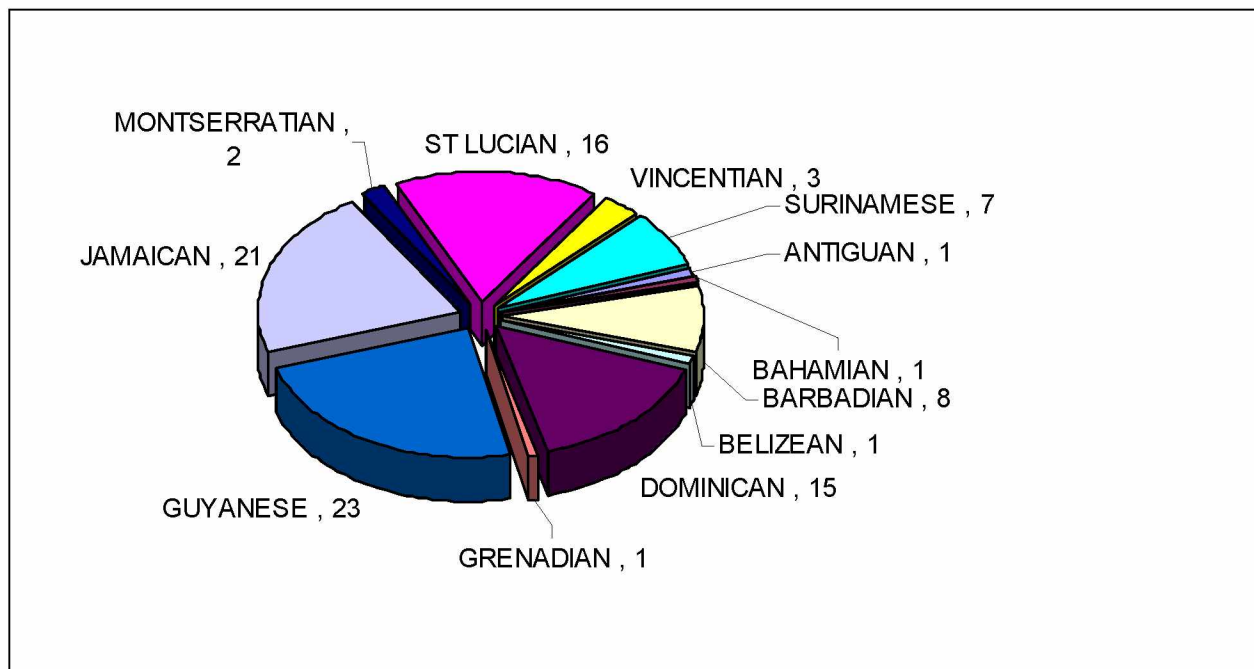
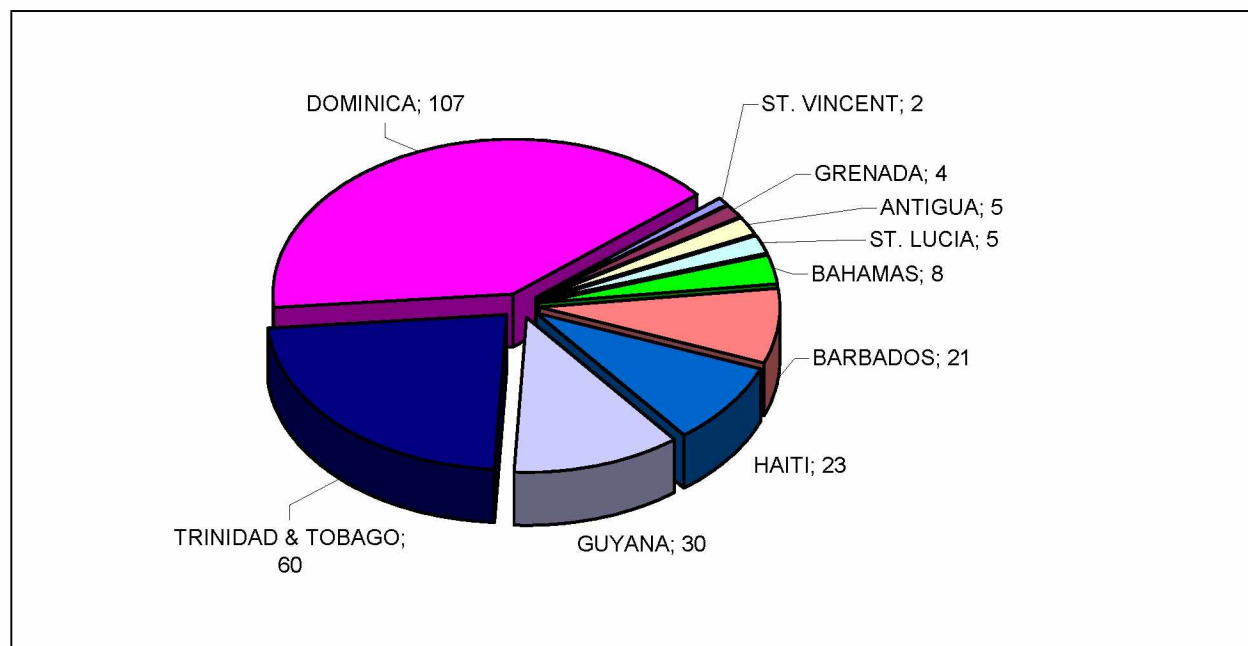


Figure 23: Work permits from CARICOM to Jamaica, 2004

4. Conclusion and Policy Recommendations

In total, several holistic policy recommendations can be made based upon this study:

1. The first recommendations, which deal with employment demand as well as labour supply, pertain to a more encompassing approach to the issue of unemployment:

- (a) To increase demand, the region needs a concerted approach to employment creation. Active policy programmes that encourage output growth and ultimately create employment possibilities in the region need to be implemented in which specific sunrise industries – industries which bear potential for growth, with a special emphasis on export growth – should be targeted to replace the traditional agricultural export industries that have dominated in the past. By focusing on high-skilled industries, such as technology sectors and service exports, the region will be able to corner important niche-markets that can provide employment opportunities to its workers. Several member States have prepared national development plans which formulate holistic visions and prospective strategies. These are important steps to reducing the burden of unemployment.
- (b) There is little doubt that education systems in the region need to be restructured in order to equip school leavers with tools more relevant to labour markets as there is currently a mismatch between demands of the labour market and skills provided by the education system. Access to schools of all levels needs to be widened and

Box 3: The University of Trinidad and Tobago

Trinidad and Tobago has recently seen the launch of a new university: the University of Trinidad and Tobago (UTT), which was inaugurated on November 1st 2004. What makes this university rather interesting and a candidate for best practice is that it has received substantial support from the oil and gas industry, with the largest contribution coming from British Petroleum which invested US\$10 million dollar in the University of Trinidad and Tobago. Accordingly, its courses are tailored to the extraction industry: the initial course offerings include diplomas, bachelors and masters degrees in engineering, technology, and oil and gas exploration and production.

The university has already created partnerships with other higher education institutions: the BSc in petroleum engineering (and later the MSc) is offered in association with the University of Texas, USA; a BSc and MSc in manufacturing systems for the 2005/06 academic year is planned with the Institute of Manufacturing of Cambridge University, whilst TAT InfoTech (India)) is the university's partner in IT and software development programmes. Its first intake totalled some 2,000 students, studying on campus at Point Lisas, whilst architectural plans for the university's main facilities - campus and administration - to be at the Wallerfield Science and Technology Park are at an advanced stage.

Clearly, the establishment of this institution is a direct response to the inability of the natural resource extracting industry to find workers with skills related to the needs of the industry within the region in general and within Trinidad and Tobago - the region's largest natural resource exporter - in particular.

secondary level education should be made compulsory throughout the region. Closer interaction between labour markets and the education system must be created; this could take place through apprenticeships, internships and other means of gaining work experience before completing school. Interesting examples here are. the HEART Trust, National Training Agency in Jamaica and the National Institute of Higher Education, Research, Science and Technology (NIHERST) in Trinidad and Tobago. The former provides *inter alia* planning assistance, instructor training accreditation, vocational curriculum development and the development of training and facilities standards, and has thus become an important tool as it is charged with ensuring that all technical and vocational education training in the country complies with national standards. This is also one of the functions of NIHERST. A further interesting example of closer links between education institutes and industries is found in Trinidad and Tobago, where the natural resource extraction industry has given substantial support to the creation of a new higher training institution that is specifically geared to equipping students with the required skills (see Box 3). Thus, overall improved investment in and reform of education is needed to place member States in the region in a position to be able to compete on a global scale.

- (b) The second set of recommendations pertains to productivity in the region: in view of varied productivity performance during the last 5 years, a more cohesive approach towards productivity should be adopted to ensure that productivity is increased. Thus, Barbados created a productivity council in 1993, which comprises representatives from employees and employers organizations as well as the Government of Barbados; Jamaica has instituted a Productivity Centre and the Bahamas are considering the introduction of a council along the lines of Barbados. The aim of these centres should be not only to measure productivity and aspects of productivity, but also to advise firms on how to create incentives

conducive to their operating environment. These could be e.g. productivity-related payment schemes to boost work input, re-organisation of operating procedures and/or re-design of plant designs to e.g. streamline production processes etc. The establishment of such productivity centres across the region would greatly enhance the region's ability to compete on a global scale.

- (c) Finally, as a third set of recommendations relates to labour mobility in the region. For one, steps must be undertaken to reduce the brain drain in the region; furthermore, free labour mobility in the region needs to be embraced. In view of the former, policy programs to encourage output growth (see above) can act as a 'brain-retention' mechanism. Whilst not actually stemming brain drain, several countries in the region have implemented special policies to re-attract their Diaspora. These policies include e.g. special tax breaks and other incentives upon return to their country.

In addition, policymakers in the region have responded to increased globalisation and the greater competition from other regions by striving to bring about closer economic integration. This has *inter alia* included recognition to increase labour mobility in the region as a mean to overcome the SIDS nature of member States by effectively increasing the size of 'domestic', i.e. regional labour markets. Consequently, allowing for free labour mobility has the potential to reduce emigration of skilled labour from the region ('brain drain'). So far member states have been hesitant in allowing for the free mobility of labour in general, in fear of unleashing large migratory flows from less well-off States to wealthier States. The rationale of this caution towards free mobility is not entirely clear however. Whilst there have been no studies in the region on potential migration, experience drawn from other regions suggests that migration is likely to remain rather limited: migration in Europe has turned out to be significantly lower than initially anticipated, as has migration in the US, where an average of 2.65% of the population moves between states annually. Drawing from this experience and considering that migration is more cumbersome between island states than within a continent, potential migration within the region is likely to be limited – even if it were available to all workers. Furthermore, research from the US has shown that education is strongly correlated with migration (Rosenbloom and Sundstrom, 2003) as more *'education may be associated with better sources of information, greater ability to process information about opportunities, or lower risk aversion'*. Hence, there is little reason to conclude that allowing for free mobility of unskilled labour will entail large migratory dynamics in the region.

Overall, it thus seems that the current limitation on labour mobility by excluding unskilled labour is currently misplaced; however, the more fundamental challenge to the region is how to make education more relevant to the demands of a globalized economy. The education sector must be considered key to achieving economic prosperity. The region must learn from its inability in the past to make the sector relevant to labour markets, which has led to persistent unemployment, and must remedy this situation. A combination of education reform and employment creation through programmes to encourage output growth would not only potentially reduce the brain drain problem that the region is facing by providing new employment opportunities, but would also place the region in a position to face the challenges that increased globalisation is posing to the 21st century.

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