

Employing Youth: Promoting employment-intensive growth



International Labour Office Geneva

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Report for the Interregional Symposium
on Strategies to Combat Youth Unemployment
and Marginalization

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Preface

The large, and perhaps growing, number of unemployed youth is one of the most daunting problems faced by developed and developing countries alike. On average, and almost everywhere, for every one unemployed adult, two young persons find themselves without a job. The social distress caused by this situation is well known. The long-term effects of youth joblessness are equally important. The unemployment spells over a worker's life cycle are related to the ease of transition between school and work. Furthermore, it is disappointing to observe that the unprecedented expansion of investment in youth education in many regions of the world is not being matched by higher employment levels for this population group.

Building upon the work initiated in 1996-97 under the Action Programme on Youth Unemployment, and in response to the resolution on Youth Employment adopted by the International Labour Conference at its 86th Session (June 1998), the ILO Development Policies Department launched a number of studies on the effectiveness of strategies and programmes implemented in different countries of the world to cope with youth marginalization and unemployment. The present paper, which will be presented at the *Interregional Symposium on Strategies to Combat Youth Unemployment and Marginalization* (Geneva, December 1999) provides a synthesis of these reports.

Our challenge has been to identify practical and effective strategies to eradicate youth unemployment. While much has been learnt, we must admit that more has yet to be discovered. As the present employment situation throughout the world shows, only few countries have managed to generate decent employment for their youth, let alone their adult population. We are still searching for practicable solutions to this global problem. One thing is clear: sustainable, job-enhancing economic growth remains an indispensable component of any strategy to eradicate youth unemployment. Experience has shown that employment-friendly growth is essential, and targeted programmes can only provide complementary resources and cross-gap actions. Starting from this premise, the present paper examines the effects of policies and programmes on employment, and suggests some viable strategies for the inclusion of youth in the process of development.

The debate about education versus training needs to be revived. In an increasingly mobile world, the need to acquire the ability to learn is, often, more important than the acquisition of a specific skill. There is, however some evidence to indicate that effective apprenticeship systems ease the transition from education to work. Those systems must rely on the growth of enterprises in the formal sector. Investment in better, earlier and longer education might be more effective in promoting the attitudes and

competencies required for the world of work. It is questionable that large untargeted youth employment or training programmes have positive rates of return. There is little evidence that such programmes improve either the employment prospects or earnings for the young and especially so for the disadvantaged among them. Narrowly targeted and carefully evaluated programmes can, however, ease the plight of specific youth categories. The effective use of public resources can only be achieved if there are ways to measure the short-, medium- and long-term outcomes of specific strategies. It is strongly argued that detailed evaluations must be conducted as a pre-requisite for the design of any job-creating strategy for the young.

It is hoped that the present study has provided a synthesis of the experience with youth employment, and will thus contribute to a more realistic approach for future strategies.

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This document is primarily based on David Blanchflower's forthcoming paper: *What Can Be Done to Reduce the High Levels of Youth Joblessness in the World?* which drew upon contributions by G.K. Chadha, W. van Eekelen, N. Ismail, G. Kanyenze, S. Lijstestein, L. de Luca, S. Mamder, M. Matsumoto, G. Mhone, J. Ramirez, T. Sparreboom, and H. Tabatabai. R. Islam, N. Majid and R. Zachmann, as members of the team implementing the Action Programme, that led to the preparation of this document, provided comments and modifications to the final manuscript.

This publication would not have been possible without the dedication and attention to detail demonstrated by Ms. G. Ople.

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I. Executive Summary¹

1. The aim of the ILO's action programme on Strategies to Combat Youth Marginalization and Unemployment is to identify effective policies and interventions to combat youth unemployment and exclusion. To do this, it is necessary to assess both the mechanisms that regulate the demand for labour and identify the strategies that can increase the possibilities of employment and the wages of the young. This, however, must be done in different economic structures and within different business cycles.

2. The work carried out under this action programme has been largely based on the resolution on Youth Employment adopted by the International Labour Conference at its 86th Session, June 1998. It is also a continuation of the work initiated in the 1996-97 biennium under the Action Programme on Youth Unemployment.

3. To assess youth employment policies it is necessary to ensure that increases in jobs for the young do not lead to rises in adult unemployment, that schooling and training are not impaired and, naturally, that the future employability and the quality of youth employment is enhanced. Evaluations that provide information on the effects of policies and programmes over long time periods and take into account these factors are rarely available. In this sense, it is clear that much remains to be done to identify appropriate youth employment strategies.

4. This paper, which summarizes the work carried out under the Action Programme, describes youth joblessness in the world, assesses some experiences to deal with this problem and suggests what can be done to improve it. In a very summarized manner, research indicates that:

- a. There are many similarities in youth labour markets. In particular, it has been found that youth unemployment is approximately double the adult unemployment in most countries of the world. This ratio appears to decline as unemployment increases.
- b. In examining possible causes of youth joblessness it has been found that, in general, wages, minimum wages, cohort size, shifts in industry composition, trade, technology and increased female participation are not related to youth unemployment. Reaffirming the fundamental message of the resolution concerning youth employment adopted at the 86th Session of the International Labour Conference, the level of aggregate demand in the economy does appear to play an important role. Contrary to widespread belief, unemployment makes young people very unhappy, which suggests it is not a conscious choice.

- c. It is noted that there are substantial supply responses to economic incentives in the youth labour market. High unemployment encourages young people to stay on longer at school and acquire more education. The young are more likely to continue living with their parents these days than was true in the past. It is also observed that there is a number of worrying responses which include increased drug taking, more participation in crime and increased suicide.
- d. It has been concluded that increased youth wage flexibility does not seem to be an effective tool to deal with youth joblessness: there is little evidence to suggest that the young are being priced out of jobs. There has been a decline in the wages of the young relative to adults over the last decade in many countries and youth unemployment has not improved. Schemes to encourage self-employment may have some value. Active labour market policies have generally not been very successful in improving the situation of the disadvantaged young. A series of recommendations for narrow targeting and careful monitoring are made in this report.
- e. Finally, as it appears that solutions to youth unemployment are driven by what happens to overall unemployment, the effectiveness of the suggested macroeconomic policies in decreasing unemployment is examined. Unfortunately, we are a long way from understanding why aggregate unemployment is so high and why it has trended upwards over the last couple of decades. High unemployment does not seem to be primarily the result of job protection, trade union power or wage 'inflexibility'. There is some evidence that overly generous benefits do tend to raise the level and duration of unemployment by making work less attractive. However, quantitatively, the impact of benefits is small. There are two components of the aggregate unemployment problem to be understood. First, cyclical movements in joblessness - why does unemployment in general and youth unemployment in particular fluctuate up and down in large, irregular cycles? Second, why in so many countries has unemployment trended secularly upwards over the last few decades? It appears that the main explanation for the cyclicity rests with changes in commodity prices in general and the oil price in particular, while explanations of the upward trend are related to aggregated demand, unemployment benefits and labour taxes, the internal mobility of the population, home ownership and the existence of a well-functioning private rental sector.

5. On the basis of present knowledge about the policies adopted and experiences evaluated, it is concluded that:
 - a. Economic strategies that boost aggregate demand must be adopted;
 - b. Carefully targeted dual apprenticeship - education systems should be implemented;
 - c. These systems will be successful if the formal sector in the economy grows, and if active tripartite participation in these schemes is achieved; and
 - d. Self-employment and small enterprises in the formal sector, backed up with financial services and training, are promoted within carefully targeted population groups.

II. Youth and the world of work: An economic and social overview

6. In 1995 there were 525 million men and 500 million women aged between 15 and 24 in the world, according to estimates of the United Nations.² About 60 per cent of the world's youth live in the developing countries of Asia alone, while 23 per cent live in Africa, Latin America and the Caribbean. Only about 16 per cent live in developed regions. From 1980 to 1995 the percentage of the world's population represented by youth aged 15-24 declined slightly from 19 per cent to 18 per cent. This decline occurred in all regions except Africa where youth, as a percentage of the total population, continues to rise. The ratio of young men to 100 women is unusually high (over 106) in some countries in Asia and Oceania. Examples where the (1995) ratios were very high include UAE (124); Pakistan (111); India (109); Austria (108); Germany (108), and the UK (107). Rather surprisingly, the ratio is above 100 in all developed regions.³ The ratio of men to women is 96 or below only in Cape Verde (96); Central African Republic (95) and Congo (96).⁴

7. To place our analysis of youth in context, an examination of some background information on demographics and various measures of living standards across countries illustrates a marked gap between the developed and developing countries (Table 1). These statistical profiles show the brutal disparities between countries. The proportion of the population under the age of 18 was as high as a remarkable 55 per cent (Benin, Niger and Zambia) to a low of 18 per cent in Italy. Among these 192 nations, annual per capita GNP is as low as US\$80 (Mozambique) and as high as US\$45,360 (Switzerland).

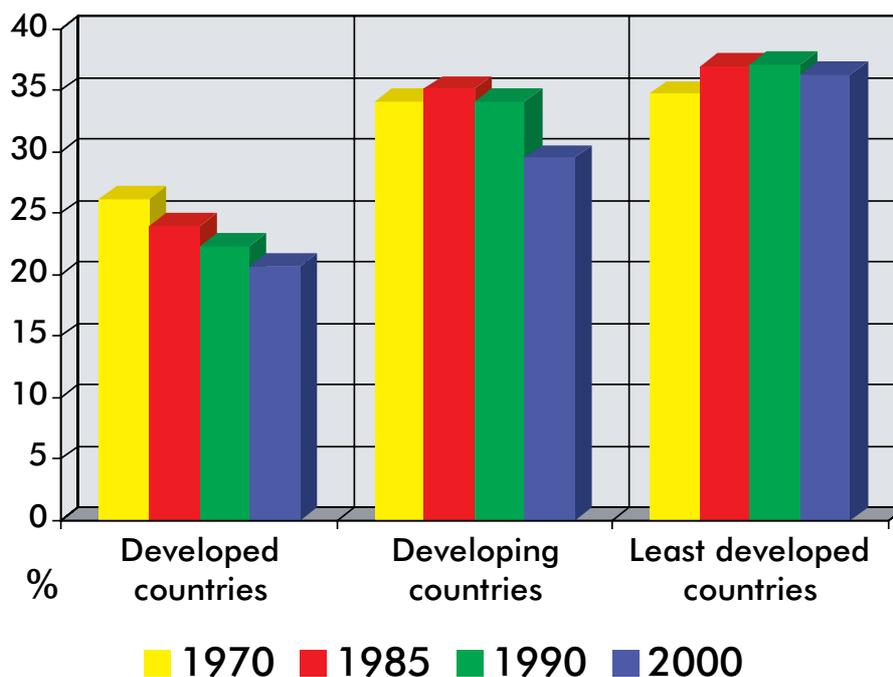
8. The under-5 mortality rate varies from 4 to 320 deaths per 1,000 live births (Singapore and Niger). The percentage of under 5's under weight is as low as 1 (Chile, Croatia, Czech Republic and the United States) and as high as 56 per cent (Bangladesh). The maternal death rate ranges from single figures to 1,800 deaths per 100,000 live births. The fertility rates vary from a high of 7.2 (Niger) to 1.2 (Italy and Spain) while the maternal mortality rate was highest in Sierra Leone at 1,800 compared with a low of 6 in Canada, Norway and Switzerland.

9. The primary school enrolment rate varies from 24 per cent (Afghanistan) to 100 per cent (many OECD countries) of young people. The share of youth in the total labour force, as seen below,⁵ is continuing to *decrease* as educational enrolments have increased. The proportion of 12-17 year olds in the world enrolled in secondary school increased from 7.1 per cent in 1970 to 88.3 per

cent in 1990. This contrasts with 35.8 per cent and 48.2 per cent respectively in developing countries.⁶ In all regions, except eastern Asia, the young female labour force is increasing more rapidly than the male labour force.

10. Enrolment in higher education is growing rapidly in all regions and is greater in all countries among young women than among young men, especially in Latin America and the Caribbean. Even with this growth in schooling, which has been substantial in many countries in the developing world, gross enrolment ratios⁷ vary considerably by degree of development. They range from 10.7 per cent in developing countries to 44.7 per cent in developed countries and economies in transition.⁸ In most developing countries, education is compulsory for between four and eight years, while in the developed countries it is compulsory for at least eight years. Only a few developing countries have been able to close this gap (e.g. Gabon, Malaysia, Namibia, Peru, South Africa, Sri Lanka and Venezuela). Developing countries have increased public expenditure on education as a share of GNP since 1980. On a per capita basis, East Asia and Latin America increased their public expenditures on education more rapidly than the other developing regions. East Asia more than doubled public expenditures on education per inhabitant, while Latin American countries raised outlays by 30 per cent between 1982 and 1992.⁹ Despite this growth in spending, the overall gap between the developing and developed countries in per capita public expenditures on education widened between 1980 and 1993.

Figure 1
Share of youth in the economically-active population



Source: Calculated by the United Nations Statistics Division from the ILO, *Economically-Active Population 1950-2010*, 4th edition, 1996 (Paris).

11. The extremely low per capita incomes in some countries have made it hard for communities to find the resources to contribute further to the education of their children. Many developing countries have attempted to extend public primary education by hiring teachers with less formal education but more in-service training and hence lowering salary costs (e.g. Colombia, Senegal, Zimbabwe). Others, such as Zambia and Bangladesh, have raised their pupil-teacher ratios and introduced double shifts which can reduce costs. Many developing countries have moved to favour primary education. In Chile, the share of secondary and higher education expenditures was reduced from 18 per cent and 33 per cent in 1980 to 13 per cent and 21 per cent in 1993 respectively. Bangladesh lowered the share of higher education from 13 per cent in 1980 to 8 per cent in 1992. According to UNESCO, illiteracy rates have continued to decline around the world, falling from 30.5 per cent in 1980 to 22.6 per cent in 1995. They are higher in South Asia (49.8 per cent) than in sub-Saharan Africa (43.2 per cent) or in the Arab States (43.4 per cent). They are especially low in Latin America and the Caribbean (13.4 per cent) and East Asia and Oceania (16.4 per cent).

12. The size of the youth labour force is declining in agriculture and industry and increasing in services in developing regions, northern Africa and western Asia, Latin America and the Caribbean. In south-central Asia, increases in the labour force are roughly equally distributed among the three sectors, but in sub-Saharan Africa, eastern and south-eastern Asia and Oceania, about half of the increase of youth in the labour force is still in agriculture. From 1980 to 1990, services absorbed all of the increase in the youth labour force in developed countries and over half the increase in northern Africa, Latin America and the Caribbean and western Asia. In 1995 nearly two-thirds of the world's youth lived in countries with per capita GDP's of less than US\$1,000 per year.

III. Youth in Labour Markets

13. We now turn to a series of statistics (Tables 1 and 2) that describe the extent to which the young are jobless by country and over time. First, changes in the relative size of the youth population aged 15-24 compared with the older age group 25-54 are reported (Table 1). The size of the youth population aged 15-24 years relative to the numbers aged 25-64 has fallen in all developed countries and most developing countries - the main exceptions are Niger, El Salvador, Nicaragua, Paraguay and Pakistan. The youth population is increasing in most of the transition economies.

14. From Table 1 it can be observed that: (1) the youth participation rates are higher in developed countries than in developing countries; (2) the participation rates for young men have declined in almost all countries; and (3) they have declined for women aged 15-19 in most countries, but increased for the older age group of 20-24 year old for most countries, except for the eastern European countries where the rates have declined.

15. An examination of overall unemployment rates (with minimum and maximum ages variously defined) and by gender presents a mixed picture (Table 2).¹⁰ Overall rates vary from as high as 38.8 per cent in Macedonia to as low as 0.4 per cent in Uzbekistan. This illustrates the difficulty of interpreting the unemployment rate in developing and transition economies. For example, in transition economies it is unclear whether a low unemployment rate is a signal of positive factors - the economy is working well at full-employment - or of negative factors - little adjustment has been made to a market economy. Similarly, in many less developed countries, only the better educated can afford to be unemployed. Hence, in those countries, unemployment rates for the more educated are above those of the least educated. In the majority of countries reported in Table 2, female unemployment rates are higher than male rates (e.g. Botswana, Jamaica, Chile, Belgium and Spain), while in a few others, the male rates are higher (e.g. El Salvador, Algeria, Puerto Rico, UK, Sweden and Australia).

16. Data on current unemployment rates across countries for the 15-24 and 25+ age groups reveals that the youth unemployment rates are approximately twice as high as adult unemployment rates across both developed and developing countries. In a number of developing countries the ratio is considerably higher (Egypt, Colombia, Chile, Honduras, Indonesia, Republic of Korea and Sri Lanka). The ratio is also above two in several southern European countries (Greece, Italy and Turkey), as well as in a number of Eastern European countries (e.g. Bulgaria, Estonia, Romania and Slovenia).¹¹

17. An examination of male and female unemployment rates for our two age groups shows that the unemployment rates for young men aged 15-24 are lower than the equivalent rates for young women in virtually all of the developing countries and transition economies (Table 2). The pattern is more mixed in the developed world - male youth rates are higher in the English speaking countries (Australia, Canada, Ireland, New Zealand, the UK and the US) plus Japan, Sweden and Turkey, but lower in countries such as Austria, Belgium, Denmark, France, Germany, Italy, Spain and Portugal.

18. Youth unemployment rates are significantly higher in the 1990s than they were in the 1980s in a number of countries. Even where they have not increased significantly they have generally remained high (e.g. Spain at 36 per cent and Italy 32 per cent). The rate has increased markedly in Brazil, Colombia, El Salvador, Nicaragua, Canada, Italy, France, Finland, Sweden and New Zealand but declined sharply in Chile, the Netherlands and Portugal.

19. The average annual changes in the proportion of 20-24 year olds in higher education between 1990 and 1995 show a rise. It is likely that this is in part a labour supply response on the part of the young to the lack of unskilled job opportunities, as well as to the worldwide increase in the demand for the skills. A lack of jobs causes young people to defer their entry into the world of work. The transition from school to work appears to be sensitive to aggregate economic conditions, with the employment and unemployment of youths highly dependent on the rate of unemployment, particularly for younger youths and for those out of school (see Blanchflower and Freeman, 1996b and OECD, 1996).

IV. Youth Unemployment: Causes and Effects

20. A number of possibilities suggest themselves to explain patterns of high and persistent unemployment amongst the young: aggregate demand; youth wages; the size of the youth cohort and a lack of skills. Clearly, in finding solutions to the youth unemployment problem, it is crucial to determine the relative importance of these factors. Many studies have shown the importance of aggregate demand. As argued above, youth unemployment rates are approximately twice as high as adult unemployment rates. It is also the case that young people are not only more likely to quit their jobs voluntarily but are more likely to be fired as well (last in, first out). However, the opportunity cost to firms of firing young workers appears to be lower than firing older workers. Young workers are also less likely to be subject to employment protection legislation. It is often held that the wages of young workers are too high because of the existence of minimum wage legislation, which raises the wage of the young making them uncompetitive, especially compared to married women who, around the world, have entered the labour force in large numbers over the last two decades. There is a good deal of evidence that youth wages relative to adult wages have declined considerably in recent times in many countries.¹² Furthermore, there is growing literature that suggests that the employment reducing effects of the minimum wage have been greatly exaggerated, especially in the United States where its level is very low.¹³ *The evidence does not seem to suggest that youths are being priced out of jobs in any major way.*

21. A further explanation for high and persistent youth unemployment is the size of the youth cohort. The higher the number of young people, the more jobs that will be required to accommodate them. This explanation does not fit the data well, as was discussed earlier, since the size of the youth cohort has been in decline in most countries.

22. Finally, it is argued that in this new technological age the young do not possess the skills that firms need. There is less demand than in the past for unskilled jobs, particularly because of new technology, and this substantially affects the young.¹⁴

23. No matter what the cause of youth unemployment is, it does seem to have serious consequences especially if the unemployment spells are long or if an individual experiences numerous spells of it. The duration of unemployment spells tends to be shorter for the young than for older workers. There is, however, some evidence across countries that although youth unemployment is of shorter duration than that of adults, the difference is not substantial.¹⁵ The longer an unemployment spell, the more difficult it is for that person to find work because of the loss of skills, morale, psychological

damage etc. There are three major reasons why unemployment while young, especially for frequent or long periods, can be particularly harmful:

- a. Early unemployment in a person's career may permanently impair his or her future productive capacity.
- b. Barriers to employment can block young people in the passage from adolescence to adulthood, which involves setting up a household and forming a family. There is some connection between youth joblessness and serious social problems such as drug abuse, petty crime and single parent families.
- c. High levels of youth unemployment may, at an aggregate level, lead to alienation from society and from democratic political processes, which may give rise to social unrest. Unemployment makes people unhappy (Blanchflower and Oswald, 1999a, Winkelmann and Winkelmann, 1999; Oswald, 1997b).

24. In the next three sections, evidence that exists on the causes and consequences of youth unemployment is examined for the OECD, Transition Economies and finally the developing countries of Latin America, Asia and Africa. As much more is known about the workings of the youth labour market in the OECD, the first section on the OECD lays out the ground for other regions of the world. In the following sections, an attempt is made to compare and contrast the situation in the developing countries with that found in the OECD. Interestingly, there seem to be important similarities.

V. Regional perspectives

Youth Labour Markets in OECD Countries^{16, 17}

25. In the 1970s, the labour market situation of youth in member countries of the OECD worsened noticeably, apparently due to the huge increase in supply resulting from the entry of baby boomers into the job market.¹⁸ Most analysts expected the deteriorated position of youths in the job market to improve as baby boomers aged, and as the youth cohort declined in size (see OECD, 1978). It was largely expected that increased education or training would substantially alleviate the problems of all youths except for a small hard core. The youth job market problem was thus expected to be a temporary one, readily curable by policy. Over twenty years later, while the youth cohort is much smaller and better educated than in the past, the youth job market problem remains.

Changes in the Transition from School to Work

26. Perhaps the most important and positive way in which young persons can respond to poor labour market conditions is by postponing entry into the job market and remaining in school. Without a family to support, youths can invest in human capital rather than struggling to make a living in a difficult market. In virtually all OECD countries, enrolments in school rose from the 1980s through the 1990s. The deterioration in the youth job market seems to have contributed to particularly large increases in enrolments in higher education. The increase has been more rapid in OECD countries, other than the US. In addition to enrolling in school, young persons shifted among fields of study and occupations. In the US students rejected sciences and liberal arts in favour of business related areas, and PhD degrees in favour of professional degrees. The flow of students toward relatively higher paying fields should have increased the earnings of young workers relative to the earnings of older workers, but such a pattern is not found in the data.

27. Is the extension of the period of schooling and the delay of working the result of the state of the macroeconomy, or is it the result of other factors? To what extent is the schooling-employment status of youths sensitive to aggregate economic forces? Blanchflower and Freeman (1999b) examined the data for 15 countries¹⁹ for the period 1983-94. In addition, data was available for the US from 1970 to 1993 and for Canada for 1976-94, making an overall total of 8,000 observations. The findings on the relationship between schooling and unemployment were mixed.²⁰ Pooling all of the countries together, schooling was *positively* related to unemployment, but the diverse country results prevent any broad generalization. By contrast, there is no ambiguity in the effect of

aggregate economic conditions on the proportion of a cohort that is neither in school nor working or that was employed. The proportion neither in school nor working, sometimes called “idle”, falls with unemployment in nearly all countries. In the pooled OECD sample, an increase in aggregate unemployment raised the proportion idle by 0.73 percentage points. Contrarily, unemployment reduced the employment rate of youths by 1.13 percentage points.

28. An examination of education and labour market status of 18 and 22 year olds in 1984 and 1997 shows that education and employment are quite separate activities for many young people. In 1997, on average, 56 per cent of the cohort of 18 year olds were in full-time education, while among 22 year olds, 46 per cent were solely in employment. In terms of the OECD average, the *trends* over the period are the same for both: a strong increase of youth in full-time education and a much smaller increase of those combining education with employment; conversely, there has been a strong decrease of those in employment without studying and a much smaller decrease of those neither in education nor in employment.

29. In several countries, a high proportion of young people combine education and work, while in others this is rarely the case. For example, in Belgium youths rarely work while in school. Belgian teenagers are nearly all full-time students.²¹ In contrast, in the United Kingdom, quite a large proportion of teenagers are working.²² Interestingly, in both countries, there exists a sizeable group at risk of social marginalization which is composed of teenagers not in education nor in employment; this group accounted for over 20 per cent of the teenage population in the United Kingdom in 1997, compared with about 12 per cent in Belgium. It is also noticeable that the relative size of this at-risk group has shown little change in both countries over the past 15 years (OECD, 1998).

30. The data on the schooling and labour market status of young persons aged 18 and 22 by gender in 1984 and in 1997 (Table 3) show large variations across countries in transition patterns. The high proportion of young persons in vocational training/apprenticeships in Austria, Denmark and Germany contrasts markedly with those in schooling in other countries. In general, however, they show a general pattern of increases in school attendance and of declines in employment/population ratios and high rates of unemployment in most countries for youths of both genders. The rise in school enrolments is most marked outside the US.²³

31. The proportion of young men that are idle - that are neither in school nor in the labour force - has increased over the period 1984-97, especially so in the UK and the US, although the level is considerably higher in the former case - 11.4 per cent and 6.8 per cent for 18 year olds and 8.4 per cent and 5.6 per cent for 22 year olds respectively. The proportion of young women that are idle

decreased in the OECD as a whole but increased, as it did for men, in Germany, the US and the UK.

32. Employment to population rates fell between 1984 and 1997 in virtually all the OECD countries, as demonstrated in Table 3. The unweighted average shows that 35.4 per cent of 18 year old men were employed in 1997, compared to 43.8 per cent employed in 1984; and that 29.9 per cent of 18 year old women were employed in 1997, compared to 36.6 per cent in 1984. The comparable figures for 22 year olds show a drop in employment rates for men of 7.0 percentage points, compared to 4.0 percentage points for women. Interestingly, unemployment as a proportion of population declined in most countries for both men and women. Major exceptions to this are found in Australia, France and Canada.

33. Successful transition into the world of work varies considerably by education attainment in every country. In general, the burden of joblessness among the young falls on the least educated and the least skilled. In a number of countries, amongst young men - much less so for young women - *the most educated have to wait the longest to find work*. Examples where this occurs are Germany, Greece, Italy, Portugal and Spain. What does stand out, however, is how low the unemployment rate amongst the new school leavers is in Germany for the least educated (9.7 per cent for men and 13 per cent for women). This contrasts dramatically with most other countries where more than one-third of such individuals were unemployed one year after completing education. What is perhaps surprising is the similarity in the degree of concentration of unemployment in Germany and the US. Among all Germans 1.6 per cent of the population who experienced at least two years of unemployment accounted for 25 per cent of all weeks of unemployment over the five year period examined. Analogously, in the US 1.8 per cent of the population with at least two years of unemployment accounted for around 20 per cent of total unemployment. This evidence is inconsistent with the view that the transition from school to work is dominated by short spells.

34. A case in which young people do relatively well in booms is examined by Freeman and Rodgers (1999) who analysed the 1990s boom in the United States and found that it substantially improved the position of non-college educated young men, especially young African Americans who are the most disadvantaged group in the US. Young men in tight labour markets experienced a substantial boost in both employment and earnings. Adult men had no gains, and their earnings barely changed even in areas where unemployment rates were below 4 per cent. Youths did particularly well in areas that started the boom at lower jobless rates, suggesting that they would “benefit especially from consistent full employment”.²⁴ The earnings of youths in the US appear to be especially responsive to changes in the unemployment rate. Similar results have been found in other countries such as the UK, Australia and Canada.²⁵ A virtuous cycle is set in place as unemployment

amongst the young decreases and as the attractiveness of work increases.

35. A number of OECD countries have experimented with *labour market programmes* designed to help youths in the job market. On the supply side are programmes that link schooling to work before youths encounter difficulties in the market; and second chance programmes that try to increase the skills of youths who have trouble in the job market. On the demand side are programmes that raise youth wages, for instance through minimum wage, or that target some employment opportunities at youths. On the basis of aggregate outcomes, the German apprenticeships seem to be a highly successful supply-side programme. Less educated young workers have lower unemployment rates and higher relative earnings in Germany than in the US. In the first five or so years of work, fewer young Germans are jobless than young Americans. Apprenticeships offer a good return for most young persons. However, the German apprenticeship system has its own problems. The number of apprenticeship contracts has fallen as more youths have chosen higher education. Youths who do not find a job immediately after their apprenticeship face a comparatively long period of non-employment, and those who fail an apprenticeship programme suffer long-term reductions in earnings. The apprenticeship system does not improve the effects of family background; children of blue-collar and white-collar employees were more likely to be employed subsequently than children of non-employed parents.²⁶

36. By contrast, second chance programmes, including Sweden's much heralded active labour market programmes, do not seem to be overly effective.²⁷ There is also considerable evidence that large-scale programmes designed to move young people from unemployment to work, such as Youth Opportunities Programme (YOP) and Youth Training Scheme (YTS) programmes that operated in the UK in the 1990s, were ineffectual. For example Dolton et al. (1994) found that YTS *lowered* the probability of subsequent employment. Some studies such as O'Higgins (1994) have found more positive effects on employment but he finds no significant employment effects for the disabled and ethnic minorities. The substantial variation in magnitudes of such estimates has lead Ryan and Buchtemann (1996) to question the reliability of these studies. Moreover, research on the effect of YTS on earnings by Green et al. (1996) have generally found a negative effect (see O'Higgins, 1997).

37. For many years Sweden was viewed as having solved the problem of joblessness and economic inequality. During the 1970s and 1980s, young workers fared reasonably despite sharp increases in the youth's relative wages. However, the recession of the early 1990s proved that Sweden was not immune to substantial unemployment nor to a major youth joblessness problem. In the 1990s, youth unemployment has risen sharply, and the state has expanded youth participation in active labour market programmes.

This has reduced unemployment somewhat without solving the joblessness problem. Indeed, the increase in unemployment has been roughly proportional by age and education, implying that these programmes have not altered the relative distribution of unemployment. The proportional growth of joblessness suggests that aggregate factors were more important in Sweden's joblessness than disaggregate shifts in demand for labour among different skill groups.²⁸

38. France has a wide variety of youth programmes and indeed leads the advanced countries in the proportion of youths employed under some special programme. France also has relatively high minimum wages which, in contrast to the minimum in the United States, has increased quite strongly in recent years, possibly leading to an adverse impact on youth employment. To some extent, these two factors offset one another. The real minimum hourly wage in France (the *Salair Minimum Interprofessionnel de Croissance* [SMIC]) has risen steadily since 1967 whereas in the US, the Federal Minimum Wage has declined. In 1990 approximately 28 per cent of French workers were at or below or within 5 Francs per hour of the minimum. In 1987 in the US, only 18 per cent of employed persons had hourly wage rates at or below the minimum or within an additional US\$1.00 of the minimum. Young workers paid around the minimum wage in France were more likely to become unemployed or move out of the labour force than those paid over the minimum wage.²⁹ While an analogous similar pattern is found in the US, where a larger share of workers employed at or around the minimum wage were either unemployed or out of the labour force in the previous period than was true among workers above the minimum wage, the smaller scope for the minimum implies less of an impact on the youth market. The employment effects of the minimum wages in France are mitigated somewhat by participation in employment promotion programmes that shield workers from some of the effects of the increasing real SMIC. When this eligibility ends, the probability of subsequent non-employment rises sharply.

Evaluating the causes: wages, cohort size, changing industry structure, the rise in female participation rates, aggregate demand or other factors

39. The country which seems to have most successfully dealt with the youth problem is Germany. While some German youths have great trouble in the job market, young, less educated Germans have done markedly better in terms of both employment and wages than comparable youths elsewhere. The situation for young women is less worrying, as young women have continued to move into the job market in increasing numbers and as female pay has improved relative to male pay. Still, in the late 1990s, young women earned less than seemingly comparable young men and experienced a similar twist in the age-earnings profile against them. The unemployment rate for young women workers has risen in most countries, and in the US and the UK, poverty has become increasingly concentrated among single parent female-headed

households. What is puzzling about the deterioration of the job market for young workers is that economic forces operate to *raise* the relative position of youths. Movements of wages, cohort size and industry all appear to work in youth's favour. In addition, the increased years of schooling and skill of younger workers relative to that of older workers should have raised their relative pay and employment. In short, things did not work out as expected in the youth job market. We will consider each of these factors in turn:

- a. *Wages*. In the 1980s, educational differentials moved differently among countries. In several countries the differentials rose but at a modest pace, while in the US the wage dispersion rose dramatically.³⁰ The one country with widening wage differentials which were quantitatively similar to those in the US was the UK (Katz et al. 1995). Canada, Sweden, Australia and Japan had smaller increases in educational differentials, but wage differentials continued to narrow in Italy and France; the Netherlands and Germany experienced no change. The patterns outside the OECD are similar.³¹ Along a variety of dimensions, the economic position of workers in the age brackets 16-24, 25-29, and even 30-34 has *worsened* relative to that of older workers in virtually all OECD countries. There is a drop in their relative earnings with some country variations in the magnitude and timing of the drop (Blanchflower and Freeman, 1996, 1999b). Blanchflower (1999b) found from an analysis of data from the International Social Survey programme for 13 industrialized countries that there was only a weak relationship between youth/adult relative wages and the corresponding youth/unemployment rates.³² Sweden aside,³³ despite the sharp fall in the relative size of youth cohorts and despite differences in the institutions of wage-setting, *the relative pay of youths dropped throughout the OECD*. This implies that the beneficial effect of the declining size of youth cohorts on youth wages was overwhelmed by other market forces. The surprise is that the 1980s-1990s deterioration in relative earnings followed a sharp drop in relative earnings, attributed to the baby-boom increase in the supply of young persons on the job market, despite favourable demographic changes.
- b. The *minimum wage* does not seem to play a major part in explaining the poor economic performance of the young in OECD countries. The findings on the extent of the impact of the minimum wages on employment are mixed.³⁴ Regardless of the wage experience, however, youth unemployment rates rose substantially everywhere except in Germany.
- c. *Cohort size*. Korenman and Neumark (1999) have documented that the youth proportion of the population declined in virtually every OECD country in the 1980s and 1990s. Declining youth cohort size should lead to lower unemployment rates for youth and higher relative earnings for youth. This should be particularly marked in countries like

Japan, Ireland, Italy, Spain and Portugal, where the fall in the relative size of youth cohorts was exceptional. However, the economic position of youths worsened rather than improved. That the demographic changes failed to improve the position of youths much does not mean that the shifts in supply have no effect on the youth job market – the elasticity of youth unemployment rates with respect to relative youth cohort size may be moderately large (Korenman and Neumark, 1999). Rather, *it means that other factors, such as the aggregate rates of unemployment or the technological changes, dominated youth job market outcomes.*

- d. ***Industry, technology and trade.*** In addition to the demographically induced decline in the number of young workers and the declines in youth wages relative to adult wages documented above, there was a shift in the industrial composition of employment toward sectors that hire relatively many workers – retail trade and services like hotels and restaurants.³⁵ This should have increased employment if not the wages of young workers. Furthermore, the technological factor that many analysts cite as underlying the long run rise of inequality and higher premium to skill – computerization – should have benefited the young, who have grown up with computers, relative to older workers who have not. Increased trade with the Third World countries is another potential determinant of the deteriorated economic position of young workers. On a world scale, the share of youths in the working age population is much larger than in advanced countries. Thus, trade with LDCs might be expected to reduce the relative position of young workers. Nevertheless, the sectors which compete most with less developed countries are those such as apparel that traditionally employ women workers; so one would expect trade to have lowered their wages or employment rather than that of young men.
- e. ***Increased female participation.*** The influx of women into the job market may also have affected the economic position of young workers. Many women workers are new entrants or re-entrants into the job market who might fill jobs that younger workers would otherwise hold. Such a story is difficult to sustain as female pay has increased with the growth in the supply of female workforce and since the effects of such increase in the supply of women are expected to be greater on women than on substituting young workers.
- f. ***Other explanations.*** While the increased supply of competitive workers due to women or trade may have affected the position of young workers, these forces do not seem to be sufficiently powerful to counteract the demographic and demand factors that favoured young workers. To explain the observed deterioration in terms of labour supply, we must argue that workers in the baby boom generation are highly substitutable with younger workers such that the baby boom cohort

reduced not only their earnings but those in the ensuing smaller cohorts as well. As the baby boom cohort gets older and older, however, and as the economic position of young workers remains depressed, this becomes an increasingly tenuous claim. There is yet another supply side possibility: the young workers are simply not as good as older workers. However, the 1994 survey results for all countries except the US and Ireland show that younger workers are more skilled than older workers (OECD, 1997a).³⁶ It is difficult to argue the case that the shifts in demand or supply or for deterioration of youth skills caused the worsening job market for young workers.

- g. *Aggregate demand.* If demographic factors and long-term demand worked to improve the situation of young workers, why did their economic position deteriorate? The main reason appears to be that the aggregate unemployment was relatively high in OECD countries in the 1980s and 1990s. The demand for young workers is highly sensitive to aggregate economic conditions (Blanchflower and Freeman, 1996; Clark and Summers, 1982). As new entrants to the job market, young workers lack the specific training or seniority that buffers older workers from swings in market conditions. Their employment is highly dependent on the aggregate state of the labour market. High rates of unemployment in the EU thus go a long way to explaining the prevailing rate of youth joblessness.³⁷ The fall in joblessness in the US in the late 1990s produced some rise in youth wages, as well as in employment, after two or so decades of decline even though it did not come close to restoring the relative position of young workers.

40. Many analysts would expect the relative employment of youths to vary inversely over time with their relative wages. Perhaps greater declines in youth wages generated more jobs for them in some countries, but the declines that did occur, including the large drops in youth wages in the US, did not suffice to stabilize, much less raise, youth employment to population rates. One interpretation is that the wage and employment numbers lie along labour supply curves, due to massively declining labour demand for young workers. Another interpretation is that the concordance of joblessness and falling pay reflects disequilibrium in the labour market, also the result of declining demand for young workers. Whichever way, we have identified one basic pattern in the worsened job market for young workers: *the disproportionately large response of youth employment or unemployment to changes in overall unemployment.* Unless overall rates of unemployment are reduced, there is little prospect for improvements in youth outcomes in the OECD, even if youth shares of the population continue to fall or remain relatively small or even if the composition of employment shifts modestly toward service sectors that hire relatively many more youths.

41. To summarize, there is little evidence then that the size of the youth cohort (which is in relative decline almost everywhere), or the level of youth wages (which have been falling) or the existence of minimum wages (which are low) explain the rise in youth unemployment over the last couple of decades. Changes in aggregate demand, increased demand for skilled workers and the rising participation of women who compete with the young for jobs appear to constitute the main explanations for the increase in youth unemployment. Youths in the OECD appear to have responded to the worsening job market by deferring entry and undertaking more education.

Consequences of youth joblessness

42. A number of other important changes in society accompanying the high and rising levels of youth unemployment are correlated with a number of other social outcomes:

- a. *Unemployed youths are increasingly concentrated in workless households.* Of considerable concern is the fact that the proportion of teenagers and young adults (20-24) living in households in which nobody else is employed has risen in the EU as a whole and especially in Belgium, France, Germany, Ireland and the UK. The share of unemployed youth living in workless households is, at over 40 per cent, highest in Finland, Ireland, and the UK and lowest in the southern European countries, Austria, Luxembourg and Switzerland.
- b. *Increasing proportions of young people are living with their parents.* In Canada, France, Greece, Italy, Portugal and Spain there has been a strong increase between 1985 and 1996 in the proportion of young people living with their parents. In Canada and the US, low youth wages increased the likelihood that young women would remain living with their parents and that they would attend school; while low employment rates raised the chances that women would remain in their parents' home with only a marginal impact on their rate of school attendance. The proportion of young people living with their parents are especially high in Spain. Interestingly enough, Spain has the highest rate of home ownership in the OECD.³⁸
- c. *The young are increasingly involved in crime.* Large numbers of young American men committed sufficiently serious crimes in the 1980s and 1990s to make 'prisoner' just about the fastest growing occupation among the young. This incarceration rate is approximately ten times higher than other western countries. In the UK, which has the highest rate of incarceration in western Europe, just under 50,000 people were in prison in 1995 or 0.13 per cent of the population aged 15-64 (48,983 men and 1,979 women).³⁹ Many young persons involved in crime are employed before their arrest, suggesting that they have reservation wages for both legal and illegal work.⁴⁰ The reaction of youths to the deteriorated job

market in terms of enrolments, residence in parental homes, and crime suggests *substantial supply responsiveness to economic incentives*, which may augur well for the future.

- d. *Increasing numbers of young people are committing suicide.* The gender disaggregated death rates per 100,000 by suicide and self-inflicted injury for young and older persons for 22 countries for 1970, 1980 and 1992 show that the suicide rates are in all cases higher for men than for women. Across the countries, there is a wide variation in both the adult and youth rates and considerable variation in the pattern of change. In English-speaking countries – the US, Canada, UK, Australia, New Zealand and Ireland – rates of suicide rose sharply, which could potentially reflect the rising problems for youths in the job market in those countries, in particular, the increase in inequality that marked the 1980s. However, the rates of suicide also rose among young men in Norway, where earnings inequality is small and the social safety net high. That youths in these countries report themselves as being happier or more satisfied with their lives⁴¹ further complicates any simple interpretation of these patterns and their link with the increasingly elongated transition from school to work.

Youth Labour Markets in the Transition Economies of the Former Soviet Union

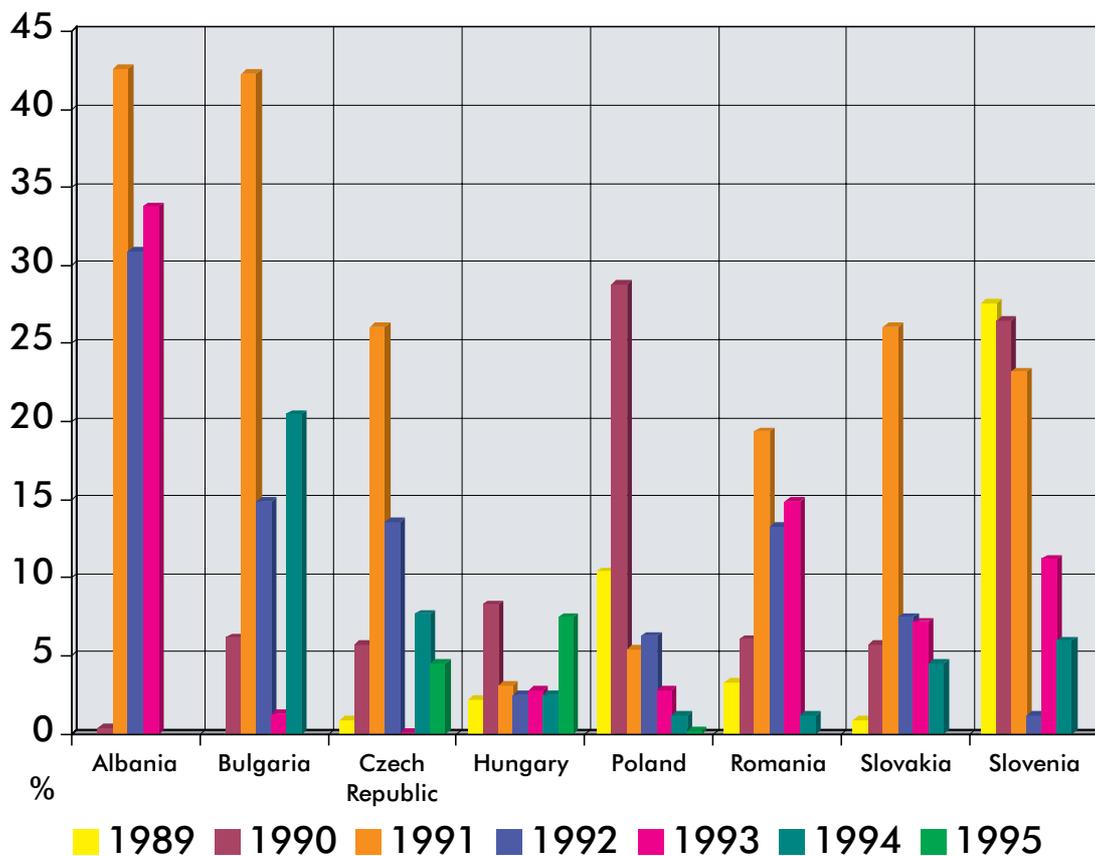
43. Are the patterns observed in the OECD repeated in the group of countries that were members of the former Soviet Union? The answer is a qualified yes. There has been some work on the labour market situation of the young in the ex-communist countries of the Soviet Union since the fall of the Berlin wall in 1990. Lack of quality data has made such an analysis difficult, but the situation appears to be improving. The countries for which the best data exists include former East Germany; there is also some good published data available on Hungary, Poland and the Czech Republic, who have recently joined the OECD. There are also a number of micro-data files that have recently become available. Their analysis has shed some light on the situation in these countries. Examples of such surveys include the German Socio-Economic Panel, the East Europe Eurobarometer Survey series, the International Social Survey programme (ISSP), the Polish Social Survey, the Russian Longitudinal Monitoring Survey and the Russian Survey of Employment, Income and Attitudes. Analysis of these labour market surveys for eastern Europe is reported in Blanchflower and Freeman (1996), Blanchflower and Oswald (1999), Hunt (1999), Krueger and Pischke (1995), Kollo (1998), Blanchflower (1999b).

44. It is apparent from the data on general indicators of demographics and living standards and of labour market (Tables 1-2) that:

- a. The Central Asian Republics such as Armenia, Azerbaijan, and Tajikistan are poor and similar to many other South Asian countries. The transition economies in Eastern Europe are much richer. Compared to many developing countries, maternal and child mortality rates are relatively low in countries like Hungary, Poland and the Czech Republic.
- b. By 1997, approximately a quarter of the population of the European transition economies was under the age of 18. This is a significantly *higher* proportion than is found in most Western European economies in which closer to 20 per cent of the population is under the age of 18.
- c. In contrast to most Western European economies, the relative size of the youth population aged 15-24 has been *rising* in most of these countries in the 1990s.
- d. The level of aggregate demand varies a lot across the transition economies for which we have data. It is particularly high in the Former Yugoslav Republic of Macedonia (1997=38.8 per cent) and very low in Tajikistan (2.7 per cent), Uzbekistan (0.4 per cent) and the Czech Republic (1997=4.7 per cent). It is unclear what to make of the unemployment rate in many of these countries. Does it indicate a well-functioning labour market (Czech Republic) or one where little adjustment to capitalism has occurred (Russia)?
- e. As was found in OECD countries, the level of youth unemployment is generally between two and four times higher than for older workers. The ratio of youth to adult unemployment was highest in Romania at 4.7 times.
- f. Based on the most recent estimates we have (mainly 1997), there is no obvious pattern in youth unemployment rates between men and women. Female rates are higher in Belarus, Croatia, Czech Republic, Macedonia, Lithuania, Poland, Romania and Slovakia; but are lower in Hungary, Latvia, Russia and Ukraine. They are approximately the same for the two sexes in Slovenia.
- g. The proportion of 20-24 year olds in the 'third-level' or higher education has declined in Belarus, Latvia, Russia and Ukraine but increased strongly in the Czech Republic, Hungary and Estonia and has increased but to a lesser extent elsewhere.

45. Adjustment from a centrally planned economy to a market economy has been difficult. Not only have there been dramatic increases in unemployment rates, but also declines in real wages and considerable widening of the overall wage distribution. Year to year swings are very pronounced in many of these transition economies. Declines in real wages have been dramatic in many countries, especially from the CIS. The annual changes in real wages (1989-95) are presented in **Figure 2** and **Figure 3**.⁴²

Figure 2
Annual changes in real wages (1989-95) (Eastern Europe)

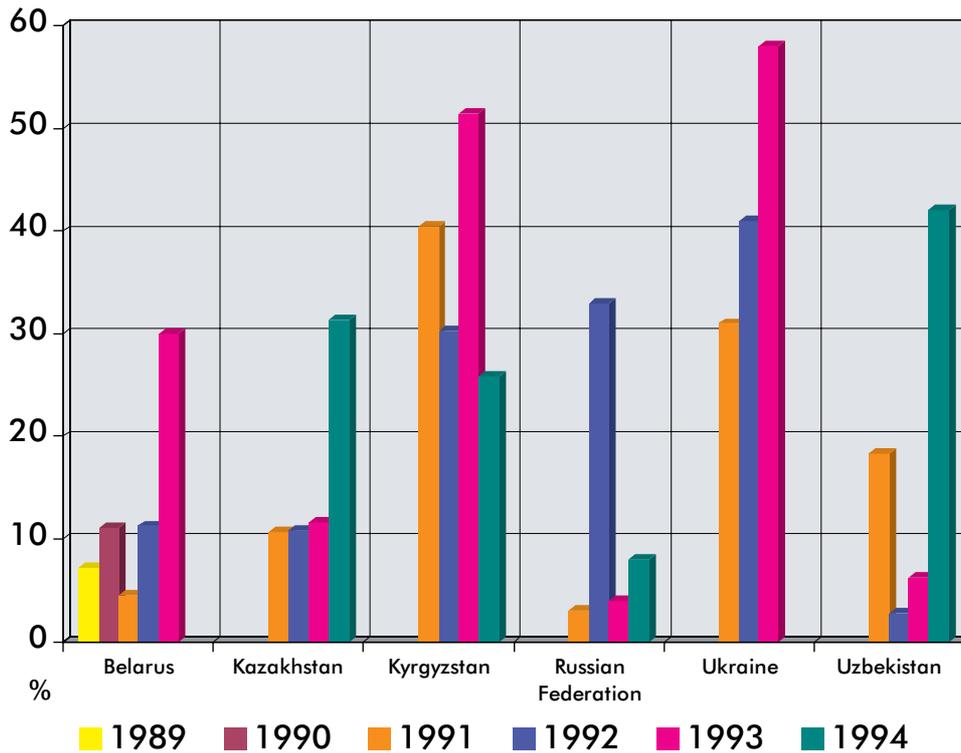


Source: *Report on the World Social Situation, 1997*, United Nations, New York, p. 124.

46. A recent review⁴³ of micro-data for randomly sampled workers in both Eastern and Western Europe reached three conclusions:

- a. Microeconomic studies demonstrate similar behaviours of unemployment both in Eastern Europe as in the industrialized West;

Figure 3
Annual changes in real wages (1989-95) (CIS)



Source: *Report on the World Social Situation, 1997*, United Nations, New York, p. 124.

- b. Unemployed people in the transition economies are as unhappy, relative to the employed, as those who are jobless in the industrialized Western countries. Such a result sheds doubt on the idea that voluntary or benefit-induced unemployment is worse in the East; and
- c. Estimating a 'wage curve', (the unemployment elasticity of pay following Blanchflower and Oswald, 1994 - see text box in page 38) using pooled data from five East European nations, produces a local unemployment elasticity of pay fairly close to -0.1, which is the figure commonly found for the rest of the OECD. Such findings cast doubt on the argument that wages are inherently less flexible in the East. Keune (1998) examined youth unemployment in Hungary and Poland and argues that "In general, the main factors explaining youth unemployment are the same as the ones explaining the general unemployment" (p. 24).

47. The broad conclusion from the analysis conducted to date on the transition economies is that the workings of the labour markets of East and West appear surprisingly similar. To understand youth unemployment, it is necessary to understand adult unemployment. There is another side to this coin: youth employment policy is unlikely to be successful if it ignores the aggregate unemployment picture. There is probably no distinctive solution, therefore, to *Eastern* Europe's unemployment (whether youth or adult). Instead, there is only a single problem - joblessness in Europe.

Youth Labour Markets in Developing Countries

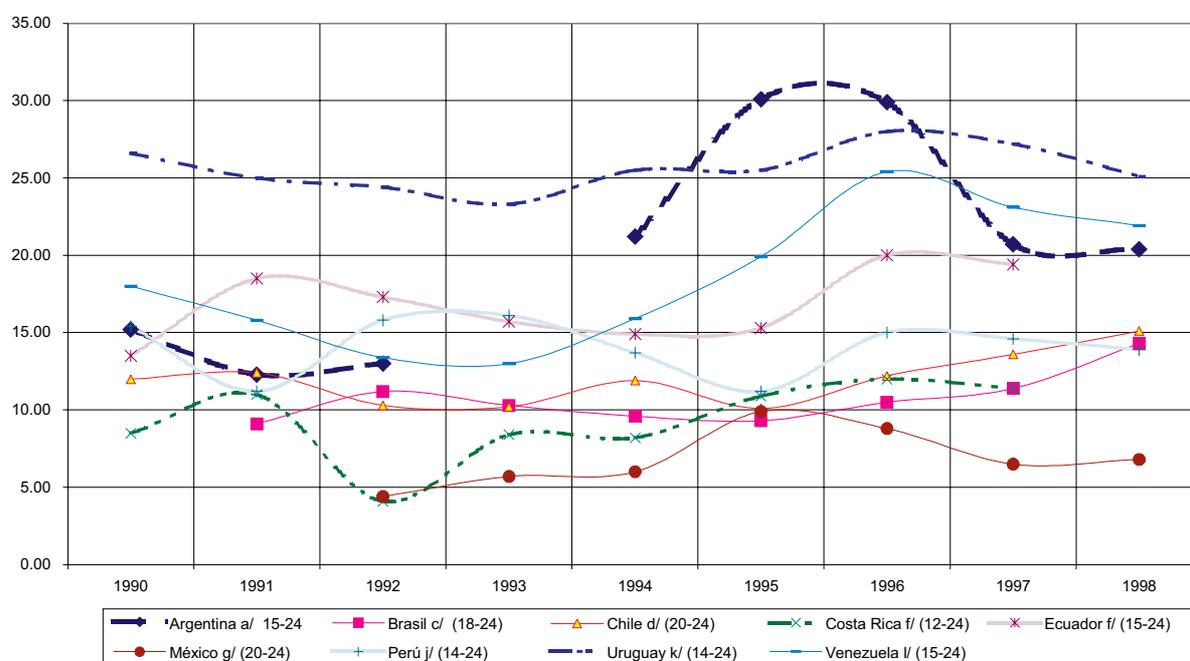
Latin America

48. The countries of Latin America show considerable variations in wealth, degree of development and labour market performance.⁴⁴ In terms of income, the country with the highest GDP per capita is Argentina (US\$8,380) and the lowest is Nicaragua (US\$380) (Table 1). Similar differences are found on other dimensions, such as maternal and under 5 mortality rates. The differences in the proportion of the population that is young (<18) shows enormous variations from a high of 50 per cent in Nicaragua to a low of 28 per cent in Uruguay. Although the size of the youth population is declining relative to the adult population (Table 2) in most countries in Latin America (e.g. Brazil, Chile and Peru), it has been increasing in Bolivia, Nicaragua and Paraguay.

49. The growth of employment in the informal sector is of particular concern in the region. It is estimated that 85 per cent of all new jobs are created in the informal economy.⁴⁵ Only in Chile and Colombia did employment in this sector diminish during the 1990s.

50. There are large differences in labour market performance. Tables 1-2 also suggest the following:

Figure 4
Youth Unemployment 1990-97



Source: Source: ILO News, Latin America and the Caribbean: 1998 Labour Overview.

Note: a/ Greater Buenos Aires, May 1998; c/ 6 metropolitan areas, Jan-Sep 1998 average; d/ national total, Jun 1998; f/ national urban; g/ 41 urban areas, 1998 1st quarter; j/ Metropolitan Lima, as of 1996, national urban, 1998 2nd quarter; k/ Montevideo, Jan-Sep 1998 average; l/ national urban, national total, 1st semester 1998.

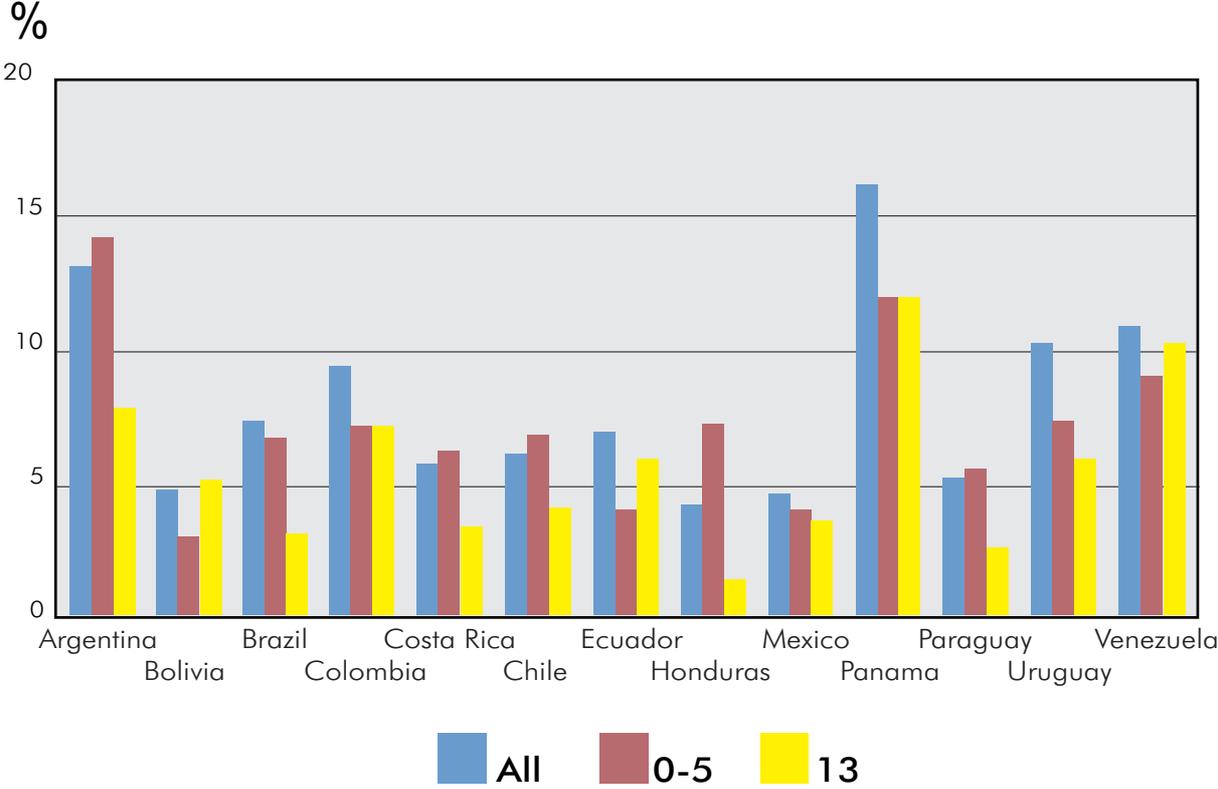
- a. Unemployment rates are generally higher in the 1990s than they were in the 1980s (Table 2). The main exception to this is Chile, where unemployment has declined dramatically. In Chile the unemployment rate was as high as 19.6 per cent in 1982; by 1997 the rate had fallen to 5.3 per cent. Unemployment rates are especially high in Argentina (1995=16 per cent), Colombia (1997=12.1 per cent) and Panama (1996=14.3 per cent). They are low in Bolivia (1996=4.2 per cent) and Mexico (1997=3.5 per cent).
- b. Higher unemployment rates for the least educated are found in the more developed of the Latin American countries (e.g. Argentina, Brazil, Chile, Mexico and Uruguay). Urban unemployment rates in 1994-95 for those with 13 or more years of schooling compared with those with 0-5 years are presented in **Figure 5**.⁴⁶ The most educated have *higher* unemployment rates than the least educated in Bolivia, Ecuador and Venezuela. It must be recalled that in most OECD countries unemployment rates are highest for the least educated - the two major exceptions are among the poorest member nations, Greece and Republic of Korea.⁴⁷
- c. Over the last 15 years or so, the size of the youth cohort relative to that of adults has declined in most Latin American countries and dramatically so in some, such as Colombia, Costa Rica, Honduras, Puerto Rico, Trinidad & Tobago and Venezuela. It has remained roughly the same in Bolivia, El Salvador and Uruguay but has increased substantially in Nicaragua and Paraguay.

**Growth per annum in % in higher education,
1990-95**

	Men	Women
Bahamas	-7.1	5.4
Brazil	2.4	3.0
Chile	4.9	4.3
Colombia	3.8	3.3
Dominica	0.8	12.4
El Salvador	1.7	16.2
Guyana	5.6	10.6
Honduras	5.3	6.2
Mexico	2.9	6.0
Nicaragua	9.7	5.4
Trinidad & Tobago	4.3	8

- d. Youth unemployment rates are approximately twice as high as adult rates in most countries. Youth unemployment seems to be a particularly serious problem during the late 1990s in Argentina (24.6 per cent), Colombia (35.1 per cent), Panama (27.3 per cent) and Uruguay (24.6 per cent). As can be seen from the **Figure 4**,⁴⁸ youth unemployment rates for the youngest age groups in a number of countries are worryingly high, even in Chile which has experienced strong declines in aggregate unemployment.
- e. There has been a considerable growth in the proportion of those aged 20-24 going to college in most Latin American countries in the 1990s. The table above lists average growth rates of growth of students in tertiary education by gender.⁴⁹ The rates for women are particularly noteworthy.

Figure 5
Unemployment rates by years of schooling (%)



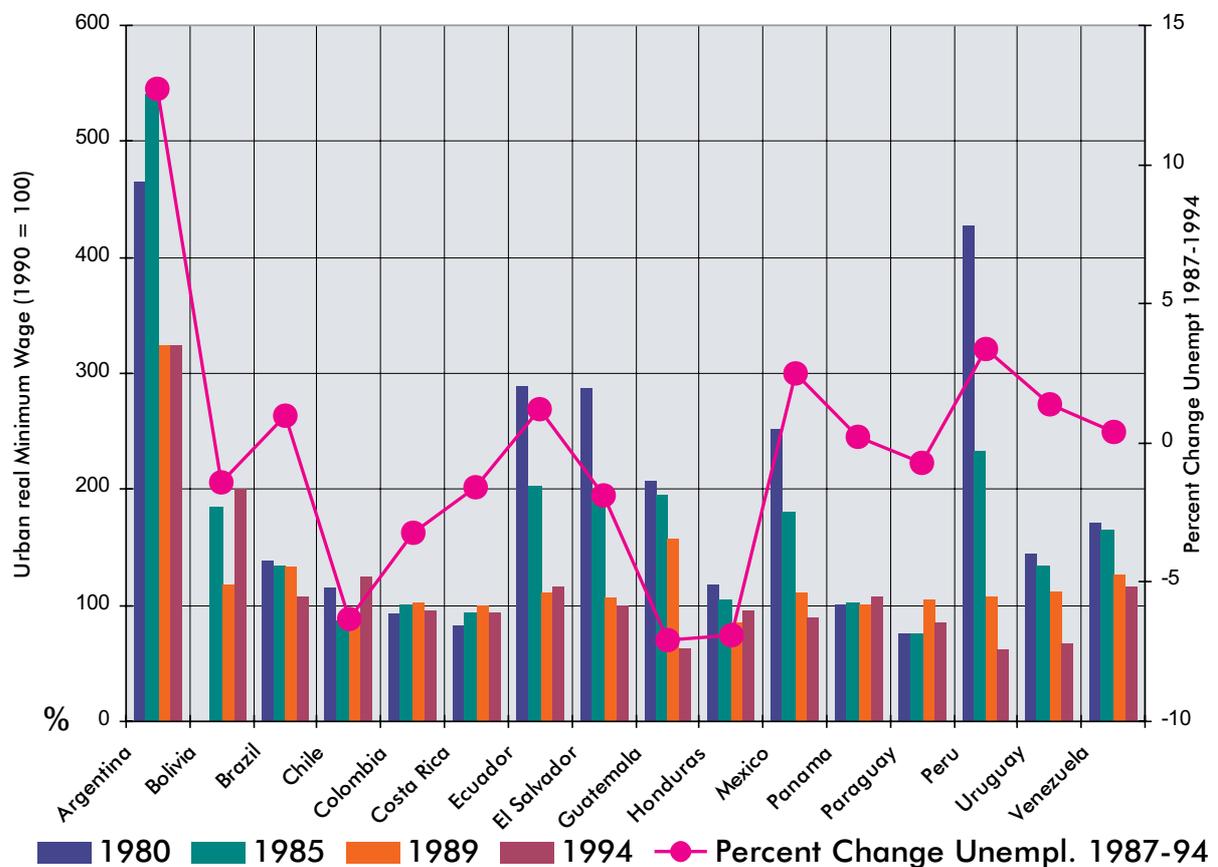
Source: *Social Panorama of Latin America, 1997*, Economic Commission for Latin America and the Caribbean, United Nations, Santiago, Chile.

51. Urban minimum wages exist in most Latin American countries. The coverage of minimum wage laws is incomplete, and their enforcement is weak and likely to vary considerably across countries. As can be seen in **Figure 6**, there is considerable variation across the countries in how the minimum wage has changed.⁵⁰ There appears to be no simple relation between changes in the minimum wage (bars measured in left hand side axis) and the levels (not graphed) or changes (depicted as circles and measured in the

right hand axis -note where the zero is) in unemployment. In a few countries, growing real minimum wages are associated with increases in unemployment, especially in Argentina, Brazil and Ecuador and vice versa in Colombia, Costa Rica, Guatemala, Honduras and Paraguay. The pattern is more mixed elsewhere. There seems to be little empirical work done on the role of minimum wage in Latin America, with the main exception being the work of Reynolds and Gregory (1965); Card and Krueger (1995); and Castillo-Freeman and Freeman (1992) on Puerto Rico. Minimum wages in Mexico were found by Feliciano (1998) to have little effect on male employment but a small negative employment effect on females. Lustig and McLeod (1997) found minimum wages increased unemployment but lowered poverty.

52. There has been rising income inequality in many Latin American countries, especially in Brazil, Chile and Colombia. Poverty rose between 1980 and 1989 from just over a quarter to just under one-third of the population.⁵¹ It was highly localized to a subset of countries - in 1989 Brazil had 45 per cent of the continent's poor but only 33 per cent of its population. At the same time, there has been *declining* income inequality in Bolivia, Chile, Colombia and Uruguay.⁵²

Figure 6



Source: Tardanico, 1997.

Labour Market Programmes in Latin America

53. Since the beginning of the current decade, training programmes focussed on unemployed young have spread rapidly through several Latin American countries. These were pioneered in Chile in the late eighties under the name of “Chile Joven” (CHJ). The programme is specifically directed at young people in a situation of ‘social risk and/or structural unemployment’. The CHJ makes use of short training and apprenticeship programmes that help young people to acquire basic skills to be eligible for work. The scheme, originally implemented with the intention that it should last for four years (1991-95), was extended for a further four years. The training and occupational practice process normally lasts about six months (from 200 to 300 hours’ training and two to three months of work practice, although in some variants of the Chilean case training reaches up to 420 hours). The programme is highly decentralized and relies on around 1,000 private training centres which undertake public bidding for training contracts. While they are on the programme, the users get a maintenance and transportation subsidy to encourage them not to drop out. Usually, the subsidy is about 50 per cent of the minimum wage in force. Firms who take trainees are not obliged to remunerate trainees or give them employment subsequently.

54. There are some interesting features that must be underlined in the Chile Joven scheme:

- a. Programmes must include both training and practical apprenticeships in the private sector; this aims at ensuring that the training and experience acquired correspond to the market needs;
- b. Considerable attention has been given to targeting; special programmes have been designed for specially marginalized population segments; and
- c. Assessment mechanisms to evaluate the performance of the programmes were introduced as an integral part of the exercise.

55. Evaluation studies have stressed the success of the CHJ in promoting employment. The programme enrolled more than 128,000 young people, well above its target. In the first three years, almost 60 per cent of the young people found jobs at the end of the programme, compared to 40 per cent for those who did not get the training. Around 55 per cent of the participants were employed in the company where they took the traineeship compared with 41.3 per cent in the control group which was made up of youths residing in the same neighbourhood with the same socio-economic characteristics as the programme participants. The difference was even greater for women – 45.5 per cent and 27.0 per cent respectively, and those who were relatively younger had the greatest problems in finding a job. Of these, the overwhelming majority

came from the target population: 95.6 per cent came from low income sectors, and 79 per cent were below the age of 24.⁵³

56. Unfortunately, it is unclear from these studies: a) the extent to which the trainees are cheap substitutes for existing workers who could potentially lose their jobs to the subsidized (lower cost) trainees; b) whether the jobs the trainees obtain are long-lasting - evaluation was generally focused on what happened six months after completion; c) whether the schemes teach real skills; and d) whether the training actually represents a route out of poverty. "Evaluation must at least make an attempt to take into account what would have happened in the absence of such programmes".⁵⁴ Moreover, it must be noted that the Chilean Labour market was quite tight during the first phases of the interventions. The issues of evaluation are examined in greater detail later in this document.

57. In the rest of Latin America, there have been other ambitious schemes to improve the economic situation of the young, particularly in Argentina and Brazil, but also in Colombia, Peru and Uruguay.⁵⁵ In Argentina "Proyecto Joven", which is a variant of Chile Joven, has been in existence since 1994. It is addressed at young persons with employment problems from low-income homes, low educational levels and little or no occupational experience. By training youth, the programme attempts to increase their productivity and instill in them values and attitudes which are thought to improve their chances of obtaining and keeping a job. Courses are completely free of charge, including teaching materials, tools, transportation, inputs, safety and hygiene implements and other elements required for training purposes. The programme has set itself the goal of training 280,000 people. The first phase, which started in 1994 and which recently came to an end, had over 100,000 young participants; another 180,000 will be trained in the following three years.

58. There have been some successes in Argentina, but they have been smaller than found in Chile, especially for women. The overwhelming majority of participants are poor (80 per cent belong to low-income families) and only 7 per cent had finished secondary education. Males increased their employment rates from 43.7 per cent to 61.3 per cent over the 11 month interval between the training and the survey, compared with 51 per cent and 51.9 per cent for the control. Results for females are less convincing - employment went up from 35.4 per cent to 38.6 per cent whereas the control group did *better*, increasing from 35.3 per cent to 41.5 per cent. There are some concerns about the nature of the control groups as they were generated *ex-post* and do not appear to have matched characteristics to the treatment group.⁵⁶

59. In 1996, Brazil implemented PLANFOR targeted towards youths, the unemployed and the dispossessed. During the first year of operation the programme trained close to 1.2 million workers. The programme targets rural areas: blacks and non-whites are over-represented. The programme is much more heterogeneous than the

Chile Joven but does appear to be having some success. There is some evidence of statistically significant impacts on employment and wages of men and older workers but lesser effects for women and younger workers (de Moura, Castro and Verdisco, 1998). Colombia has implemented the programme of Occupational Training for Young People. Its general objective is to help low income young people from 17 to 25 years of age that are unemployed and have not completed their secondary education, by giving them semi-skilled training in occupations for which there is evidence of demand in the productive sectors. Peru has implemented their own Pro-Joven programme of Youth Occupational Training. The purpose of Pro-Joven is to supply semi-skilled training and labour experience to low-income young people in specific trades in demand in the productive sector. It thus endeavours to face the problem of access of deprived young persons into the labour market. It is intended to have an intake of 150,000 youngsters over a period of five years. Uruguay's PROJOVEN is much smaller than the programmes in Brazil, Chile, Argentina, Colombia and Peru. An initial set of pilot schemes organized training courses with a coverage of only 4,090 young people between 1995 and 1996. To date, they have trained 1,200 to 1,500 young persons a year.

60. Castro and Verdisco (1999) compare the projects in Chile, Argentina and Brazil regarding the quality of the training they offer and the targeting mechanisms used, and come to a conclusion that the two "Joven" schemes are strong in targeting but weak in quality, while the courses sponsored by PLANFOR tend to be of good quality but poorly focused. Those in charge of the Chile Joven programme point out that the growth experienced by the Chilean economy is the key factor in the success ascribed to the project. According to Messina (1995), the only positive effect in the Chilean case would be the opportunity of a temporary labour experience for beneficiaries.

61. Just as in Europe and the US, the evidence on the effectiveness of training schemes in Latin America is mixed at best (reference is made to paragraphs 35 to 38 above).

Asia and Africa⁵⁷

62. The lack of good data makes it difficult to evaluate the extent of the youth labour market problem in many Asian and African countries. Tables 1 and 2 suggest considerable variation in the levels of GDP per capita in both Asia and Africa (cf. Gabon and Eritrea; Singapore and Nepal) and similarly for other variables such as infant death rates and primary school attendance. There are no consistent patterns of youth unemployment - they are very high in some countries (e.g. Algeria, Egypt, Mauritius, Sri Lanka) and very low in others (e.g. Burkina Faso, Central African Republic, Ethiopia, Thailand). Female unemployment rates are generally higher than male rates. There has been considerable growth in Asia and Africa, but presumably from a very low base, in the proportion of young people in 'third-level' or higher education, more prominently in

general in Africa than in Asia and also more notably so for females rather than males.

63. The size of the agricultural sector in these countries tends to be large and in Africa the majority of the young live in rural areas. In contrast, for some Asian countries,⁵⁸ the proportion of youth in the urban areas is uniformly higher than in rural areas. As a measure of labour market slack, the unemployment rate is generally not useful in rural areas, especially in countries where no unemployment benefit system exists, since unemployment in the developing world is primarily an urban phenomena. Where unemployment rates for rural areas exist they are almost always much lower than in urban areas. Youth unemployment rates tend to be higher than adult rates in these countries being, on average, twice as high as overall unemployment rate in some African countries.⁵⁹

64. The relationship between youth unemployment and educational attainment is mixed. In Africa, the unemployment rates for the least and the most educated tend to be lower than for those with intermediate level of education (e.g. South Africa).⁶⁰ On the other hand, in Asia, they are generally higher for the more educated than the less educated. This is partly due to the increased participation in education, resulting in a greater number of educated youths. For example, in Indonesia, among the rural male unemployed adolescents (15-19 years old), more than a third have completed primary schooling, more than a third have had a junior high school degree and about a fifth possess senior high school degree; their female counterparts are slightly better placed in this regard.

65. Underemployment is the main problem in rural areas. For example, a much higher proportion of underemployed young men, women and persons are found: (1) in rural Indonesia, 45.2, 60.5, and 50.9 per cent respectively, compared with 23.5, 23.8 and 23.7 per cent for their urban counterparts; and (2) in agriculture and allied activities in the Philippines, 52.0, 70.0, and 55.0 per cent respectively, compared with 9.0, 15.0 and 13.0 per cent among service workers, 13.0, 12.0 and 12.0 per cent among production and related workers.⁶¹ In general, for some Asian countries, the proportion of underemployed youth in the rural areas is more than twice as high as in the urban areas.

66. In comparison with the OECD as well as the transition economies and the Latin American countries, much less empirical work on wages and/or youth unemployment has been undertaken on other developing countries. The main published exceptions are Hoddinott (1996) on Côte d'Ivoire; Dickens and Lang (1995) on Sri Lanka and Schultz and Mwabu (1998) and Moll (1993) on South Africa; Blanchflower (1999b) on the Philippines as well as a new crop of unpublished papers by Rodgers and Nataraj (1998) on Taiwan and Kingdon and Knight (1998) on South Africa.

67. A number of generalized facts emerge from a set of country studies commissioned by the ILO⁶² on the nature of the youth labour market in Asian and African countries:

- a. Youth unemployment in most developing countries is perceived as a major problem. In many countries young people constitute a very high proportion of both the total population and total unemployment, comprising more than half the total number of the unemployed in Africa. In many countries the young unemployed are looking for their first job (e.g. India).
- b. Inadequate and incomplete data make it hard to know exactly the scale of the problem. Some of the features of the problems related to the data for the purpose of making cross-country comparisons are: (1) cross-country variations in the definition of youth; (2) cross-country variations in measurement of employment, unemployment and underemployment; and (3) country-specific data gathering and survey systems.⁶³

68. In general, Africa is thought to be caught in a number of self-reinforcing, vicious circles:

- a. African economies are unable to generate adequate growth rates in GDP and enough employment and income generating opportunities to absorb the majority of their labour forces;
- b. The inability of the private sector to generate sustainable livelihoods has given prominence to rivalry over control of the state as a primary means for attempting to share in whatever fruits of the economy that there may be, further exacerbating the possibility of unrest; and
- c. The capacity of the state to govern and deliver with respect to social services, such as education, and the security is compromised.⁶⁴

69. High inflation and restrictive macroeconomic policies have especially harmed youth. The main feature of the African labour market is the slow growth of employment in the formal sector and the retrenchment of labour in the course of implementing structural adjustment. In response, the non-formal sectors have not only acted as residual sectors but also as labour absorbers of last resort. Such structure of wages and unemployment can have some perverse effects on youth:

- a. High unemployment rates may discourage youth from investing in education and training as the investment appears wasted;

- b. The association of increasing age with increasing probability of employment may result in a passive approach to job search; and
- c. Youth who have relatives in wage employment may develop a dependency that makes them have a high reservation wage for entry into formal employment (ILO/SAMAT, 1999).

70. In a different context, the south-east Asian experience has demonstrated that youths are more vulnerable to external shocks such as the financial and the resulting socio-economic crisis since they are the first ones to be retrenched and face greater difficulties in finding employment. Overall, there seems to be some recognition that the problem is closely linked with adult unemployment and overall economic performance.

71. Various strategies have been tried unsuccessfully, and the public sector job generation has not worked. The World Bank and IMF have come to the aid of countries in financial crisis but forced them to reduce public sector employment (e.g. United Republic of Tanzania, Vietnam). There have been some attempts at reforming the existing educational and training system in Africa (e.g. Zambia). The main aim of such reforms is to increase the relevance of education and training system, making it better geared towards the demands of the labour market.⁶⁵

72. Minimum wages exist in many countries (e.g. Indonesia, United Republic of Tanzania, Mali, Côte d'Ivoire, India, Mauritius, Zimbabwe, South Africa). High levels of the minimum wage apparently exist in Mauritius, Zimbabwe and South Africa which may reduce employment.⁶⁶ The absence of a youth sub-minimum is likely to have the largest employment consequences on the young who tend to have the least skills, if the minimum is actually implemented. Lustig and Mcleod (1997) found minimum wages increased unemployment but lowered poverty in four African countries (Ghana, Mauritius, Morocco, Tunisia) and five Asian countries (India, Indonesia, Philippines, Sri Lanka, Thailand).

73. A number of countries have experimented with some success with policies to increase self-employment in both urban (e.g. PMRY in India) and rural areas (e.g. TRYSEM also in India). These include workshops on how to set up in business (e.g. Mali and Zimbabwe), provision of lines of credit and advisory activities to help the creation and survival of small businesses (e.g. Philippines, Indonesia, Sri Lanka, Zimbabwe, Mali, Côte d'Ivoire and Cameroon). It is increasingly the case that reforms of the existing educational and training institutions are integrated into programmes for entrepreneurship development and enterprise promotion.⁶⁷

India: Training of Rural Youth for Self-Employment (TRYSEM)

TRYSEM is a facilitating component of a poverty eradication programme which aims at providing basic technical and entrepreneurial skills to the rural poor in the age group of 18 to 35 years to enable them to take up self- or wage-employment. At least 40 per cent of the beneficiaries have to be women. Training is imparted both through training institutions and through the non-institutionalized mode, e.g. master craftsmen functioning from their own place of work. Every TRYSEM trainee becomes eligible to avail of assistance for setting up a self-employment enterprise. During the Eighth Plan (1992-97), 1.528 million youths were trained under TRYSEM, of whom 34.2 per cent took up self-employment and 15.0 per cent wage-employment, while the remaining 51.8 per cent remained unemployed (Govt. of India, 1999, p. 14). The situation was not satisfactory during the earlier years either. For example, over the 16 years between 1980 and 1996, nearly 3.9 million rural youth were trained but only 53.0 per cent of them were employed; almost a quarter of them had found work as wage employees rather than as self-employed 'entrepreneurs' (Visaria, 1998, p. 40).

74. There seems to be broad recognition of the importance of formal schooling⁶⁸ and the need to improve its quality (e.g. Indonesia, United Republic of Tanzania, Zambia, Zimbabwe). Raising the school leaving age, reducing child labour and raising the quality as well as instituting 'appropriate' curricula of education are important objectives. These findings reaffirm the need to "increase investment in basic education targeted at improving the quality of education and access to further and higher education for disadvantaged categories of young people" as noted in the resolution concerning youth employment adopted by the ILO's General Conference at its 86th Session.

75. There is little evidence that job training schemes work, especially in difficult times, partly because they are biased towards preparation for formal sector jobs which simply do not exist on any adequate scale (*Zambia Ministry of Sport, Youth and Child Development - MSYCD - 1996*). One exception perhaps is Egypt which has adopted the Mubarak-Kohl initiative which attempts to adapt the successful German dual education and training system to the Egyptian context. Several pilot schemes suggest some success.⁶⁹ The rate of return to programmes is likely to be a function of the state of the labour market (national and local). It is easier to place programme participants when unemployment is low and vice versa. The displacement effects for non-participants are potentially serious.

The pilot project in the 10th of Ramadan City

In Ramadan City, Egypt, the modern private sector is organized in the Investors' Association (IA). Many of its members use relatively sophisticated production methods, and have serious difficulties recruiting adequately qualified workers. Therefore, the IA was willing to invest in the Mubarak-Kohl Initiative. In 1995, a dual vocational education and training centre became operational. The youths, who were to become mechanics, electricians or textile workers, were selected by the factories themselves. Each week for a period of three years, these students receive two days of general and technical education (arranged by the Ministry of Education) and four days of practical work experience. The Regional Unit of the Dual System (RUDS), with specialists from the private sector and the German GTZ, supervised the internships and designed some specialized courses. Together, the Ministry and RUDS designed and evaluated the exams.

Almost all factories that participated in 1995 are still participating four years later. This confirms the viability of the dual training system. But the pilot project also showed that even under ideal circumstances (an enthusiastic and organized private sector, with modern factories and a clear need for qualified workers), a dual training system is not established easily. Some individual factories used their interns as cheap labour (and were consequently excluded from the project), and participating factories are concerned about their trainees moving to competitors after graduation (a fear that is not confirmed by dual training system experiences in Germany). To some extent, these issues were solved by recruiting students 'the Egyptian way': through people who already work for the company and who supported the candidacy of friends or relatives. While this type of favouritism is generally considered harmful, impeding fair and effective recruitment processes, the principle proved useful in the case of the dual training system. Youngsters whose parents or relatives work in the same factory are unlikely to be exploited, as their relative will keep a keen eye on their duties and learning process. After graduation, the family's loyalty towards the factory keeps students committed to their employers.

76. It will be hard to 'solve' the problem of urban youth unemployment as this is likely to induce a flow to the cities from the land in countries where the reserve of rural youth labour force is large. Programmes need to be developed to slow the flow from the land and deal with the underemployment of the young in rural areas.

77. The situation in sub-Saharan Africa (SSA) has been somewhat different to that in Asia - modern economic growth has succeeded in increasing the welfare of many developing countries, but it has left most of Africa behind. Thirty six per cent of the region's population live in economies that in 1995 had not regained the per capita

income levels first achieved before 1960. The evidence on whether the openness to international trade enhances economic growth is also rather mixed (Sachs and Warner, 1995; Harrison, 1998). Inequality does not seem to be a major factor inhibiting growth in SSA to low levels of human capital. However, recent work has produced equivocal results on the effects of education on productivity (see Krueger and Lindahl, 1998; Topel, 1999; Pritchett, 1997). Freeman and Lindauer (1999) argue that the main limit on African growth is political turmoil, corruption and the lack of security of property; by implication, fast economic growth can only be achieved in a peaceful, stable environment where property rights are guaranteed:

“The return to schooling requires stable property relations and a safe economic environment, which have been lacking in most African states. Wars, corruption, revolutions and other instabilities that disturb or distort the normal functioning of markets may make the value of schooling less than it would be in a more stable world. If your country is riven with strife, better to pick up a gun than a book”.⁷⁰

78. The good news is that investment in physical capital is well correlated with economic growth, but for this to occur, property rights have to be guaranteed. Namibia and Uganda, who ranked as ‘mostly free’ have experienced rates of growth in investment in excess of 7 per cent per annum. Lowly ranked Nigeria (95th) and Togo (134th) experienced investment declines of nearly 10 per cent a year.

VI. Youth Unemployment: The Policy Agenda

Introduction

79. While every effort has been made to review policies and experiences in different regions of the world, it is clear that high quality labour market *data*, especially micro-data, is now available mainly across OECD countries, often collected in the same way with the same variables. Aggregation matters in the labour market; hence *disaggregated* data must be drawn from surveys of individuals, households and firms. Panel surveys where the same respondent is surveyed on more than one occasion, are especially useful; repeating a cross-section survey year after year is another valuable resource for researchers. Many such surveys in similar form are available for OECD countries: the panels include the National Longitudinal Survey (NLS) in the US, the British Household Panel Study (BHPS), the Swedish HUS and the German Socio-Economic Panel (GSOEP).

80. More *econometric analysis* have been conducted on OECD countries about the workings of the labour market than is true for developing countries. Even though many developing countries have implemented labour market programmes, a large body of technical literature has shown that it is virtually impossible to measure the success of any programme *without carefully conducted evaluations with appropriate control groups*. Experience with these types of evaluations in the United States suggests zero or even negative rates of return for programmes aimed at the disadvantaged young, although there is some evidence that they work for adults, especially so for women.

81. Econometric work that is available suggests that there are many *patterns in the data* that are *similar* across the member countries of the OECD which appear to extend over to the transition economies and the developing world. This runs contrary to the conventional wisdom that emphasizes differences and not similarities. Regression equations estimated on various countries - for the OECD and elsewhere - to explain wages and earnings, self-employment, unemployment, union density, happiness, life satisfaction and job satisfaction, for example, tend to have the same significant variables with the same signs, although with differences in their coefficients, no matter for which countries they are estimated.⁷¹ There is little, if any, systematic variation in the coefficients by country in any of these variables that is correlated with any macro variable of interest, such as economic performance. Mincerian⁷² earnings equations estimated for the US, the UK and Germany look broadly similar to those estimated for the countries in transition and the developing world.

82. Not only patterns in data appear to be similar. Some of labour market fundamentals seem to be quite similar throughout the world:
- a. Youth unemployment is higher than adult unemployment. Double is a good rule of thumb;
 - b. The relative size of the youth cohort is down;
 - c. There is a growing move to increased formal education among the young;
 - d. Young people are deferring marriage until later in life;
 - e. Female participation rates are rising;
 - f. Labour market programmes for the young generally have low rates of return; and
 - g. There is, moreover, evidence from a series of *econometric studies* that there are *patterns in the data* that hold in the developed countries and are repeated elsewhere. Institutions may matter less than we think.

The wage curve: patterns in the data

Recent research has established that there is a negatively sloped curve linking pay to unemployment. The nature of this relationship - "the wage curve" - is almost identical across the countries of the world. This curve was first found in micro-data for 11 OECD countries: Austria, Canada, Holland, Ireland, Italy, Norway, Republic of Korea, Sweden, Switzerland, the UK and the US. It is also present, within nations, across different periods of time. In the countries studied, the estimated unemployment elasticity of pay was approximately -0.1: A doubling of unemployment is then associated with a 10 per cent fall in pay. Blanchflower and Oswald further reported on work by other researchers which established the same pattern in some non-European countries (Japan, Cote d'Ivoire, and India), making 14 in all. Since the study was undertaken, other researchers have confirmed these results for the group of countries Blanchflower and Oswald analysed and a number of new papers have established similar results in a number of new countries across all continents: Europe (Belgium, Denmark, France and Spain), Latin America (Argentina and Brazil), the transition economies (Bulgaria, Czech Republic, East

Germany, Hungary, Poland and Russia), Africa (Ghana, South Africa, Burkina Faso) and Asia (Taiwan). The wage curve slopes down in *all 30* countries studied with an approximate elasticity of -0.1.

Kingdon and Knight (1998), for example, concluded that "when we use the definition of unemployment that is most plausible for South Africa, i.e. the broad definition, there is evidence of a remarkable OECD-type wage curve in South Africa, a country with several times the typical unemployment rate of OECD countries. The relationship between broad unemployment and wages is downward sloping, becomes flat at high unemployment rates and yields a wage unemployment elasticity of -0.11" (1998, p.21). Other examples of wage curves outside the OECD are Hoddinott (1998) for the Côte d'Ivoire; Galiani (1999) for Argentina; Amadeo and Camargo (1997) and Barros and Mendonca (1994) for Brazil; Rodgers and Nataraj (1998) for Taiwan; and Blanchflower and Oswald (1999b) for the transition economies. The degree of wage flexibility may be more similar across countries, whether in the OECD or otherwise, than has been previously believed.

Macroeconomic Policies

83. It does appear that the solutions to youth unemployment are inextricably linked to, and cannot be separated from, the difficulties countries face in reducing overall unemployment. Unfortunately, we are a long way from understanding why aggregate unemployment is so high and why it has trended upwards over the last couple of decades. Our knowledge about means to enhance *employment-intensive* economic growth is also scant. There is some evidence that *overly generous* benefits can increase unemployment, but the correlation is rather weak in the data - Italy has high unemployment and low benefits. Despite conventional wisdom,⁷³ high unemployment does not seem to be primarily the result of job protection, labour taxes, trade union power or wage 'inflexibility'.⁷⁴ Econometric support for the importance of home ownership and mobility in explaining unemployment in Europe is provided in OECD (1999) who model unemployment across countries and find ownership to be the only significant influence; job protection, benefits and unions play *no* role at all.^{75, 76}

84. Cross-country comparisons show that unemployment in Europe is higher than in the US and Europe has more job protection, higher unemployment benefits, more union power and a more generous welfare state. However, such comparison tells us little or nothing about changes *over time*. In many OECD countries unemployment has increased substantially over the last decade or so;⁷⁷ but the unemployment benefits have been cut; the union density has fallen and the union power has weakened;⁷⁸ job protection has changed little; and there is said to be a new flexibility in wage bargaining than there was in the past. If these were the causes, then unemployment ought to have decreased. If not, why not? Current research on unemployment has been unable to find a convincing answer. Recent research suggests some promising new candidates that merit consideration: changes in commodity prices in general and the oil price in particular seem to predict reasonably well the cyclical movements in unemployment. One promising line of inquiry is the interregional mobility of the population and the role of home ownership which seem able to explain at least some of the upward trend for the high levels of youth unemployment prevailing today.

85. *Home ownership*. The large rise in the level of *European* home ownership may well be the 'missing piece' of the unemployment puzzle because it impairs people's mobility'.⁷⁹ Oswald (1999) makes it clear that the economies need to be adaptable. They require workers to be able to move around to find new jobs. Private rental housing helps as it allows people to be mobile. In the period from 1950 to 1960, most European nations had low owner-occupation rates and low unemployment rates. The link between housing and jobs appears to hold across space within a country as well as across different countries.

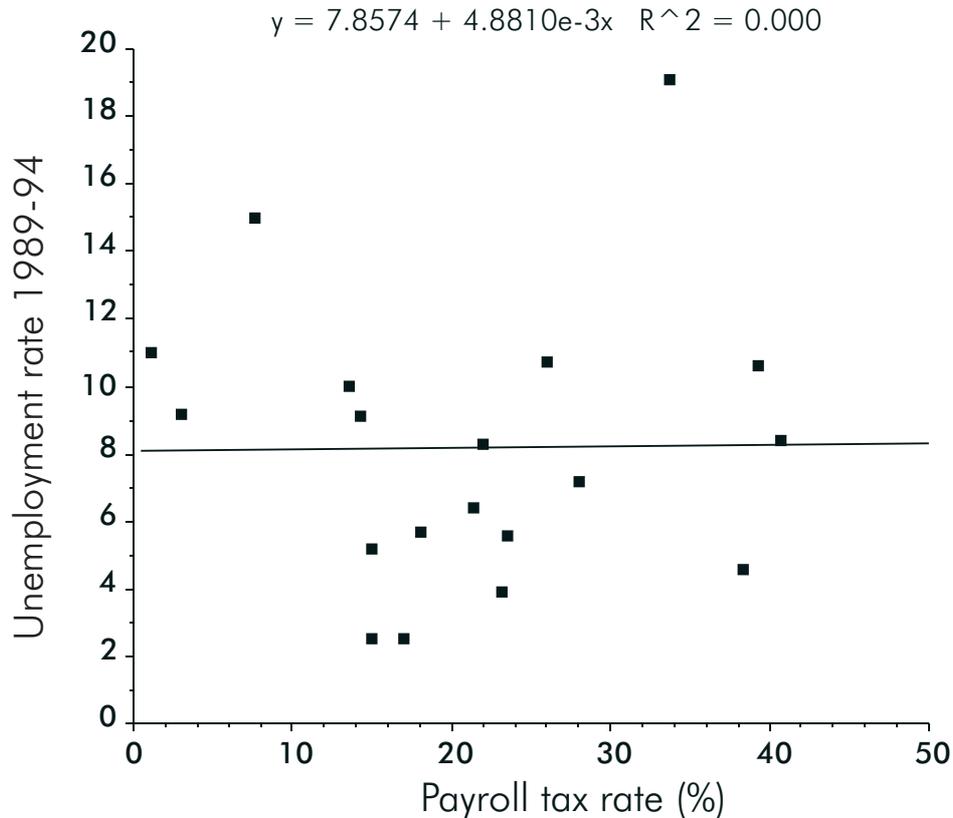
86. *Internal migration.* Data on interregional migration on a number of OECD countries in the 1970s and 1980s shows that there was relatively little cyclical in the numbers of migration, suggesting that the scale of migration is not simply a response to unemployment rate which was highly cyclical over the period. The *low* unemployment countries of Norway, Sweden, Japan and the US all have *high* proportions of their populations that move across regions. Mobility is low and unemployment, especially youth unemployment, is particularly high in Italy (32 per cent in 1998). Faini et al. (1997) have shown that migrations between Northern and Southern Italy declined steadily from 1970 to 1990. Over this period, the unemployment differential between north and south doubled from just under 7 per cent to just under 14 per cent.

87. *Wage flexibility.* It is sometimes alleged that the trouble with many European economies is that wages are inflexible. However, recent research seems to indicate that the degree of local wage flexibility is approximately the same in all of the countries studied (see above). The earnings of youths appear to be especially responsive to changes in the unemployment rate and have a somewhat higher elasticity of closer to -0.20. This pattern is broadly consistent across countries.⁸⁰ In brief, as there are very different rates of unemployment across nations in spite of similarity in the degree of wage flexibility across countries than has been believed, making wages more flexible across countries does not seem to be a solution to youth unemployment.

88. *Unemployment benefits, taxes and trade unions.* There is only a weak positive relation between unemployment rates and unemployment benefits.⁸¹ A similar picture is seen in a comparison between unemployment rates and the proportion of GDP spent on unemployment compensation. On both measures, Italy has low benefits and high unemployment. In 1996, Italy spent 0.68 per cent of GDP on unemployment compensation, even though it had a 12 per cent unemployment rate.⁸² Japan and the US are counter-examples, having low unemployment and low spending on benefits (0.40 per cent of GDP and an unemployment rate of 3.4 per cent for Japan, and 0.26 per cent of GDP and an unemployment rate of 5.4 per cent for the US). There is some evidence from Denmark and the US and to a lesser degree from the UK, New Zealand and the Netherlands, that reducing the generosity and the duration of benefits can cut unemployment, even though the degree of responsiveness has been small. This, of course has limited impact in countries with low unemployment coverage.

89. There is no correlation between unemployment and taxes (see **Figure 7**)⁸³ and even a weak negative relation with union density.⁸⁴ Spain and France have very low union density rates and high unemployment while Austria has low unemployment and quite high union density.

Figure 7
Countries which tax labour highly do not have more unemployment



Source: Oswald, 1999

90. *Oil prices.* Movements in oil prices appear to cause cyclical changes in unemployment in the US and Europe but seem unable to explain the upward trend in European unemployment. Carruth, Hooker and Oswald (1995, 1998) find that oil prices help to explain unemployment in the UK and Canada and the US. Plotting the unemployment rates for the US and OECD Europe along with the oil price for the years 1970-98,⁸⁵ upward trend in European unemployment compared to the absence of trend in US unemployment is notable. Furthermore, there is a co-movement between unemployment and the real price of oil. This correlation has been paid relatively little attention in the unemployment literature. Unemployment appears to follow the oil price with a lag of about one year in the US.⁸⁶ The oil price hikes of 1973, 1979, 1989 and 1994 all appear to have had harmful effects a short time later on unemployment in both Europe and the US. The steady decline in oil prices which started in 1982 and went on until 1989 predates declines in unemployment in both the US and Europe and similarly for the period 1990-94. The oil price seems to explain the cyclical movements of unemployment.

91. As noted by Schultz,⁸⁷ “*Studies suggest that the structure of output, composition of employment, openness of the economy to trade and technical change all contribute to the derived demand for more educated*

workers. High technology industries are associated with higher returns to schooling by sector, but this may also reflect selectivity of persons entering into high technology sectors who are more able and better educated, or it could signal the complementarity of on-the-job training and schooling in fields of rapid technological change (Gill, 1989; Gill and Khandker, 1991; Mincer and Higuchi, 1988; Choi, 1993). Increases in the share of the employment in services, commerce, and manufacturing are associated with increased female participation in the labour force, and perhaps enhance market returns to women's education (T.P. Schultz, 1990)." Since the younger populations are increasingly more educated, it stands to reason that strategies that promote technology related employment would enhance the prospects of younger populations. This, however, implies that the enterprises generating new jobs must rely on modern technology which, in turn, has consequences on the sectoral composition of the economy and its degree of informality.

92. There is, thus, considerable evidence backing up the call inviting member States to "adopt and implement policies which improve competitiveness through investment, including investment in technology, human resources development, education and skills, in order to promote economic growth, social development and employment".

How have countries who have tried to make their labour markets more 'flexible' fared?

93. Countries like the UK and New Zealand have attempted to make their labour markets more flexible by, amongst other things, cutting unemployment benefits, tightening regulations, restricting the power of unions and so forth. Has this worked? First, looking at their positions in the OECD country rankings (excluding Luxembourg, Iceland and Switzerland) by unemployment rates and employment/population rates, it seems that such attempts had little impact on these indicators' rankings. Blanchflower and Freeman (1994) analysed the effectiveness of the Thatcherite reforms on the UK labour market. They concluded that they had succeeded in their goals of weakening union power; may have marginally increased employment and wage responsiveness to market conditions and may have increased self-employment. On the positive side, the reforms were accompanied by a substantial improvement in the labour market position of women. On the negative side, the reforms failed to improve the responsiveness of real wages to unemployment; they were associated with a slower transition from non-employment to unemployment for men, a devastating loss in full-time jobs for male workers; and produced substantial, seemingly non-competitive increases in wage inequality.

94. Maloney and Savage (1996) document the labour market reforms that have occurred in New Zealand since 1984. Over the past 15 years or so the economy was made more decentralized; unemployment benefits were cut, welfare eligibility criteria were tightened and industrial relations legislation was passed to restructure the industrial relations system by eliminating national awards and removing compulsory unionism. Union density fell dramatically from 40.8 per cent in 1991 to 24.1 per cent in 1994.⁸⁸ Interestingly, product markets were protected and made immune from many competitive pressures. In subsequent work, Maloney (1998, 1999) found that neither changes in unionization nor benefits had *any* significant effect on unemployment, although they do appear to have some effects on employment and labour force participation. Chapple et al. (1996) concluded at the end of their examination of unemployment in New Zealand that: “*despite ten years of stabilization, liberalization and labour market reform, it should be a source of some discomfort that these changes have yet to be reflected in an unemployment rate lower than when the reforms began*”.⁸⁹

95. The Netherlands and Denmark have both seen a strong improvement in their position in these rankings, whether measured by unemployment or by the employment to population ratio. The unemployment rate in the Netherlands, for example, fell from 7.1 per cent in 1994 to 4.0 per cent in 1998 while Denmark’s unemployment rate fell even faster, from 10.1 per cent in 1993 to 5.1 per cent in 1998. Denmark’s rise in the rankings is even more pronounced than that of the Netherlands. It does not appear that this decline in unemployment in either country was brought about by decline in union power, changes in job protection, mismatch or labour taxes. Overall strictness of employment protection measures remained *unchanged* in both countries⁹⁰ between the 1980s and 1990s.⁹¹ What is puzzling is that despite the rapid decline in unemployment over this period in the Netherlands, there was an *increase* in spending on labour market programmes.⁹² In the case of Denmark, there is more evidence of declines in benefits being correlated with declining unemployment. In 1994, Denmark introduced a reform package which seemed to work: it reduced the generosity of its unemployment compensation system; job placement interviews were introduced; paid leave schemes were made less generous; the maximum duration of benefits were reduced; and the eligibility criteria were tightened. A tax reform package was also implemented to lower taxes on labour⁹³ and increase incentives to work.⁹⁴ This programme appears to have been working as unemployment was halved from 10.1 per cent in 1993 to 5.1 per cent in 1998.

96. Union power does not seem to fit the picture very well either as union membership in the Netherlands *increased* during the 1990s - the number of members went from 1.4 million in 1990 to 1.87 million in 1995, and union density increased from 26 per cent to 28 per cent over this period.⁹⁵ Union density in Denmark was the same in 1994 as in 1980. Bargaining coverage and the degree of

centralization or coordination of their bargaining remained roughly constant in both countries over this period.⁹⁶

97. On the other hand, it does not make sense to make unemployment too attractive which implies that governments must not set unemployment benefits too high and that there needs to be incentives for individuals to work and for firms to hire them. A delicate balance has to be struck between helping the unemployed through a crisis and assisting them to find a new job on the one hand, and being overly generous on the other. The cost of setting benefit levels too high imposes a heavy burden on those who do work. At the same time, there is little benefit in trading poverty out of work for poverty in work. *It is important to reward work over non-work.* As labour market mobility also appears to be an important factor in explaining both youth and adult unemployment, a direct recommendation would be to help to subsidize mobility in the form of allowances for moving as well as subsidies to individuals and firms to help in building a fully functioning and large private rental housing sector. Reducing the influence of unions, removing job protection, lowering minimum wages and/or cutting youth wages would probably not be effective.

Minimum wages

98. There is little strong evidence either that youth wages are too high or that the minimum wages have priced young people out of jobs. There is some evidence that youth wages relative to adult wages have been falling in the OECD. It does not appear that youths are being priced out of jobs in this case, and there is much less evidence on movements on relative wages in the developing world. Wage cuts are not a solution.

99. During the last decade or so, the level of the minimum wage in the United States has been at an all time low in real terms. The evidence suggests that its low level and small changes in it had small, if any, effect on employment.⁹⁷ There is also little evidence from Europe that the minimum wage has had major employment effects.⁹⁸ Even where evidence has been found in OECD countries for negative effects, it has generally been small and weakly significant. Minimum wages have mostly remained low in most European countries except France, where they appear to have had some employment effects. Neumark and Wascher (1999) report evidence that increases in minimum wages have reduced youth employment rates in Canada, the Netherlands, Luxembourg and to a lesser extent in the US and the UK. They also found evidence that declines in minimum wages were accompanied by declines in youth employment rates in Italy, Belgium, Spain, Greece and Portugal. They could find no relation between these two variables in Germany, Sweden, France and Japan. Both patterns were evident at various times in New Zealand and Denmark. There is stronger

evidence for employment reducing effects of minimum wages in a number of Latin American countries.

100. There are, however, strong grounds for operating a youth sub-minima to ensure that youths are not priced out of jobs for lack of skills. It might also make sense to allow some variation within a country to allow for differences in living costs and earnings. Large increases in the minimum wage can significantly worsen young people's relative position. High minimum wages in developing countries do seem to raise unemployment, but overall, they appear to *reduce* poverty (Lustig and Mcleod, 1997). This result is consistent across high and low poverty lines, alternative measures of poverty and the classification of observations by whether the economy is growing or contracting, by whether the population is urban or rural, and by region (Latin America, Asia or Africa).⁹⁹ Raising the earnings of some of the young may make things worse for the rest. Lustig and Mcleod argue forcefully that their findings “should not lead to a flat endorsement of minimum wage increases as an effective policy measure to reduce poverty” (1997, p.81). However, their results do suggest that reducing minimum wages in the developing world does hurt the poor, at least in the short term.

Self-employment

101. The persistence of the youth labour market problem seems to demonstrate that standard economic policies have been insufficient. Western governments are searching for new alternatives. One idea is that policy should attempt to create more entrepreneurship among the young. It is not obvious, however, that even a large new supply of young entrepreneurs would solve the job crises. Self-employment presents an opportunity for the individual to set his or her own schedule; they can work when they like; they have to answer to nobody; and ultimately perhaps, it is a way to become rich. Unfortunately, on the downside, if the business fails, it may take with it their job, their savings, their home if, as it often happens, it is used as security on a loan, and perhaps generate a family crisis. If we have learnt anything from portfolio theory, it is that an individual should diversify their portfolio and not to pool their resources into a single, risky activity. Governments on the other hand, frequently see self-employment as a route out of poverty and disadvantage and for this reason, offer aid and assistance for small businesses. The justification for these actions are usually based on a number of 'potential' benefits often discussed by commentators:¹⁰⁰

- a. Entrepreneurship may promote innovation and thus create new jobs;
- b. There may be a direct effect on employment if new, young entrepreneurs hire fellow youths from the dole queues;
- c.

- New, small firms raise the degree of competition in the product market, bringing gains to consumers;
- d. Young entrepreneurs may be particularly responsive to new economic opportunities and trends; and
 - e. Greater self-employment among young people may go along with increased self-reliance and well-being.

102. Economists have little evidence, however, on whether these hypothetical benefits exist in practice. Moreover, it is by no means obvious that more self-employment is better than less. Blanchflower (1999a) could find no evidence in OECD countries that increase in the self-employment rate increased the real growth rate of the economy; in fact, there was even evidence of the opposite. It was also found that the overall trend in self-employment, at the economy level in the years since 1966, has been downward in most countries - mostly due to the decline in agricultural self-employment. The end of the twentieth century may mark a particularly appropriate time for young entrepreneurs in developed countries.

103. There is evidence that many more people would like to run their own businesses. On the question of preferences for employment status between being an employee as against self-employment and for working in a small firm as against a large firm in the International Social Survey Programme, a large number of respondents expressed their preference for being self-employed and working in a small firm.

104. A noticeably higher proportion of young people preferred self-employment and this was the case for most countries. The data appears to indicate that *there is large, latent demand for a kind of entrepreneurial behaviour: self-employment*. People find self-employment intrinsically attractive and those in self-employment tend to be enjoying greater well-being and satisfaction than equivalent employees. This finding suggests that self-employment brings direct microeconomic benefits to people. It raises a puzzle too. If self-employment does this, why are not more individuals running their own business? Economists have amassed considerable evidence that potential entrepreneurs are held back by lack of capital.¹⁰¹ There is particularly strong evidence in the US that suggests that liquidity constraints bind especially tight on blacks, which may help to explain why the self-employment rate of black males is about one-third that of white males.¹⁰²

105. The literature on micro-enterprises also identifies a lack of capital as a primary constraint on enterprise development.¹⁰³ The Grameen Bank in Bangladesh has demonstrated very successfully that the poor will repay small, non-collateralized loans or micro-loans.¹⁰⁴ Grameen organizes borrowers into self-selected, peer groups usually clustered together in villages; if any member of the group defaults, no member can ever again borrow from the bank. By getting borrowers to monitor each other, Grameen has consistently been able to recover 98 per cent of its loans from its mostly female

customers, enabling it to offer credit to over 1 million families a year. The Grameen Bank's data suggests that a good percentage of its members manage to pull themselves out of poverty. The main lesson to be learnt is that there is a demonstrated need in Bangladesh and many other developing countries such as Thailand, Indonesia and Botswana, for institutional changes which channel loans to micro-enterprises. This helps to overcome the capital constraints confronted by the poor.

106. It is more complicated to assess how liquidity constraints can be exploited by the designers of economic policy. Evidence suggests that some unemployed workers are interested in self-employment and that government assistance can help to increase the numbers of unemployed who start their own business.¹⁰⁵ In Britain and France, for example, government programmes provide transfer payments to the unemployed while they attempt to start businesses. In the US, similar programmes are being started for unemployment insurance and welfare recipients. Many countries, including the UK and the US, have government programmes to provide loans to small businesses and even exempt small businesses from certain regulations and taxes. Furthermore, many states and municipalities in the US have had programmes to encourage minority and female-owned small businesses. There is evidence of an underlying interest in self-employment among large numbers of citizens who are currently employees. Schemes which provide help and advice to young people on how to set up their own business and remove regulations that prevent individuals from doing so may also have some value.

Active labour market programmes

107. Considerable progress has been made in the last few years, mostly in the US and Canada, in developing methods that can be used for programme evaluation. The most widely known are the experimental impact studies that have examined the effectiveness of schemes operating under the Job Training programmes and which were funded by the US Department of Labour, at a cost of approximately US\$30 million. It was found that the schemes had no impact at all - or even more worryingly, that they scarred participants. The experiment found negative and statistically significant impacts on the earnings of male youth in the 19 months after random assignment and negligible impacts on the earnings of female youth.¹⁰⁶ There was some evidence of positive returns to adults, especially adult males. In response to these findings, Congress cut funding for the youth component of JTPA from US\$540 million in 1994 to only US\$110 million in 1995, a cut of over 80 per cent.

108. Non-experimental evaluation programmes for the young are consistent with the results in the experimental literature. The

estimated impacts are usually close to zero or even negative again.¹⁰⁷ The outcomes of other programmes, such as the Summer Training and Education programme (STEP), are disappointing. Analysis of the General Equivalence Diploma (GED), which is of interest in its own right as a major goal of many government training programmes is certification of participants at high school GED levels, suggests that except for a small upper tail GED, certified high school graduates earn roughly the same as high school dropouts.¹⁰⁸

109. There is some evidence that more narrowly focused, smaller but much more expensive schemes such as Job Corps, which is a residential scheme in the US in which youth are removed from their neighbourhoods to a separate camp and which costs \$20,000 or so a participant, have generated significant positive returns.¹⁰⁹ Similarly, in Europe, there seems to be little evidence that active labour market policies have had a positive impact on participants' wages. There is stronger evidence that they have had positive employment effects, but there is no consensus on the question. Even if there were, it is unclear the extent to which any of the newly created jobs constitute net job creation or are offset by the displacement of non-participants.¹¹⁰

110. In contrast, early childhood interventions of high quality do appear to have lasting effects. Disadvantaged, subnormal IQ children to the Perry Pre-school programme, one of the early childhood programmes most studied, were administered intensive treatments at ages 4 and 5. Treatment was then discontinued and the participants followed (they are now 35). The evidence suggests that those enrolled in the programme have higher earnings and lower levels of criminal behaviour than do comparable children randomized out of the programme. Benefit-cost ratios seem to be substantial.¹¹¹ Other examples of early intervention programmes which have had some positive results include the Syracuse Pre-school programme and Head Start.

111. The programme evaluation literature makes it clear how important it is to have a fully representative control group to allow for 'what might have been'.¹¹² Unfortunately, experimental evaluations involving humans are often imperfect and some of the negative results appear due to details of the evaluation procedure and other technical decisions which could have readily had different outcomes. The literature also makes clear how difficult it is to determine the impact of any programme using non-experimental methods. The lesson to be learned is that care needs to be taken both in the selection of the control group and ensuring that comparable data are available on both control and treatment group. Before a programme is fully implemented, it makes sense to run a series of pilot programmes with a panel of expert advisers to help in the design of any analysis, selection of samples, etc. Care also needs to be taken that the labour market histories of control and treatment groups are comparable. It is also essential to conduct the analysis at multiple sites because of the possibility of the success or failure of any programmes being dominated by local factors, such as the state

of the local labour market. For a discussion of appropriate methods to use in conducting programme evaluation, see Heckman, LaLonde and Smith (1999) and Heckman and Smith (1998).

112. The evidence from the programme evaluations that have been conducted in OECD countries suggests that large-scale interventions have been only partially successful in overcoming the problem of widespread unemployment. Auspos, Riccio and White (1999) review the existing literature on labour market programmes directed at young people in the US and Europe and conclude that European programmes have *not* produced earnings gains for participants. As for the effect of training programmes, the evaluations that have been carried out suggest no statistically significant impacts in Sweden, Norway, Poland, East Germany and Ireland. They found some evidence of positive effects of training schemes in Austria, Finland, France and the Netherlands, but there are serious concerns about the appropriateness of the methods used, sample attrition and in particular, about the appropriateness of control groups used. Small but significant gains were found in Denmark. Contradicting evidence on this was reported in studies for Britain.^{113, 114} Despite enormous expenditures on youth training schemes in many countries in Europe, the youth unemployment problem has persisted.

113. As discussed in an earlier section, a number of developing countries, particularly in Latin America, have conducted labour market programmes for the disadvantaged (e.g. Chile, Argentina, Peru, Colombia and Brazil). There has been evidence of moderate success, but to an even greater extent than was the case in OECD countries, the schemes have not been subjected to the strict scrutiny of researchers in the way that programmes such as JTPA in the US have been examined. As Castro and Verdisco have noted, the programmes in Argentina and Chile do seem to have had some success. It is important to subject these programmes to high quality experimental and non-experimental evaluations to determine if the programmes really do work. If they do, then the Chile Joven model could be a valuable template for the rest of the world - including the US where *nothing* seems to work for young black men. It is advisable for programmes to be subjected to, *ex ante*, careful piloting, monitoring and measurements even though this may slow down the spread of programmes that work.

114. A number of conclusions can be drawn from the experimental and non-experimental evaluation literature that is mainly focused on the developed countries but that may have implications for the developing countries:

- a. Investing in formal schooling for the most able young people conveys high rates of return, which in most countries has increased in recent years. The more skilled do more investing, even after they attain high skill levels;

- b. Private sector training typically excludes low-skilled persons - firms choose not to train the disadvantaged. “The lack of interest of private firms in training disadvantaged workers indicates the difficulty of the task and the likely low rates of return to the activity”;¹¹⁵
- c. In general, training programmes for the disadvantaged do *not appear to raise wages or employment prospects for the young*. Evidence is somewhat more positive for adults. Large-scale schemes such as JTPA in the US and YOP/YTS in the UK appear to have been a waste of money (see paragraph 36). Most importantly, they have not improved the job prospects of the young.
- d. Young people are increasingly choosing to stay on in formal schooling, either at high school or tertiary college. There would seem to be more merit in encouraging young people to remain at school, possibly by raising the school leaving age and/or providing them with a subsidy to do so. It may be cheaper to train young people in schools rather than creating a new parallel bureaucracy or, perhaps, maintaining old ones;
- e. Consideration should be given to pre-school programmes that intervene in the lives of children and their parents;¹¹⁶
- f. Careful consideration and planning needs to be given on the types of the training young people are being given. Governments are not well placed to predict market demands. Public sector job creation is generally not an option;
- g. Any schemes that are implemented probably need to be small, narrowly targeted and carefully piloted and monitored. Considerable care needs to be taken - and more than has been in most countries outside the US - in careful selection of a control group to overcome the selection bias problem;
- h. Successful schemes are likely to be very expensive - Job Corps, a residential programme in the US, which runs for around six months costs roughly the same as undergraduate tuition at Harvard. It is probably better to spend US\$10,000 on one person than US\$1,000 each on ten people;
- i. The rate of return to training is likely to vary across sites. What works in one place may not be effective in another. Careful selection of control groups from the same labour market seems crucial;
- j. Rates of returns to training programmes are likely to be highest at times when the economy is booming and lowest when it is in recession. There are more jobs available in expanding economies and programme participants are easier to place. The programmes are most needed during the downturns of the economic cycle and when there is a lack of jobs;

- k. It makes sense to consider the displacement and substitution effects of any programme. Do youths take jobs away from the older age groups?
- l. In any evaluation, it makes sense to calculate the social returns from a society investing in a training programme as well as the private returns that accrue to the individual in question. A major benefit to society of getting young people into the world of work could be a lower crime rate, fewer people in jail, fewer homeless people, fewer teenage pregnancies, less illicit drug taking, lower suicide rates, etc.

Conclusions

115. This paper is an attempt at evaluating youth joblessness in the *world* and to consider what might be done about it. It has been found that:

- a. there are many similarities across countries, not least of which is the fact that youth unemployment is approximately double adult unemployment in most countries of the world. This ratio appears to decline as unemployment increases. **The 2 times rule means that solving adult unemployment is the key.**
- b. The following are ruled *out* as explanations of high levels of youth joblessness - wages; minimum wages; cohort size; shifts in industry composition; trade; technology; increased female participation.
- c. On the other hand, the level of aggregate demand in the economy is ruled *in* as an explanation. Similarly, the level of unemployment and welfare benefits seem to explain the high levels of youth joblessness.
- d. An encouraging sign is that young people around the world appear to have responded to the lack of jobs by staying on in school longer and increasing their education. The young are more likely these days than was true in the past to continue living with their parents. Increased drug taking, more participation in crime and increased suicide are direct consequences of youth unemployment. It makes young people very unhappy, which suggests it is not a conscious choice as some may believe. The army of the unemployed is a conscript rather than a volunteer army.

116. As it appears that the solutions to youth unemployment are driven by what happens to overall unemployment, macroeconomic strategies are examined. It seems that the main explanation in OECD countries is at least related to the generosity of unemployment benefits, the internal mobility of the population, the existence of a well-functioning private rental sector and changes in commodity prices in general and the oil price in particular. Unemployment remains hard to solve.

117. The contraction or stagnation of modern sector employment and the growth of the informal or survival economy in developing countries do not augur well for the young who are increasingly better educated. Self-employment strategies for carefully selected population segments clearly seem to be a promising alternative. Such strategies must include micro-finance components and should be carefully monitored and evaluated.

118. Strategies to deal with youth joblessness have been examined. Minimum wages can help to improve poverty in developing countries but, if set too high, can increase unemployment. Schemes

to encourage self-employment and entrepreneurship, which provide advice on how to set up in business or which help to overcome capital constraints, may have some value. Active labour market policies have generally not been very successful in improving the situation of the disadvantaged young. A series of recommendations are made for narrow targeting and careful monitoring.

119. Clearly, there is much to be learned about the workings of the labour markets around the world. High and persistent unemployment is a hard problem to solve. The starting point for any prescriptions for solving unemployment has to be what we *know*. Much of this is derived from the econometric analysis of the workings of labour markets in OECD countries. In the future, it would be helpful to have more research on the workings of the labour markets using micro-data outside the developed world. This process has started - projects such as the Living Standards Survey of the World Bank, which now has micro-data on households available in 19 countries¹¹⁷ and the International Social Survey Programme, which now has 30 members, including a number of transition economies (Poland, Hungary, Russia, Slovenia, Bulgaria, Slovakia and developing countries - Philippines), offer interesting sets of data that can be used for further analysis.¹¹⁸ Many countries, particularly Latin America, run household surveys; releasing them for analysis by the worldwide research community would be an important step. We need more *analysis* of how labour markets work in developing countries.

120. With due regard to the importance of economic cycles and stages of development there are, thus, clear lessons learnt here from OECD and other countries that can provide pointers for public policy throughout the world. *The first and most fundamental lesson is that youth and adult unemployment cannot be dissociated from each other and are driven by what happens to overall employment.*

121. Rising levels of aggregate demand will reduce both adult and youth unemployment but it will have twice as high an impact on the young than it will on older age groups. How to achieve growth in aggregate demand is an issue that goes beyond the scope of this publication.

122. Efforts to make the labour market more flexible, to reduce the power of unions, to cut minimum wages, or to enfeeble job protection legislation do not appear to reduce (nor have they reduced) unemployment, either in the young or in the adult populations.

123. The debate about education versus training needs to be revived. In an increasingly mobile world, the need to acquire the skills to learn are often more important than the acquisition of a specific skill, though some evidence does indicate that effective apprenticeship systems ease the transition from education to work. Investment in better, earlier and longer education might be more effective in developing the attitudes and competencies required for the world of work.

124. It is questionable that *large untargeted* youth employment or training programmes have positive rates of return. Emphasis must be placed in “untargeted” and “large”. There is little evidence anywhere in the world that such programmes improve either the employment prospects or earnings for the young and especially so for the disadvantaged young. Narrowly targeted and carefully evaluated programmes can, however, ease the plight of selected youth categories. The effective use of public resources can only be achieved if there are ways to measure the short-, medium-, and long-term outcomes of specific strategies. It is strongly argued that detailed evaluations must be conducted for any job creating strategy for the young. The assessment of the impact of such programmes must take into account the initial endowments of both beneficiaries of the strategy under review and a control group and their evolution over time both in terms of employment and wages. Clearly training, educating or attempting to improve the quality of human resources will lead to little if there is no demand for labour.

125. From the above, it can be concluded that to combat youth unemployment and exclusion:

- a. Employment-intensive economic strategies that boost aggregate demand must be adopted;
- b. Economy specific, dual apprenticeship - education systems should be implemented;
- c. These dual systems:
 - i. must be carefully targeted to cover relatively small specific young population groups;
 - ii. will require the expansion of the formal sector; and
 - iii. must rely on the active participation of the social partners;
- d. The enhancement of self-employment and small enterprises in the formal sector is a promising strategy. It must be backed up by adequate training and financial support; and, finally
- e. The effects of strategies and policies to combat youth unemployment must be carefully assessed. This assessment must be carried out over the long term and calls for sophisticated evaluation methods with control groups.

VIII. Tables

Table 1

	'(1)	'(2)	'(3)	'(4)	'(5)	'(6)	'(7)	'(8)	'(9)	'(10)	'(11)	'(12)	'(13)	'(14)	'(15)	'(16)	'(17)	'(18)	'(19)	'(20)	'(21)	'(22)				
	Basic social and economic data								Labour Force Participation Rates, 1980-1995																	
	Total population (mil) 1996	GNP per capita \$ 1996	Population under 18 (%) 1996	- 5 mortality rate 1996	- 5 under weight % 1987-1997	Net primary school enrol/ attend 1987-1997	Total fertility rate 1996	Maternal mortality rate 1990	Proportion economically active %								Econ active Population: Women as a % of total 15-24	Econ active Population: Change per year 1990-1995 (%)	Population Size Age 15-24 Relative to Age 25-54							
									15-19 Male		15-19 Female		20-24 Male		20-24 Female				Male	Female	Year	%	Year	%		
								1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995							
SUB-SAHARAN AFRICA																										
Angola	11.2	270	54	292	--	--		6.8	1500	84	81	71	69	87	86	76	74	47	46	3.4	3.3			Angola		
Benin	5.6	350	55	169	29	43	#	6	990	61	52	59	56	87	84	84	81	53	51	2.5	2.1			Benin		
Botswana	1.5	3,020	47	50	15	96		4.6	250	54	44	51	40	90	87	80	76	48	47	2.4	2.5			Botswana		
Burkina Faso	10.8	230	54	173	30	33	#	6.7	930	86	78	78	71	93	90	81	78	47	47	2.4	2.5			Burkina Faso		
Burundi	6.2	170	53	176	37	52		6.4	1300	86	84	85	82	95	94	89	87	50	49	1.2	1.3			Burundi		
Cameroon	13.6	610	51	102	14	65	#	5.4	550	69	60	39	38	89	87	46	47	35	37	3	3.6			Cameroon		
Central African Republic	3.3	310	48	173	27	63	#	5.1	700	71	61	67	56	89	85	73	62	48	47	2.8	2.9			Central African Republic		
Chad	6.5	160	49	198	--	41		5.6	1500	71	67	59	59	94	93	69	71	44	45	2.5	3			Chad		
Congo	2.7	670	52	108	17	--		6	890	54	51	41	43	84	82	47	53	40	43	3	3.2			Congo		
Congo Dem. Rep.	46.8	130	54	207	34	56	#	6.4	870	63	57	58	55	87	86	63	61	45	45	3.8	3.7			Congo		
Côte d'Ivoire	14	660	51	150	24	53	#	5.3	810															Côte d'Ivoire		
Eritrea	3.3	100	52	120	44	31		5.5	1400	67	63	69	67	85	84	76	75	49	50	1.2	1.5			Eritrea		
Ethiopia	58.2	100	53	177	48	24		7	1400	65	61	56	54	81	80	61	60	45	44	2.6	2.7			Ethiopia		
Gabon	1.1	3,950	45	145	--	86	#	5.3	500	60	54	60	54	87	84	63	63	45	45	2.7	2.4			Gabon		
Gambia	1.1	320	45	92	21	47	#	5.3	1100	78	70	62	59	92	90	69	69	44	45	3.3	3.8			Gambia		
Ghana	17.8	360	51	110	27	70	#	5.4	740	42	40	66	57	83	82	82	82	55	54	2.9	2.4			Ghana		
Guinea	7.5	560	53	210	26	33	#	6.7	1600	76	65	71	66	92	88	80	78	47	48	4.5	4.6			Guinea		
Guinea-Bissau	1.1	250	45	223	--	45		5.5	910	70	67	52	52	92	91	59	59	41	42	2	2.4			Guinea-Bissau		
Kenya	27.8	320	53	90	23	84	#	5	650	77	73	69	66	92	91	73	73	45	46	4.3	4.6			Kenya		
Lesotho	2.1	660	48	139	16	75	#	5	610	57	51	41	37	89	88	54	54	41	39	3	3.3			Lesotho		
Liberia	2.2	490	50	235	--	56	#	6.5	560	53	45	50	42	86	85	55	59	43	44	-2.9	-2.5			Liberia		
Madagascar	15.4	250	53	164	34	62	#	5.8	490	73	66	57	54	90	88	69	68	44	44	3.2	3.3			Madagascar		
Malawi	9.8	180	54	217	30	83	#	6.8	560	65	60	66	62	89	87	78	78	50	49	1	0.4			Malawi		
Mali	11.1	240	54	241	27	41	#	6.8	1200	81	73	70	67	91	90	74	73	46	47	2.5	2.4			Mali		
Mauritania	2.3	470	52	183	23	54	#	5.1	930	73	64	55	53	92	90	71	66	44	44	2.9	2.9			Mauritania		
Mauritius	1.1	3,710	36	23	16	96		2.3	120	58	48	20	27	92	90	32	46	25	34	-0.6	1.1	1990	36.8	1995	34.2	Mauritius
Mozambique	17.8	80	51	214	27	40		6.2	1500	72	68	69	63	94	92	88	86	49	48	3.5	3.6			Mozambique		
Namibia	1.6	2,250	50	77	26	92		5	370	61	52	41	30	86	81	61	59	41	40	2.6	2.3			Namibia		
Niger	9.5	200	55	320	43	26	#	7.2	1200	88	85	64	62	94	91	70	68	43	43	3	3.1	1980	55.4	1990	56.2	Niger
Nigeria	115	240	52	191	36	59	#	6.1	1000	69	63	38	35	87	84	43	43	35	35	2.7	3.7			Nigeria		
Rwanda	5.4	190	54	170	29	61	#	6.2	1300	87	86	85	82	97	96	89	87	49	49	-5.3	-5.3			Rwanda		
Senegal	8.5	570	52	127	22	45	#	5.8	1200	69	63	57	56	88	89	61	61	43	44	2.9	3.1			Senegal		

Table 1

	'(1)	'(2)	'(3)	'(4)	'(5)	'(6)	'(7)	'(8)	'(9)	'(10)	'(11)	'(12)	'(13)	'(14)	'(15)	'(16)	'(17)	'(18)	'(19)	'(20)	'(21)	'(22)						
	Basic social and economic data								Labour Force Participation Rates, 1980-1995																			
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									15-19 Male	15-19 Female	20-24 Male	20-24 Female	1980	1995	1980	1995	1980	1995	1980	1995	Male	Female	Year	%	Year	%		
Sierra Leone	4.3	200	51	316	29	48	6.2	1800	57	53	36	33	86	85	44	46	37	37	0.7	1.5							Sierra Leone	
Somalia	9.8	110	54	211	--	--	7	1600	69	65	57	55	89	88	62	62	43	44	1.7	1.8							Somalia	
South Africa	42.4	3,520	43	66	9	96	3.9	230	52	41	43	37	85	80	55	52	41	43	2.1	2.3							South Africa	
Tanzania, United Rep.	30.8	170	53	144	27	48	5.6	770																			Tanzania, United Rep.	
Togo	4.2	300	52	125	19	85	6.2	640	69	62	46	45	91	90	51	52	38	39	2.8	3.3							Togo	
Uganda	20.3	300	55	141	26	64	#	7.1	1200	82	78	75	73	94	93	78	77	47	47	3.4	3.4						Uganda	
Zambia	8.3	360	55	202	24	75		5.6	940	71	69	64	61	89	90	74	73	49	46	3.4	2.7						Zambia	
Zimbabwe	11.4	610	51	80	16	91	#	4.8	570	59	54	45	44	91	90	65	64	43	43	1.9	1.9						Zimbabwe	
MIDDLE EAST AND NORTH AFRICA																												
Algeria	28.8	1,520	45	39	13	95		4	160	43	33	15	13	86	83	22	33	22	27	2.4	5.9							Algeria
Egypt	63.3	1,080	44	78	15	78	#	3.5	170	48	42	23	18	80	78	34	33	29	33	1.6	3.3	1989	47.1	1995	45.6		Egypt	
Iran	70	1,033	51	37	16	96	#	4.9	120	51	41	19	22	86	83	22	31	23	29	2.2	5.5						Iran	
Iraq	20.6	1,036	49	122	23	83	#	5.4	310	40	27	10	6	83	80	16	20	17	19	2.2	4.2						Iraq	
Israel	5.7	15,870	35	6	--	--		2.8	7	35	27	20	15	82	78	55	60	38	41	3	4.2	1980	38.6	1997	32.9		Israel	
Jordan	5.6	1,650	50	25	9	89		5.3	150	37	29	9	8	85	83	23	35	20	26	3.5	7.4						Jordan	
Kuwait	1.7	17,390	47	14	--	65		2.9	29	34				86	82	22	52	14	35	-6.2	-3.3						Kuwait	
Lebanon	3.1	2,970	39	40	3	--		2.9	300	37	34	18	22	81	80	33	46	33	37	0.8	2.7						Lebanon	
Libyan Arab Jamahiriya	5.6	5,540	52	61	5	97		6.1	220																		Libyan Arab Jamahiriya	
Morocco	27	1,290	43	74	9	72		3.3	610	57	46	37	36	81	80	39	48	36	39	1.7	2.5						Morocco	
Oman	2.3	4,820	52	18	23	71		7.2	190	46	27	4	7	95	84	7	17	6	18	2.4	9						Oman	
Saudi Arabia	18.8	7,040	48	30	--	62		6	130	49	31	7	7	87	83	13	25	10	21	-0.2	6.5						Saudi Arabia	
Sudan	27.3	310	48	116	34	55	#	4.7	660	62	56	27	26	87	83	28	32	27	29	3	4.2						Sudan	
Syria	14.6	1,160	51	34	13	97	#	4.2	180																		Syria	
Tunisia	9.2	1,930	40	35	9	97		3	170	57	44	38	31	89	86	45	53	35	38	1.1	1.9						Tunisia	
Turkey	61.8	2,830	37	47	10	86	#	2.6	180	69	64	50	46	90	89	50	54	37	39	2.7	3.3						Turkey	
United Arab Emirates	2.3	17,400	35	10	14	83		3.6	26	46	19	5	7	95	87	15	37	6	24	3.7	7						United Arab Emirates	
Yemen	15.7	380	54	105	39	57	#	7.6	1400	54	50	28	25	88	86	29	29	33	26	5.3	4.6						Yemen	
CENTRAL ASIA																												
Afghanistan	20.9	250	46	257	--	24	#	6.9	1700	65	59	44	42	90	87	50	49	36	37	5.4	6.2							Afghanistan
Armenia	3.6	630	33	30	--	--		1.8	50	32	26	31	25	75	74	70	71	49	48	0	-0.8						Armenia	
Azerbaijan	7.6	480	37	44	10	--		2.4	22	35	28	36	27	80	75	61	49	44	44	-1	-1.5						Azerbaijan	
Georgia	5.4	850	28	29	--	82		2	33	34	28	35	26	80	74	73	60	49	44	-0.4	-0.5						Georgia	
Kazakhstan	16.8	1,350	35	45	8	--		2.4	80	38	32	32	24	88	82	81	74	46	45	0.1	1.2						Kazakhstan	

Table 1

	'(1)	'(2)	'(3)	'(4)	'(5)	'(6)	'(7)	'(8)	'(9)	'(10)	'(11)	'(12)	'(13)	'(14)	'(15)	'(16)	'(17)	'(18)	'(19)	'(20)	'(21)	'(22)							
	Basic social and economic data								Labour Force Participation Rates, 1980-1995																				
	Total population (mil) 1996	GNP per capita \$ 1996	Population under 18 (%) 1996	- 5 mortality rate 1996	- 5 under weight % 1987-1997	Net primary school enrol/ attend 1987-1997	Total fertility rate 1996	Maternal mortality rate 1990	Proportion economically active %								Econ active Population: Women as a % of total 15-24	Econ active Population: Change per year 1990-1995 (%)	Population Size Age 15-24 Relative to Age 25-54										
									15-19 Male				15-19 Female				20-24 Male		20-24 Female		1980	1995	Male	Female	Year	%	Year	%	
								1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995	1980	1995
Kyrgyzstan	4.5	550	42	50	--	86	#	3.3	110	36	26	32	24	87	80	83	74	47	48	0.3	1						Kyrgyzstan		
Tajikistan	5.9	340	47	76	--			4	130	36	27	43	29	84	79	81	66	52	47	1.9	1.7						Tajikistan		
Turkmenistan	4.2	940	45	78	--	80	#	3.7	55	40	33	40	32	89	84	83	76	48	48	0.9	1.6						Turkmenistan		
Uzbekistan	23.2	1,010	46	60	19	95		3.6	55	36	27	40	31	84	80	85	76	51	50	2	1.6						Uzbekistan		
EAST/SOUTH ASIA AND PACIFIC																													
Australia	18.1	20,090	25	6	--	98		1.9	9	65	57	62	56	91	88	71	79	45	47	-0.9	-0.8	1980	30.4	1997	22.3		Australia		
Bangladesh	120.1	260	48	112	56	76	#	3.2	850	71	67	57	54	88	83	67	65	41	43	3	3						Bangladesh		
Bhutan	1.8	390	50	127	38	41		5.9	1600	82	75	69	63	93	91	64	62	42	43	0.9	1.4						Bhutan		
Cambodia	10.3	300	47	170	40	--		4.6	900	56		69	69	88	88	88	88	56	52	-0.9	-1.9						Cambodia		
China	1232.1	750	31	47	16	99		1.8	95	75	60	79	66	97	93	90	91	48	49	-3	-3						China		
India	944.6	380	41	111	53	68	#	3.2	570	62	56	41	35	89	87	45	42	34	33	0.8	1.8						India		
Indonesia	200.5	1,080	39	71	34	97		2.7	650	54	45	35	35	85	81	40	53	35	40	1.2	2.1	1982	44.9	1992	41.9		Indonesia		
Japan	125.4	40,940	20	6	--	100		1.5	18	19	30	19	16	75	81	71	74	48	48	0.8	0.7	1980	22	1997	19.9		Japan		
Korea, Dem.	22.5	970	31	30	--	--		2.1	70																		Korea, Dem.		
Korea, Rep.	45.3	10,610	28	7	--	93		1.7	130	30		39	19	79	76	64	68	47	48	0.1	-0.2	1980	40.3	1997	26.4		Korea, Rep.		
Lao Rep.	5	400	52	128	40	69	#	6.7	650																		Lao Rep.		
Malaysia	20.6	4,370	43	13	20	91		3.4	80	50	40	32	30	91	85	53	62	38	42	0.5	1.7						Malaysia		
Mongolia	2.5	360	44	150	12	80		3.4	65	71	59	61	52	92	88	80	80	45	46	1.5	1.6						Mongolia		
Myanmar	45.9	220	42	150	43	85	#	3.4	580	73	69	63	58	91	90	69	68	44	43	1.3	0.9						Myanmar		
Nepal	22	210	50	116	47	65	#	5.1	1500	73	65	61	54	90	88	59	58	41	42	3.4	1.8						Nepal		
New Zealand	3.6	15,720	28	7	--	100		2.1	25	57	32	56	51	90	78	63	72	44	46	-0.3	-0.5	1986	30.7	1997	23.8		New Zealand		
Pakistan	140	480	49	136	38	66	#	5.2	340	66	57	24	25	89	87	27	32	23	27	1.2	3.4	1983	46.4	1995	47.3		Pakistan		
Papua New Guinea	254.4	1,150	45	112	--	32	#	4.8	930	71	65	57	51	95	93	68	65	39	41	0.9	1.9						Papua New Guinea		
Philippines	6489.3	1,160	45	38	30	89	#	3.7	280	50	39	28	30	85	83	49	50	36	39	1.7	2.1	1980	58	1997	44.1		Philippines		
Singapore	503.4	30,550	26	4	--	100		1.8	10	47	25	49	25	93	83	79	81	46	48	-3.7	-4.7	1980	51.9	1997	23		Singapore		
Sri Lanka	1478.1	740	35	19	38	--		2.1	140	43	35	21	21	87	85	39	62	32	40	0.1	1.2	1985	46.4	1995	37		Sri Lanka		
Thailand	5318.7	2,960	33	38	26	--		1.8	200	71	66	73	65	88	88	82	80	49	48	-0.5	-0.6	1995	40.3	1997	34.5		Thailand		
Viet Nam	7415.2	290	43	44	45	81	#	3.1	160	79	58	74	64	97	93	84	88	50	49	-0.2	-0.2						Viet Nam		
AMERICAS																													
Argentina	3205.2	8,380	34	25	--	95		2.7	100	60	55	28	24	87	86	47	56	34	35	2.6	3.8						Argentina		
Bolivia	317.6	830	47	102	8	89	#	4.5	650	54	48	35	36	83	80	40	45	36	39	2.4	2.8	1990	50.9	1996	49.6		Bolivia		
Brazil	16281.1	4,400	37	46	6	94	#	2.3	220	75	69	34	43	93	91	43	52	31	37	1.1	1.9	1985	45.9	1996	39.1		Brazil		
Canada	2529.7	19,020	24	7	--	95		1.6	6	58	54	52	52	87	82	72	77	46	48	-1.6	-1.4	1980	34.7	1997	20.1		Canada		

Table 1

	'(1)	'(2)	'(3)	'(4)	'(5)	'(6)	'(7)	'(8)	'(9)	'(10)	'(11)	'(12)	'(13)	'(14)	'(15)	'(16)	'(17)	'(18)	'(19)	'(20)	'(21)	'(22)				
	Basic social and economic data								Labour Force Participation Rates, 1980-1995																	
	Total population (mil) 1996	GNP per capita \$ 1996	Population under 18 (%) 1996	- 5 mortality rate 1996	- 5 under weight % 1987-1997	Net primary school enrol/ attend 1987-1997	Total fertility rate 1996	Maternal mortality rate 1990	Proportion economically active %								Econ active Population: Women as a % of total 15-24	Econ active Population: Change per year 1990-1995 (%)	Population Size Age 15-24 Relative to Age 25-54							
									15-19 Male	15-19 Female	20-24 Male	20-24 Female	1980	1995	1980	1995	1980	1995	1980	1995	Male	Female	Year	%	Year	%
Chile	1434.4	4,860	35	13	1	86	2.5	65	40	31	16	18	83	82	35	42	29	34	-0.7	1.1	1980	46.6	1997	29.8	Chile	
Colombia	3446.4	2,140	40	31	8	91	#	2.8	100	50	44	19	29	83	81	28	55	26	40	-0.6	0.7	1980	61.3	1997	37.4	Colombia
Costa Rica	423.5	2,640	40	15	2	92		3	55	67	55	19	26	89	87	28	46	23	33	0.4	1.6	1980	59.4	1997	38.7	Costa Rica
Cuba	1501	1,170	26	9	--	99		1.6	95	44	36	21	14	89	85	48	56	34	37	-3.4	-1.2					Cuba
Dominican Rep.	288	1,600	41	56	6	92	#	2.9	110	59	52	21	19	86	84	33	43	26	31	0.3	2.3					Dominican Rep.
Ecuador	1491.7	1,500	43	40	17	92		3.2	150	59	54	18	18	85	83	26	33	23	27	1.9	3.6	1990	50.3	1997	45.7	Ecuador
El Salvador	455.8	1,700	45	40	11	79		3.2	300	68	63	25	25	91	87	41	52	30	33	3.8	5.1	1980	50	1996	51	El Salvador
Guatemala	1450.9	1,470	51	56	27	58	#	5	200	73	67	25	27	93	91	29	36	24	28	2.6	5.8					Guatemala
Haiti	267.3	310	47	134	28	68	#	4.7	1000	53	44	48	38	84	81	65	59	46	44	1.4	1.4					Haiti
Honduras	355.8	660	50	35	18	90		4.5	220	73	63	21	24	92	89	36	42	25	30	2.5	4.7	1990	58.5	1996	37.7	Honduras
Jamaica	332.5	1,600	36	11	10	100		2.5	120	52	37	40	30	95	90	83	80	46	45	-1.4	-2					Jamaica
Mexico	92.7	3,670	42	32	14	98		2.9	110	58	55	27	31	85	84	37	44	31	35	1.6	3.1	1991	51.2	1997	44.7	Mexico
Nicaragua	4.2	380	50	57	12	83		4	160	66	62	22	26	89	88	35	47	27	33	3.2	4.9	1985	54.1	1990	61.1*	Nicaragua
Panama	2.7	3,080	37	20	7	91		2.7	55	47	44	20	21	85	83	48	46	33	34	0.5	1	1983	46.8	1995	39.8	Panama
Paraguay	5	1,850	48	34	4	89		4.3	160	75	60	30	28	93	90	35	41	27	31	1.5	2.5	1989	39	1995	47.4*	Paraguay
Peru	23.9	2,420	42	58	8	87	#	3.1	280	38	33	18	14	82	79	29	39	28	32	1.5	3.2	1986	53.8	1996	46	Peru
Trinidad/Tobago	1.3	3,870	38	17	7	88		2.2	90	56	38	20	18	93	88	50	56	31	33	1	1.6	1980	53.5	1996	35.3	Trinidad/Tobago
United States	269.4	28,020	26	8	1	96		2	12	50	40	43	40	87	72	69	72	44	47	-1.3	-1	1980	28.5	1997	19.3	United States
Uruguay	3.2	5,760	28	22	4	95		2.3	85	58	50	25	28	89	86	46	66	32	40	1.1	2.3	1984	28.8	1995	28.5	Uruguay
Venezuela	22.3	3,020	42	28	5	88		3.1	120	53	46	18	18	85	82	36	42	27	31	1.3	2.8	1980	54.8	1995	43.3	Venezuela
EUROPE - WEST																										
Austria	8.1	28,110	21	6	--	100		1.4	10	62	49	54	42	86	75	74	72	46	46	-2.8	-3.1	1994	18.9	1997	17.2	Austria
Belgium	10.2	26,440	22	7	--	98		1.6	10	25	12	22	9	81	66	69	61	45	47	-2.1	-1.7	1983	25.6	1997	17.9	Belgium
Denmark	5.2	32,100	21	6	--	99		1.8	9	68	66	54	60	90	86	86	80	46	47	-2.4	-2.4	1983	23.5	1997	18.2	Denmark
Finland	5.1	23,240	24	4	--	99		1.8	11	43	33	37	33	79	79	69	68	45	46	-2	-2	1980	26.9	1997	19.8	Finland
France	58.3	26,270	23	6	--	99		1.7	15	25	13	18	7	80	63	68	56	44	44	-0.7	-0.7	1980	25.5	1997	19.7	France
Germany	81.9	28,870	19	6	--	100		1.3	22	57	41	51	36	85	80	71	76	45	46	-3.8	-4.3	1980	24.4	1990	19.7	Germany
Greece	10.5	11,460	21	9	--	91		1.4	10	44	26	22	18	79	73	39	57	32	42	-0.6	0.1	1983	21	1997	18.8	Greece
Ireland	3.6	17,110	28	7	--	100		1.9	10	48	31	39	21	89	75	70	74	43	45	1.8	2.3	1981	33.5	1997	29.6	Ireland
Italy	57.2	19,880	18	7	--	97		1.2	12	41	18	34	24	78	74	57	64	43	45	-2.5	-2	1980	26.2	1997	20.9	Italy
Netherlands	15.6	25,940	22	6	--	99		1.6	12	41	33	40	39	79	76	66	75	46	48	-3.7	-3.6	1980	28.8	1997	15.3	Netherlands
Norway	4.3	34,510	23	6	--	99		1.9	6	40	48	36	32	81	81	65	68	44	47	-2.3	-2.2	1993	21.6	1997	22.9	Norway
Portugal	9.8	10,160	21	7	--	100		1.5	15	76	36	54	38	92	85	69	68	41	45	-0.7	-0.3	1980	24.3	1997	19	Portugal

Table 1

	'(1) - (8) Basic social and economic data								'(9) - (20) Labour Force Participation Rates, 1980-1995												'(21) - (22) Population Size Age 15-24 Relative to Age 25-54				
	Total population (mil) 1996	GNP per capita \$ 1996	Population under 18 (%) 1996	- 5 mortality rate 1996	- 5 under weight % 1987-1997	Net primary school enrol/attend 1987-1997	Total fertility rate 1996	Maternal mortality rate 1990	Proportion economically active %								Econ active Population: Women as a % of total 15-24	Econ active Population: Change per year 1990-1995 (%)	Year	%	Year	%			
									15-19 Male	15-19 Female	20-24 Male	20-24 Female	1980	1995	1980	1995							1980	1995	1980
Spain	39.7	14,350	21	5	--	100	1.2	7	46	52	33	24	85	83	55	64	40	44	-1	-0.1	1980	25.1	1997	23	Spain
Sweden	8.8	25,710	23	4	--	100	1.9	7	44	21	44	38	84	76	71	80	46	49	-1.8	-1.7	1980	19.9	1997	17.9	Sweden
Switzerland	7.2	44,350	21	5	--	100	1.5	6	57	26	52	46	85	79	75	80	47	48	-3.7	-2.9	1980	23.6	1997	16.6	Switzerland
United Kingdom	58.1	19,600	23	7	--	100	1.7	9	59	24	53	53	90	76	65	75	43	46	-2.7	-3.3	1984	23	1997	16.2	United Kingdom
EUROPE - EAST																									
Albania	3.4	820	35	40	--	96	2.7	65	55	49	31	28	88	86	68	72	38	41	-1.3	-0.4					Albania
Belarus	10.3	2,070	26	18	--	95	1.5	37	36	25	30	23	86	80	86	81	48	50	0.9	0.6					Belarus
Bosnia/Herzegovina	3.6	*	25	17	--	--	1.4	--	25	21	21	18	81	81	55	62	41	43	-6.3	-6.1					Bosnia/Herzegovina
Bulgaria	8.5	1,190	22	19	--	97	1.5	27	27	15	33	26	83	80	78	83	49	53	0.8	-0.4	1990	21.5	1995	22.3	Bulgaria
Croatia	4.5	3,800	22	11	1	82	1.6	--	24	21	20	18	79	77	69	65	46	45	0.1	-0.2					Croatia
Czech Rep.	10.3	4,740	23	7	1	98	1.5	15	28	32	30	31	87	87	84	86	49	49	2.5	2.6	1993	24.3	1997	25.2	Czech Rep.
Estonia	1.5	3,080	27	16	--	94	1.4	41	34	30	27	24	86	79	83	74	46	46	-1.3	-0.8					Estonia
Hungary	10	4,340	23	12	2	93	1.5	30	60	47	47	40	92	78	60	62	40	42	1.2	1.6	1992	24.3	1997	26.1	Hungary
Latvia	2.5	2,300	24	20	--	84	1.5	40	33	25	31	26	85	78	83	81	48	49	-2.4	-1.5	1995	20.3	1997	20	Latvia
Lithuania	3.7	2,280	27	18	--	--	1.6	36	27	29	21	19	83	74	79	71	47	46	-1.2	-0.7	1995	22.2	1997	24.5	Lithuania
Moldova	4.4	590	32	32	--	--	1.9	60	39	28	38	27	85	80	89	79	52	49	1.9	1.8					Moldova
Poland	38.6	3,230	27	14	--	97	1.7	19	46	27	31	23	83	82	68	63	43	43	2.2	2.4	1980	27.9	1997	22.9	Poland
Romania	22.7	1,600	25	25	6	92	1.4	130	38	33	32	30	87	87	75	72	45	45	-1.6	-1.4	1995	26.8	1997	26.4	Romania
Russian Federation	148.1	2,410	25	25	3	100	1.4	75	38	25	32	23	87	78	84	78	47	48	0.7	1.2	1992	21.2	1995	22	Russian Federation
Slovakia	5.3	3,410	28	11	--	--	1.6	--	32	33	30	31	87	75	81	86	47	48	2.1	2.1	1993	26.7	1997	27.9	Slovakia
Slovenia	1.9	9,240	21	6	--	100	1.3	13	34	35	28	21	86	83	82	74	47	46	0	-0.3	1990	23	1997	23.4	Slovenia
TFYR Macedonia	2.2	990	27	30	--	85	2	--	27	56	22	17	77	85	51	62	39	43	-0.2	0					TFYR Macedonia
Ukraine	51.6	1,200	24	24	--	--	1.5	50	38	43	33	24	82	79	85	77	49	48	1.1	0.9					Ukraine
Yugoslavia	10.3	**	26	22	2	69	1.8	-	31	19	25	19	82	62	61	62	42	43	0.5	0.6					Yugoslavia

Notes: a. Enrolment/attendance is derived from net primary school enrolment rates as reported by UNESCO and from national household survey reports of attendance at primary school. b. Several of the maternal mortality rates vary substantially. #. School attendance data derived from household surveys. * GNP per capita estimated range \$785 or less. ** GNP per capita estimated range \$9636 or more. Source: The Progress of Nations, 1998. United Nations.

Sources: (1) - (8) The Progress of Nations, 1998, United Nations; (9) - (20) Calculated by the United Nations Statistics Division from the International Labour Office, *Economically Active Population 1950-2010*, 4th edition, 1996 (Paris); (21) - (22) United Nations Database.

Table 2

Year	COUNTRY	Age Specific Unemployment Rates				Male and Female Unemployment Rates by Age %						
		Age	All	Male	Female	15-24 yrs	>=25yrs	Ratio	Age 25 and over	Ages 15-24		
AFRICA												
1997	Algeria	15+	26.4	26.9	24	38.7	7.9	4.9	2.1	9.3	14.4	46.2
1995	Botswana	12+	21.5	19.4	23.9							
1995	Egypt	12-64	11.3	7.6		34.4	4.4	7.8	9.8	3	59	24.5
1995	Mauritius	12+	9.8	7.8	13.9	23.8	5.8	4.1	9.5	4.1	28.1	21.4
AMERICAS												
1991	Anguilla	15+	7.2	6.3	9							
1991	Antigua and Barbuda	15+	6	6.4	5.6							
1996	Argentina	10+	16.3	15.4	17.6	24.6	10.4	2.4	12.6	9.2	26.2	23.5
1994	Aruba	15+	6.5	5.4	7.9							
1995	Bahamas	15+	11.1	10.3	12	23.7	10.1	2.3	9	7.4	23.6	18.1
1995	Barbados	15+	19.7	16.5	22.9	38.1	15.1	2.5	18.1	12.1	43.2	33.3
1996	Belize	14+	13.8	11.7	18.6	25.6	9.6	2.7	12.2	8.4	33.3	21.9
1996	Bolivia	10+	4.2	3.7	4.5	7	3.4	2.1	3.3	3.5	8.5	5.5
1996	Brazil	10+	6.9	5.7	8.8	12.6	4.6	2.7	6	3.7	16.1	10.3
1997	Canada	15+	9.2	9.2	9.2	16.7	7.8	2.1	7.8	7.8	15.7	17.6
1997	Colombia	12+	12.1	9.8	15.1	35.1	5.8	6.1	6.7	5	42.3	28.6
1997	Costa Rica	12+	5.7	4.9	7.5	5.4	1.8	3	2.5	1.5	7.3	4.4
1997	Chile	15+	5.3	4.7	6.6	13	4	3.3	4.9	3.5	14.7	12
1997	Dominican Republic	14+	15.9	9.5	28.6	32	8.7	3.7	17.8	4.9	59.4	19.8
1997	Ecuador	10+	9.2	7	12.7	18.9	6.2	3	8.8	4.5	24.5	15.1
1997	El Salvador	10+	8	9.5	5.3	13.1	5.2	2.5	3.8	6.1	14.3	12.5
1991	Grenada	15+	13.9	14.6	12.7							
1989	Guadeloupe	16+	24	16	34	29.5	13.5	2.2	18.7	9.6	40.4	21.1
1992	Guyana	15+	11.7	8.4	18.1							
1991	French Guiana	16+	9.7	8.2	11.6							
1997	Honduras	10+	3.2	3.2	3.2	10.6	1.3	8.2	1	1.4	13.3	9.5
1996	Jamaica	14+	16	9.9	23	35.2	8.5	4.1	12.6	4.9	47.7	25.3
1997	Mexico	15+	3.5	2.9	4.7	6.6	2.4	2.8	3.3	2	8.4	5.6
1997	Nicaragua	10+	13.3	12.6	14.8	11.1	11.9	0.9	16.4	9.6	16.7	8.6
1996	Panama	15+	14.3	11.3	20	27.3	9.9	2.8	15.5	6.9	35.6	23
1996	Paraguay	10+	8.2	7.8	8.6	6	2.4	2.5	4.4	1.7	7.9	5.2
1997	Peru	14+	7.7	6.8	8.9	13.2	5.2	2.5	6	4.6	14.2	12.4
1997	Puerto Rico	16+	13.5	14.4	12.1	26.4	11.6	2.3	8.5	13.7	23.3	28.3
1996	Saint Lucia	15+	16.3	13.8	19.3							
1991	St.Vincent & the Grenadines	15+	19.8	18.4	22.1							
1996	Suriname	15+	10.9	7.9	16.4	26.1	4.4	5.9	12.4	2.8	28.2	25.1
1996	Trinidad and Tobago	15+	16.2	13.2	21	28.5	12.7	2.2	16.5	10.4	36	23.5
1997	United States	16+	4.9	4.9	5	11.3	3.8	3	3.9	3.6	10.7	11.8
1995	Uruguay	14+	10.2	8	13.2	24.6	6.2	4				
1995	Venezuela	15+	10.3	9	12.8	19.1	7.6	2.5	9.1	6.9	24.5	16.7
1991	British Virgin Islands	15+	3.3	3.4	3.1							
ASIA												
1996	Bangladesh	10+	2.5	2.7	2.3							
1997	China	3							
1996	Cyprus	14+	3.1	2.3	4.3	1.8	2.3	0.8	3.2	1.7	3	1.1
1997	Hong Kong, China	15+	2.2	2.3	2	5	1.8	2.8	1.6	1.9	4.4	5.6
1996	Indonesia	10+	4	3.3	5.1	8.7	1	8.7	1	1	9.1	8.5

Table 2

Year	COUNTRY	Age Specific Unemployment Rates					Male and Female Unemployment Rates by Age %					
		Age	All	Male	Female	15-24 yrs	>=25yrs	Ratio	Age 25 and over	Ages 15-24		
1997	Israel	15+	7.7	6.8	8.8	14.9	6.3	2.4	7.2	5.7	16	13.9
1997	Japan	15+	3.4	3.4	3.4	6.6	2.9	2.3	2.9	2.9	6.3	6.9
1997	Korea, Republic of	15+	2.6	2.8	2.3	7.7	1.9	4.1		2.2	6.6	9.4
1997	Macau	14+	3.1	3.7	2.5	8	2.6	3.1	2.2	3	5.3	10.8
1995	Pakistan	10+	5.4	4.1	13.7	9	3.7	2.4	12.6	2.4	18.1	7.6
1997	Philippines	15+	7.9	7.5	8.5	15.7	5.5	2.9	5.7	5.5	18.5	14.1
1997	Singapore	15+	2.4	2.4	2.4	5.1	2	2.6	1.8	2.2	5.6	4.5
1996	Sri Lanka	10+	11.3	8	17.6	24.7	6	4.1	9.8	4	31.2	20.2
1991	Syrian Arab Republic	10+	6.8	5.2	14							
1997	Tajikistan	...	2.7	2.4	2.9							
1997	Thailand	13+	0.9	0.9	0.9	2.2	0.5	4.4	0.7	0.4	1.8	2.5
1995	Uzbekistan	...	0.4	0.3	0.5							
EUROPE – WEST												
1996	Austria	15+	5.3	5.3	5.2	6.5	4.1	1.6	4.4	3.9	7.6	5.5
1997	Belgium	15+	9	7.1	11.5	21.3	7.6	2.8	9.9	6	25.7	17.6
1997	Denmark	15+	5.4	4.5	6.4	8.1	4.8	1.7	5.7	4.1	9.9	6.6
1997	Finland	15-74	14.4	13.8	15.1	24.8	13	1.9	13.6	12.4	26.6	23.3
1997	France	15+	12.3	10.8	14.2	28.1	10.9	2.6	12.5	9.5	32.8	24.6
1997	Germany	15+	9.8	8.9	10.9	10	9.7	1	11.1	8.7	9.6	10.3
1997	Greece	15+	9.6	6.2	14.8	31	6.8	4.6	10.6	4.5	40.6	22.2
1997	Iceland	16-74	3.9	3.3	4.5	7.4	3.2	2.3	3.9	2.5	6.7	8.1
1997	Ireland	15+	10.3	10.3	10.3	16.1	9	1.8	8.9	9	15.2	16.9
1993	Isle of Man	...	5	6.3	3.1							
1997	Italy	15+	12.5	9.7	16.9	33.6	9.1	3.7	12.7	7	39.3	29.1
1997	Luxembourg	15+	2.5	1.8	3.6	7.3	2	3.7	2.8	1.5	9.2	5.6
1997	Malta	16-61	5	5.8	2.8	5.2	3.5	1.5	2	3.8	2.8	7.2
1997	Netherlands	15+	5.5	4.4	7	9.5	5.5	1.7	6.9	4.4	10	9.1
1997	Norway	16+	4.1	4	4.3	10.6	3.1	3.4	3.2	3	11.1	10.1
1997	Poland	15+	11.2	9.5	13.2	24.6	9.4	11.2	7.8	28	21.9	
1996	Portugal	15+	7.5	6.6	8.5	11.8	5.3	2.2	5.7	5	12.4	11.3
1997	San Marino	14+	4.4	1.9	7.3							
1997	Spain	16+	20.6	15.8	28.3	37.1	17.2	2.2	24.1	13.1	46.1	30.3
1997	Switzerland	15+	4.1	4.3	3.9	5.9	3.8	1.6	3.9	3.7	3.8	7.9
1997	Sweden	16+	7.9	8.3	7.5	15.4	7	2.2	6.7	7.4	14.3	16.3
1997	Turkey	15+	6.4	6	7.4	15.4	3.9	3.9	4	3.9	17.5	14.2
1997	United Kingdom	16+	7.1	8.1	5.8	13.5	5.9	2.3	4.7	6.8	11	15.6
EUROPE – EAST												
1995	Belarus	...	2.7	2.2	3.3	5.9	1.9	2.5	1.3	7.6	4.3	
1996	Bulgaria	15+	14.2	14.2	14.1	26.3	7	8.2	5.8	27.4	25.1	
1993	Croatia	...	16.8	14	20.1	22.6	8.7	10.3	7.4	26.5	19.6	
1997	Czech Republic	15+	4.7	3.8	5.8	8.4	4	5	3.1	9.9	7.3	
1996	Estonia	15-69	10	10.7	9.2	1.8	0.5	0.6	0.5	1.8	1.8	
1997	Hungary	15-74	8.7	9.5	7.7	15.9	7.4	6.7	8.1	14.5	16.9	
1997	Latvia	15+	14.4	14.3	14.6	27	14.4	14	14.8	28	26.4	
1997	Lithuania	...	6.7	6.6	6.9	26.2	12.1	12.8	11.5	23	28.3	
1996	Macedonia	...	38.8	35	44.5	49.3	27.1	32.2	23.9	54.4	45.7	
1997	Romania	15+	6	5.7	6.4	17.8	3.8	4	3.7	21	15.5	
1996	Russian Federation	15-72	9.3	9.6	9	16.6	6.9	6.4	7.5	17.1	16.2	

Table 2

Year	COUNTRY	Age Specific Unemployment Rates					Male and Female Unemployment Rates by Age %				
		Age	All	Male	Female	15-24 yrs	>=25yrs	Ratio	Age 25 and over	Ages 15-24	
1997	Slovakia	15+	11.6	10.8	12.5	22.2	9.5	10.7	8.5	21.9	22.5
1997	Slovenia	15+	7.1	7	7.3	18.1	5.2	5.2	5.3	20	16.5
1997	Ukraine	15-70	8.9	9.5	8.4	14.3	4.3	3.8	4.8	12.7	16
AUSTRALASIA											
1997	Australia	15+	8.4	8.6	8.1	15.9	6.6	6.3	6.8	14.6	17.2
1997	New Zealand	15+	6.7	6.6	6.7	13	5.1	5.1	5.1	12.9	13.1

Source: ILO. 1999. *Key Indicators of the Labour Market 1999*. (KILM8. Unemployment and KILM9. Youth Unemployment).

Table 3

	(1) Proportion attending school		(2) Proportion is some sort of apprenticeship		(3) Proportion not attending school & not in the labour force		(4) Employment population ratio		(5) Unemploy-ment population ratio	
	1984	1997	1984	1997	1984	1997	1984	1997	1984	1997
Men -18										
Australia	26.4	41.6	18.1	11.9	2.1	3.8	66	53.7	17.2	16.3
Denmark	41.5	51.7	30.6	29.1	1.7	2.3	66.3	70.3	8	9.3
France	54.8	80.7	8.1	8.3	3.2	2.6	27.2	15	15.3	5.2
Germany	37.1	41.1	41.1	45.8	1	3.4	61.8	53	5	2.8
Ireland	41.8	63.5	6.1	2.4	1.3	3.4	43.5	27.1	18.3	8.6
Italy	56.4	68.7	0.4	0	2.9	6.4	30.8	18.9	12.2	8.1
Luxembourg	44	72.1	21.8	6.7	3.1	3.6	50.5	16.3	3.6	5.5
Netherlands	68.1	73	3.3	7.1	4.5	6.3	26.3	56.8	10.6	5.5
United Kingdom	29.2	34.6	15.1	12.4	2.4	11.4	59	61.8	21	12.4
United States	60.9	67.4			1.1	6.8	46.3	43.3	17.9	12.7
OECD unweighted average	48.8	63.6	11.3	11.5	3	4.7	43.8	35.4	13	9.1
Men -22										
Australia	10.2	17.2	7.8	4.3	1.9	4.3	81.3	73.1	12.2	16.7
Denmark	20	33.2	7.8	10.9	3.7	6.7	75.3	66.9	8.4	8.1
France	15	43.1	0.4	2	2.6	3.3	72.6	42.1	14.3	15.6
Germany	23.8	26.1	5.1	9	1.4	4.2	68.3	66.4	8.5	8.4
Ireland	11.9	22.4	1.8	3.1	2.4	4	69.4	60.7	20.1	14.4
Italy	24.5	29.5	0.2	0.2	3.4	9.1	58.7	46	17.3	18.1
Luxembourg	16.8	28.2	1.9	1.3	1	1.7	82.2	65.3	2.9	5.9
Netherlands	39.6	48.5	2.4	3.9	2.8	4.9	58.2	72.7	16	3.6
United Kingdom	14.6	18.2	1.3	3.5	2.3	8.4	76	72.8	15.1	11.5
United States'	25.5	29.6			0.9	5.6	76.1	78.2	12.4	5
OECD unweighted average	21.5	32.7	2.3	2.9	2.8	4.6	67.6	60.6	14.4	12.1
Women -18										
Australia	28.6	51.4	6.5	7.5	6.9	5.5	59.3	50.9	14.6	17.5
Denmark	50.2	78.3	21.3	6.1	3.3	1.7	57.3	54.4	7.1	12.1
France	61	86.5	2.3	3.8	4.4	2.7	16.3	6.3	20.5	5.7
Germany	43.3	49.4	29.6	35.6	2.5	5.5	53.1	39.6	6.6	4.1
Ireland	50.6	77	1.4	1	2.2	3.8	37.1	16.4	18.6	7.9
Italy	54.3	75.3	0.4	0.2	11.9	9	20.5	10.3	16.6	7.2
Luxembourg	45.4	81	7.5	2.1	3.4	1.9	50.3	15.4	3	2.2
Netherlands	65.9	78	0.8	5.3	4.8	4.9	27.4	54	12.8	7.8

	(1) Proportion attending school		(2) Proportion is some sort of apprenticeship		(3) Proportion not attending school & not in the labour force		(4) Employment population ratio		(5) Unemploy-ment population ratio	
United Kingdom	31.5	41.9	4.4	6.1	10.8	16.2	56.4	59.5	14.9	7.2
United States'	56.2	65.7			8.6	11.6	42.5	47.1	17.7	8
OECD unweighted average	50.6	70.6	5.8	6.5	8.1	5.8	36.6	29.9	13.5	9.4
Women -22	1984	1997	1984	1997	1984	1997	1984	1997	1984	1997
Australia	10.8	20.3	3.4	4	20.5	13.5	67.2	67.9	7.7	11.8
Denmark	17.4	38.8	15.3	14	7.5	6.5	73.4	62.7	11.1	11.6
France	16.7	44.3	0.2	1.5	14.4	7.8	59.1	38.5	16.1	17.8
Germany	19.7	23.7	3.4	9.2	12.7	15.2	63.3	59.5	7.2	7.4
Ireland'	7.1	22	0.7	2.4	16	7.6	69	62.5	10.4	8.9
Italy	19.5	39.9	0.2	0.3	22.7	16.5	41.3	30.2	20	18.2
Luxembourg	8.7	24.5	1.3	1.8	13	9.6	78.6	61.5	0.5	3.9
Netherlands	24	48.2	1.1	1.2	14	8.6	64.3	72.6	9.3	4.8
United Kingdom	9.2	18.2	0.8	1.6	26.1	21.4	59.4	63.7	10.1	6.8
United States	19.8	31.7			15.8	19.8	65.5	61.3	11.3	6.9
OECD unweighted average	17.4	35.1	2.1	2.9	18.2	11.2	57.6	53.6	12.4	11.6
Total -18	1984	1997	1984	1997	1984	1997	1984	1997	1984	1997
Australia	27.5	46.4	12.3	9.7	4.5	4.6	62.6	52.3	15.9	16.9
Denmark	45.8	66.1	26	16.6	2.5	2	61.9	61.7	7.5	10.8
France	58	83.5	5.1	6.1	3.8	2.6	21.5	10.8	18	5.4
Germany	40.2	45	35.3	40.9	1.7	4.4	57.4	46.6	5.8	3.4
Ireland'	46.1	69.8	3.8	1.7	1.7	3.6	40.3	22.1	18.4	8.3
Italy	55.3	71.8	0.4	0.1	7.4	7.7	25.6	14.8	14.4	7.6
Luxembourg	44.6	76.7	15	4.3	3.2	2.7	50.4	15.8	3.3	3.9
Netherlands	67	75.6	2	6.2	4.7	5.6	26.9	55.3	11.7	6.7
United Kingdom	30.3	38.2	9.8	9.4	6.6	13.7	57.8	60.7	17.9	9.9
United States	58.6	66.6			4.7	9.2	44.4	45.2	17.8	10.4
OECD unweighted average	49.7	67.1	8.6	8.9	5.6	5.2	40.2	32.6	13.3	9.3
Total -22	1984	1997	1984	1997	1984	1997	1984	1997	1984	1997
Australia	10.5	18.8	5.5	4.1	11.5	8.9	74.1	70.5	9.9	14.3
Denmark	18.7	35.7	11.5	12.3	5.6	6.6	74.3	65	9.7	9.7
France	15.9	43.7	0.3	1.8	9	5.7	65.2	40.2	15.3	16.8
Germany	21.8	24.9	4.3	9.1	7	9.7	65.8	62.9	7.9	7.9
Ireland	9.7	22.2	1.3	2.7	8.8	5.8	69.2	61.6	15.5	11.6
Italy	21.9	34.8	0.2	0.3	13.3	12.9	49.8	38	18.7	18.2
Luxembourg	12.6	26.4	1.6	1.5	7.2	5.5	80.3	63.5	1.7	4.9
Netherlands	31.9	48.3	1.8	2.6	8.4	6.7	61.2	72.6	12.7	4.2
United Kingdom	12	18.2	1.1	2.6	13.9	14.7	67.9	68.4	12.7	9.2
United States	22.5	30.6			8.8	12.6	70.5	69.9	11.8	6
OECD unweighted average	19.4	33.9	2.2	2.8	10.7	7.9	62.4	57.1	13.4	11.8

Source: OECD School to work database.

IX. Notes

- 1 This document is primarily based on Prof. D. Blanchflower's forthcoming paper: *What Can Be Done to Reduce the High Levels of Youth Joblessness in the World?* which will be issued by the ILO in the near future.
- 2 *Statistical Charts and Indicators on the Situation of Youth, 1980-1995*, United Nations, New York, 1998.
- 3 Ibid Table 1, p.9.
- 4 Among the reasons for the low male-female ratios are urbanization even though the majority of youth still live in rural areas, higher mortality among girls, sex preference at birth and migration preferences of young men.
- 5 Source: *The Global Situation of Youth in the 1990s: Trends and Prospects, 1993*, United Nations, New York, Table 3. Notes: persons aged 15-24 as a percentage of persons aged 15-64.
- 6 Source: *United Nations Educational, Scientific and Cultural Organisation, Statistical Yearbook, 1990*, United Nations, Paris, Table 2.11. The proportion in secondary school in Africa grew from 25.6 per cent in 1970 to 47.1 per cent in 1990 and in Asia from 37.5 per cent to 46.6 per cent and in Latin America and the Caribbean from 49.8 per cent to 71.6 per cent respectively for these years.
- 7 Gross enrolment ratios are obtained by dividing the number of students enrolled in post-secondary schools, colleges and universities by the population aged 20-24 years.
- 8 For sub-Saharan Africa, 3.4 per cent; Arab States, 13.1 per cent; Latin America and the Caribbean, 18.0 per cent; East Asia and Oceania, 7.2 per cent; South Asia, 8.2 per cent and for the least developed countries, 3.3 per cent. Source of all of these statistics is UNESCO, *Statistical Yearbook*, Paris, UNESCO, 1995.
- 9 Source: *Report on the World Social Situation, 1997*, United Nations, New York, p.49.
- 10 Many more time series observations are available from 1980 but we present the most recent estimates for simplicity.
- 11 The time series data was analysed for the countries reported in Table 2, for the years 1980-97 (some countries had many fewer observations). The 15-24 year old unemployment rate was regressed on the 25+ unemployment along with (17) year dummies and obtained the following coefficients on the adult unemployment variables. Separate results for Africa are not reported here as there were only 14 data points although they are included in the overall sample.

	Coefficient on 25+ rate	Coefficient on 25+ rate plus country fixed effects	N
All	2.07	1.61	694
OECD	1.91	1.67	393
Asia	2.76	1.83	85
Latin America	2.22	1.76	153
Ex-Communist	2.01	n/a	49
Males	1.95	1.71	687
Females	2.15	1.27	687

When a full set of 85 country dummies are included, to pick up differences in the unemployment benefit system prevailing across countries and other unchanging factors, the estimates, reported in the second column, are somewhat smaller (there are too few years of data to estimate a fixed effects result for the Eastern European countries). Increases in overall unemployment hit the young particularly hard. The two times rule seems to be working here which suggests that solving adult unemployment is the key to solving youth unemployment.

- 12 Blanchflower and Freeman, 1999b.
- 13 Card and Krueger, 1995.
- 14 Berman, Bound and Machin, 1998; Berman and Machin, 1999; Machin and van Reenan, 1998.
- 15 O'Higgins, 1997.
- 16 The OECD was set up under a Convention signed in Paris in 1960. The original members are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States. The following countries became members subsequently through accession at the dates indicated - Japan (1964); Finland (1969); Australia (1971); New Zealand (1973); Mexico (1994); Czech Republic (1995); Hungary (1996); Poland (1996) and Republic of Korea (1996).
- 17 This section draws heavily on Blanchflower and Freeman (1999a).
- 18 Blanchflower and Freeman, 1999; Korenman and Neumark, 1999.
- 19 These countries are: Australia, Belgium, Canada, Denmark, France, Greece, Holland, Italy, Ireland, Luxembourg, Portugal, Spain, UK, US, and West Germany.

- 20 In some cases, schooling was found to be strongly positively related to unemployment (Germany, Holland, Portugal, and Denmark); in other cases, it was negatively related to aggregate unemployment (Italy, Luxembourg, UK, Belgium); while in yet others, schooling and aggregate unemployment had little relations (US, Canada, Spain, Eire, Greece).
- 21 In 1997, 85 per cent of teenagers aged 18 were in full-time education, only 1 per cent in combined education with employment and only 3 per cent were in employment.
- 22 In 1997, 18 per cent of teenagers aged 18 were in full-time education, 30 per cent in combined education with employment and 38 per cent were only in employment.
- 23 Among 18 year olds, in 1984, 61 per cent of US men and 56 per cent of US women were in school, considerably above the OECD averages by gender (48.8 per cent for men, and 50.6 per cent for women). By contrast in 1997, 18 year old men in the US are below the OECD average in the percentage enrolled in school and women in the US are slightly above the OECD average.
- 24 Freeman and Rodgers, 1999, p.2.
- 25 Blanchflower and Oswald, 1994.
- 26 Franz et al. 1999.
- 27 Blanchflower, Jackman and Saint-Paul, 1995.
- 28 Edin and Holmlund, 1999.
- 29 Abowd et al. 1999.
- 30 The hourly earnings of a worker at the 90th percentile in the US relative to a worker at the 10th percentile grew by about 20 percentage points for men and 25 for women from 1979-89 (Freeman and Katz, 1995, p.7).
- 31 In Latin America a number of countries have seen rises in income inequality. These include Argentina, Brazil, Mexico, Panama, Paraguay and Venezuela. However, there has been declining income inequality in Bolivia, Chile, Colombia and Uruguay.
- 32 The countries were Australia, Austria, Ireland, Great Britain, Italy, Netherlands, New Zealand, Northern Ireland, Norway, Switzerland, US and West Germany.
- 33 Swedish relative wages were roughly constant through 1991.
- 34 Card and Krueger (1995) found no harmful effects of the minimum wage on employment in the US, although this was disputed by Neumark and Wascher (1996). Even if the minimum had any impact, it was small. Dolado et al. (1996) found no harmful effects of the minimum wage for the Netherlands, Spain, the UK and France. In contrast, Abowd et al. (1999)

- found that increased minimum wages in France reduced the employment of young, less skilled workers, with an effect concentrated on a narrow band of young workers in the immediately affected parts of the wage distribution.
- 35 Blanchflower and Freeman, 1999b; OECD, 1996.
- 36 Test scores for younger and older workers on OECD international adult literacy survey rejects this explanation save for the US and Ireland. This survey, conducted in 1994, gave adults in several countries the same test of their literacy skill – prose, document and literacy.
- 37 This is the same conclusion reached by Freeman and Wise in their introduction to the Youth Labour Market volume in 1983 - “Aggregate economic activity has been found to be a major determinant of the level of youth employment” (Freeman and Wise - ‘Introduction’, 1983, p.15).
- 38 Oswald, 1999.
- 39 Source: *The World Factbook of Criminal Justice Systems*, US Department of Justice, Bureau of Justice Statistics - downloadable at <http://www.ojp.usdoj.gov/bjs/abstract/wfcj.htm>.
- 40 Freeman, 1999; Gregg and Machin, 1999.
- 41 See Blanchflower and Oswald (1999).
- 42 Source: *Report on the World Social Situation, 1997*, United Nations, New York, p.124.
- 43 Blanchflower and Oswald (1998a). The main data sources are the International Social Survey Programme and the Eurobarometer Surveys, including the six (now eight) East European Eurobarometers. To allow a comparison, the paper analysed Western data from the same sources.
- 44 For an overview of the labour markets in Argentina, Brazil, Chile and Mexico, see OECD (1994) pp.33-51.
- 45 OIT. *Panorama Laboral 1997*.
- 46 Source: *Social Panorama of Latin America, 1997*, Economic Commission for Latin America and the Caribbean, United Nations, Santiago, Chile.
- 47 In the OECD the unemployment rate for those with less than secondary education was 12.3 per cent in 1995, compared with 4.2 per cent for those with tertiary level education. In Greece and the Republic of Korea the numbers were 6.3 per cent and 8.1 per cent and 1.0 per cent and 2.0 per cent respectively. Source: OECD *Employment Outlook, 1998*, p.202.

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- 48 Source: ILO, Latin America and the Caribbean, *Labour Overview 1998*.
- 49 Source: *Statistical Charts and Indicators on the Situation of Youth, 1980-1995*, UN, New York, 1998.
- 50 Source: Tardanico (1997).
- 51 Morley, 1995.
- 52 Source: *Social Panorama of Latin America, 1997*, ECLAC, Santiago, Chile, p.217.
- 53 Castro and Verdisco, 1999.
- 54 ILO, 1998.
- 55 These programmes need to be placed against the backdrop of declining public sector employment in Argentina and Chile. Such cuts began earliest and have been deepest in Argentina in both the military and civilian branches of governments and in Chile, essentially in the civilian branch only. The declines in public sector employment have been much less elsewhere in Latin America (Tardanico and Larin, 1997).
- 56 see Castro, 1999.
- 57 While the realities of these regions are different, the relative paucity of data and long term evaluations of policies and programmes have led to the presentation of the two regions in one single section.
- 58 Chadha, 1998.
- 59 ILO/SAMAT, 1998.
- 60 Statistics South Africa, 1998, p.27.
- 61 Chadha, 1998.
- 62 These studies cover the following countries: Lebanon (Khalaf, 1997); India (Visaria, 1998), Indonesia (Juoro, 1998), Vietnam (Nguyen, 1997), Zimbabwe (Kanyenze, 1997), Tanzania (Mjema, 1997), Cameroon (Mamder, 1997a), Mali (ILO, 1997). The ILO has also commissioned summary papers for Asia (Chadha, G.K., 1998) on Sri Lanka, Philippines, India and Indonesia, and Anglophone Africa (ILO, 1999 on Egypt, Nigeria, South Africa, Uganda, Zambia and Zimbabwe).
- 63 Chadha, 1998.
- 64 ILO/SAMAT, 1999.
- 65 ILO/SAMAT, 1999.
- 66 ILO, 1999a.
- 67 ILO/SAMAT, 1999.
- 68 Chadha, 1997; ILO, 1999a.

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- 69 ILO, 1999a.
- 70 Freeman and Lindauer, 1999, p.6.
- 71 See Blanchflower, 1996, 1999b on wages; Blanchflower, 1999b on union density and Blanchflower and Oswald, 1999b on unemployment; Blanchflower, 1999a on self-employment; Blanchflower and Oswald, 1999a on happiness and life satisfaction; Blanchflower and Oswald, 1999c on job satisfaction.
- 72 “a conceptual framework for empirically summarizing wage differences across persons of different education levels and durations of postschooling experience. His approach has become the standard form for log—linear wage regressions in which the estimated coefficient on completed years of education could, under certain simplifying assumptions, be interpreted as the private rate of return to an additional year of schooling.” T. Paul Schultz: “Integrated Approaches to Human Resource Development” <http://www.world-bank.org/html/extdr/hnp/hddflash/hcwp/hrwp038.html>.
- 73 OECD, 1994; Layard, Nickell and Jackman, 1991; Nickell, 1997; Nickell and Layard, 1999.
- 74 Oswald, 1996, 1997a, 1999; OECD, 1999b.
- 75 Indeed the various union variables included are close to significance but actually have the wrong sign - higher unionization lowers unemployment. The output gap is included to control for the effects of the cycle. The problem here is that the OECD regression is over fitted (i.e. too many variables, too few observations). The model which argues the opposite (Layard, Nickell and Jackman, 1991) has other statistical problems, namely the omitted variable bias.
- 76 These results are in marked contrast to those reported in earlier Employment Outlooks (e.g. OECD, 1993, p.70).
- 77 For OECD Europe, the unemployment rate was 2.7 per cent in 1970, 6.0 per cent in 1980, 6.4 per cent in 1990 and 9.7 per cent in 1998 (Source: *OECD Labour Force Statistics, 1973-1993*; and *Employment Outlook, 1999*).
- 78 Blanchflower, 1996.
- 79 Oswald, 1997a.
- 80 Blanchflower and Oswald, 1994; Freeman and Rodgers, 1999.
- 81 The countries are Austria (unemployment = 3.7 per cent, benefits = 31.0 per cent), Belgium (8.1, 42.3), Denmark (10.8, 51.9), Finland (10.5, 38.8), France (10.4, 37.2), West Germany (5.4, 28.1), Ireland (14.8, 29.3), Italy (8.2, 2.5), Netherlands (7.0, 51.3), Norway (5.5, 38.8), Portugal (5.0, 34.4), Spain (18.9, 33.5), Sweden (4.4, 37.8), Netherlands
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- (2.3, 21.9), UK (8.9, 17.5), Canada (9.8, 27.8), US (6.2, 11.1), Japan (2.3, 9.9), Australia (9.0, 26.5), New Zealand (8.9, 30.4). Source: Oswald (1999).
- 82 Source: OECD. *Employment Outlook, 1999*, Table H.
- 83 The countries are Austria (unemployment = 3.7 per cent, payroll tax rate = 22.6 per cent), Belgium (8.1, 21.5), Denmark (10.8, 51.9), Finland (10.5, 38.8), France (10.4, 37.2), West Germany (5.4, 28.1), Ireland (14.8, 7.1), Italy (8.2, 40.2), Netherlands (7.0, 27.5), Norway (5.5, 17.5), Portugal (5.0, 14.5), Spain (18.9, 33.2), Sweden (4.4, 37.8), Switzerland (2.3, 14.5), UK (8.9, 13.8), Canada (9.8, 13.0), US (6.2, 20.9), Japan (2.3, 16.5) and Australia (9.0, 2.5). Data on payroll taxes in New Zealand were unavailable. Fitting a line through the scatter produces a horizontal slope. The R-squared is less than 0.01. Source: Oswald (1999).
- 84 The countries are Austria (unemployment = 3.7 per cent, unionized proportion = 46.2 per cent), Belgium (8.1, 51.2), Denmark (10.8, 71.4), Finland (10.5, 72.0), France (10.4, 9.8), West Germany (5.4, 32.9), Ireland (14.8, 49.7), Italy (8.2, 38.8), Netherlands (7.0, 25.5), Norway (5.5, 56.0), Portugal (5.0, 31.8), Spain (18.9, 11.0), Sweden (4.4, 82.5), Switzerland (2.3, 26.6), UK (8.9, 39.1), Canada (9.8, 35.8), US (6.2, 15.6), Japan (2.3, 25.4), Australia (9.0, 40.4), New Zealand (8.9, 44.8). Fitting a line through the scatter produces a negative slope. The R-squared is less than 0.01. Source: Oswald (1999).
- 85 We thank Andrew Oswald and Mark Hooker for providing us with the updated oil price data. This updates the annual series used by Carruth, Hooker and Oswald from 1994 to 1998. Unemployment is the standard 16-and-over rate, the real oil price is the producer price index for crude oil divided by the (US) GDP deflator.
- 86 The simple correlation between US unemployment and the four-quarter lagged oil price is 0.72; it steadily declines to 0.64 for the contemporaneous measure.
- 87 *Integrated Approaches to Human Resource Development*, World Bank.
- 88 Maloney and Savage, 1996, p.201.
- 89 Chapple et al. (1996) (p.169, 1996).
- 90 Apparently, there were significant declines in the level of disability benefits paid in the years in the Netherlands since 1993 which arose primarily because of reductions in the numbers of people counted as disabled (Nickell and van Ours, 1999).
- 91 OECD, 1999; Barrell and Genre, 1999.
- 92 Spending on labour programmes as a proportion of GDP rose from 3.22 per cent in 1990 to 4.69 per cent in 1993-94 to

- 4.86 per cent in 1996-97. Spending on unemployment compensation went from 3.22 per cent of GDP in 1990 to 3.82 per cent in 1994 to 3.14 per cent in 1998.
- 93 Barrell and Genre, 1999.
- 94 As a percentage of GDP, spending on labour programmes in Denmark went from 5.66 per cent in 1990 to 7.0 per cent in 1994 to 5.63 per cent in 1998, however, those on unemployment compensation declined from 3.78 per cent in 1994 to 1.86 per cent in 1998.
- 95 Source: *Statistical Yearbook of the Netherlands*, Statistics Netherlands.
- 96 Source: OECD. *Employment Outlook, 1997*, Table 3.3, p.71
- 97 Card and Krueger, 1995.
- 98 Dolado et al. 1996.
- 99 The countries they examine are Ghana, Mauritius, Morocco, Tunisia, India, Indonesia, Philippines, Sri Lanka, Thailand, Argentina, Bolivia, Brazil, Colombia, Costa Rica, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Uruguay and Venezuela.
- 100 Blanchflower and Oswald, 1998b.
- 101 See for example, Blanchflower and Oswald, 1998b; Evans and Jovanovic, 1989; Evans and Leighton, 1989; Holtz-Eakin, Joulfaian and Rosen, 1995; Black et al. 1996; Lindh and Ohlsson, 1994.
- 102 Fairlie, 1999; Blanchflower, Levine and Zimmerman, 1998.
- 103 for example, Todd (1996) and Counts (1996).
- 104 Yaron, 1994.
- 105 see Forslund and Krueger, 1995
- 106 Bloom et al. 1999. Recent work by Heckman and Smith (1999b) re-examined these results. They found that the estimates of the returns to training were sensitive to: a) the set of training centres included in the evaluation; b) how outliers in the earnings data are handled; c) the construction of the earnings data; d) control group substitution; and e) treatment group dropping out. Even after these adjustments, they conclude that their results for youth “fit comfortably into the pattern of several decades of research that finds very limited earnings effects for the types of services offered by JTPA”.
- 107 The wage outcomes for adult women are generally significant and large: for men they are often smaller and less consistently positive. See Heckman, LaLonde and Smith, 1999, section 10.4.
- 108 Cameron and Heckman, 1993.

- 109 Marrar et al. 1982.
- 110 Heckman, LaLonde and Smith, 1999.
- 111 Heckman, 1999, p.102.
- 112 Heckman and Smith, 1999.
- 113 e.g. O'Higgins, 1994 and Main and Shelley, 1990.
- 114 Dolton et al. 1994
- 115 Heckman, 1999, p.105.
- 116 Heckman, 1999.
- 117 The countries covered are Albania, Bulgaria, Côte d'Ivoire, Ecuador, Ghana, Guyana, Jamaica, Kazakhstan, Kyrgyz, Nepal, Nicaragua, Panama, Pakistan, Peru, Romania, Russia, South Africa, United Republic of Tanzania, Vietnam. For details see <http://www.worldbank.org/lsm/guide/select.html>.
- 118 The following countries are members of the ISSP – Australia; Austria; Bangladesh; Bulgaria; Canada; Chile; Cyprus; Czech Republic; France; Germany; Great Britain; Hungary; Ireland; Israel; Italy; Japan; Latvia; Netherlands; New Zealand; Norway; Philippines; Poland; Portugal; Russia; Slovakia; Slovenia; South Africa; Spain; Switzerland; Sweden; US; and Venezuela. For details see <http://www.issp.org>.

References

- Abowd, J.; Kramarz, F.; Lemieux, T.; Margolis, D.N. (1999): “Minimum wages and youth employment in France and the United States”, in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Amadeo, E.J.; Camargo, J.M. (1997): “Brazil, regulation and flexibility in the labour market”, in *Labour markets in Latin America*, Sebastian Edwards and Nora C. Lustig eds. (Washington, DC, Brookings Institution Press).
- Antolin, P.; Bover, O. (1997): “Regional migration in Spain: The effect of personal characteristics and of unemployment, wage, and house-price differentials using pooled cross-sections”, in *Oxford Bulletin of Economics and Statistics*, 59(2), pp. 215-236.
- Auspos, P.; Riccio, J.; White, M. (1999): *A review of US and European literature on the microeconomic effects of labour market programmes for young people*, Research and Development Report, ESR20 (Sheffield, UK. Employment Service).
- Barrell, R.; Genre, V. (1999): “Employment strategies for Europe: Lessons from Denmark and the Netherlands”, in *National Institute Economic Review*, April, pp. 82-98.
- Barros, R.P.; Mendonca, R. (1994): *Flexibilidade do mercado de trabalho Brasileiro: Uma avaliação empírica*, unpublished paper (Rio de Janeiro, IPEA).
- Bassi, L.(1984): “Estimating the effects of training programmes with non-random selection”, in *Review of Economics and Statistics*, 66(1), pp. 36-43.
- Begg, I.G.; Blake, A.P.; Deakin, B.M. (1991): “YTS and the labour market”, in *British Journal of Industrial Relations*, 29, pp. 223-236.
- Bentolila, S.; Dolado, J.J (1991): “Mismatch and internal migration in Spain”, in *Mismatch and labour mobility*, Fiorella Padoa Schioppa ed. (Cambridge, UK, Cambridge University Press).
- Bentolila, S. (1997): “Sticky labour in Spanish regions”, in *European Economic Review*, 41, pp. 591-598.
- Berman, E.; Machin, S. (1999): *Evidence on the factor bias of technological change in developing and developed countries*, mimeo, July.
- ___; Bound, J.; ___. (1998): “Implications of skill-biased technological change”, in *Quarterly Journal of Economics*, 113(4), pp. 1245-1280.
- Black, J.; De Meza, D.; Jeffrey, D. (1996): “House prices, the supply of collateral, and the enterprise economy”, in *Economic Journal*, 106, January 60-75.

- Blanchard, O and ten co-authors (1995): *Spanish unemployment: is there a solution?* (London, Centre for Economic Policy Research).
- ___; Wolfers, J. (1999): *The role of shocks and institutions in the rise of European unemployment: The aggregate evidence* (NBER Working Paper No. 7282).
- Blanchflower, D.G (1996): *The role and influence of trade unions in the OECD* (London School of Economics, UK, Centre for Economic Performance Discussion Paper No. 310).
- ___ (1999a): *Self-employment in OECD countries* (Dartmouth College, Working Paper).
- ___ (1999b): "Youth labour markets in twenty-three countries: A comparison using micro data", in *International perspectives on the school-to-work transitions*, David Stern and Daniel A. Wagner eds. (Cresskill, NJ, Hampton Press Series on Literacy: Research, Policy and Practice).
- ___; Freeman, R.B. (1992): "Going different ways: Unionism in the US and other OECD countries", in *Industrial Relations*, Winter 1992, pp. 56-79, reprinted in *Labour market institutions and the future role of unions*, M. Bognanno and M. Kleiner, eds. Blackwell.
- ___; ___ (1994): "Did the Thatcher reforms change British labour market performance?", in *The UK labour market. Comparative aspects and institutional developments*, R. Barrell ed. (Cambridge University Press).
- ___; ___ (1996) : "Growing into work", in *Employment Outlook* (Paris, OECD).
- ___; ___ (1998): "The legacy of communist labour relations", in *Industrial and Labour Relations Review*, 50, 438-459.
- ___; ___ eds. (1999a): "Introduction", in *Youth employment and joblessness in advanced countries* (Chicago, Illinois, University of Chicago Press and NBER).
- ___; ___ eds. (1999b): "The declining economic status of young workers in OECD countries", in *Youth employment and joblessness in advanced countries* (Chicago, Illinois, University of Chicago Press and NBER).
- ___; Jackman, R.; Saint-Paul, G. (1995): *Some reflections on Swedish labour market policy*, Swedish Government Official Reports No. 39 (Stockholm, Sweden, Ministry of Labour).
- ___; Levine, P.B.; Zimmerman, D.J. (1998): *Discrimination in the small business credit market* (Cambridge, Massachusetts, NBER Working Paper No. 6840).
- ___; Oswald, A.J. (1994): *The wage curve* (Cambridge, MA, MIT Press).
- ___; ___ (1998a): *Entrepreneurship and the youth labour market problem: A report for the OECD* (New Haven, Hanover, Dartmouth College).

-
- ___; ___ (1998b): "What makes an entrepreneur?", in *Journal of Labour Economics*, 16 January, pp. 26-60.
- ___; ___ (1999a): "The rising well-being of the young", in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- ___; ___ (1999b): *Study of youth labour markets and unemployment in Eastern Europe* (New Haven, Hanover, Dartmouth College).
- ___; ___ (1999c): "*Well-being, insecurity and the decline of American job satisfaction*" (New Haven, Hanover, Dartmouth College).
- Bloom, H.; Orr, L.; Cave, G.; Bell, S.; Doolittle, F. (1993): The National JTPA Study: Title "*ILA impacts on earnings and employment*" (Bethesda, MD, Abt Associates).
- Cameron, S.; Heckman, J.J. (1993): "The non-equivalence of High School Equivalents", in *Journal of Labour Economics*, 11(1) January, pp. 1-47.
- Canziani, P. (1997): *The wage curve in Italy and Spain. Are European wages flexible?* (London School of Economics, Centre for Economic Performance, Discussion Paper No.375).
- Card, D.; Krueger, A.B (1995): *Myth and measurement. The new economics of the minimum wage* (Princeton, NJ, Princeton University Press).
- ___; Lemieux, T. (1999): "Adapting to circumstances: The evolution of work, school, and living arrangements among North American youth", in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Carruth, A.A.; Hooker, M.A.; Oswald, A.J.(1995): "Unemployment, oil prices, and the real interest rate: Evidence from Canada and the U.K.", in Louis N. Christofides, E. Kenneth Grant and Robert Swidinsky eds., *Aspects of labour market behaviour: Essays in honour of John Vunderkamp*, (Toronto, University of Toronto Press).
- ___; ___; ___ (1995) "Unemployment equilibria and input prices: Theory and evidence for the United States", in *Review of Economics and Statistics*, 80(4), pp. 621-628, November.
- Castillo-Freeman, A.; Freeman, R.B. (1992): "When the minimum wage really bites: The effect of the US-level minimum wage on Puerto Rico", in *Immigration and the workforce*, George Borjas and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Castro C.M. (1999): *Proyecto Joven: New solutions and some surprises*, Working Paper.
- ___; Verdisco, A. (1999): *Training unemployed youth in Latin America: Same old story* (Washington, D.C. Inter-American Development Bank).
-

- Cave, G.; Doolittle, F. (1991): *Assessing Jobstart: Interim impacts of a programme for school dropouts* (New York, NY, Manpower Demonstration Research Corporation).
- Chadha, G.K. (1998): *Youth unemployment and marginalisation in Asia: Level, nature and policy approaches* (New Delhi, India, School of Social Sciences, Jawaharlal Nehru University).
- Chaloupka, F.J.; Grossman, M.; Tauras, J.A. (1999): "The demand for cocaine and marijuana by youth", in *The economic analysis of substance use and abuse*, F.J Chaloupka, M. Grossman, W.F. Bickel and H. Saffer eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Chapple, S.; Harris, R.; Silverstone, B. (1996): "Unemployment", in *A study of economic reform: The case of New Zealand*, B. Silverstone, A. Bollard and R. Lattimore eds. (Elsevier Science, BV).
- Choi, K.S., (1993): *Technical change and educational wage differential in Republic of Korea* (New Haven, CT, Yale University, Economic Growth Center, Discussion Paper No. 699)
- Clark, K.; Summers, L. (1979): "The dynamics of youth unemployment", in *The youth labour market problem: Causes and consequences*, Richard B. Freeman and David A. Wise eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Counts, A. (1996): *Give us credit: How Muhammad Yunus's micro-lending revolution is empowering women from Bangladesh to Chicago* (New York, Times Books).
- Deininger, K.; Squire, L. (1996): "A new data set measuring income inequality", in *World Bank Economic Review*, 10, pp. 565-591.
- Dolton, P.; Makepeace, G.; Treble, J. (1994): "The youth training scheme and the school-to-work transition", in *Oxford Economic Papers*, 46, pp. 629-657.
- Dickens, W. T.; Lang, K. (1995), "An analysis of the nature of unemployment in Sri Lanka", in *Journal of Development Studies*; vol. 31(4), April, pp. 620-36.
- Dolado, J.; Kramarz, F.; Machin, S.; Manning, A.; Margolis, D.; Teulings, C. (1996): "Minimum wages: The European experience", in *Economic Policy*, vol. 23, pp. 317-372.
- Donohue, J.; Siegelman (1998): "Allocating resources among prisons and social programmes September 20, 1999 in the battle against crime", in *Journal of Legal Studies*, vol. 27(1), pp. 1-43.
- Edin, P.A.; Holmlund, B. (1999): "The Swedish youth labour market in boom and depression", in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Ellwood, D.T. (1982): "Teenage unemployment: Permanent scars or temporary blemishes", in *The youth labour market problem: Causes*

- and consequences*, Richard B. Freeman and David A. Wise eds. (Chicago, Illinois, University of Chicago Press and NBER).
- EUROSTAT (1997): *Youth in the European Union. From education to working life* (Luxembourg, March).
- : “From school-to-working life: Facts on youth unemployment”, in *Statistics in focus, population and social conditions*, No. 13 (Luxembourg).
- Evans, D.; Jovanovic, B.: “An estimated model of entrepreneurial choice under liquidity constraints”, in *Journal of Political Economy*, Vol. 97, 1989, pp. 808-927.
- ; Leighton, L. (1989): “Some empirical aspects of entrepreneurship”, in *American Economic Review*, vol. 79, pp. 519-535.
- Fairlie, R.W. (1999): “The absence of the African-American owned business: An analysis of the dynamics of self-employment”, in *Journal of Labour Economics*, January.
- Feliciano, Z. M. (1998): “Does the minimum wage affect employment in Mexico?”, in *Eastern Economic Journal*; vol. 24(2) Spring, pp. 165-80.
- Forslund, A. and A.B. Krueger (1997): “An evaluation of the Swedish active labour market policy: New and received wisdom”, in *The welfare state in transition: Reforming the Swedish model*, R. B. Freeman, R. Topel, and B. Swedenborg eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Franz, W.; Inkmann, J.; Pohlmeier, W.; Zimmermann, V. (1999): “Young and out in Germany: On the youth’s chances of labour market entrance in Germany”, in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Freeman, R.B. (1996): “Why do so many young American men commit crimes and what might be done about it?”, in *Journal of Economic Perspectives*, vol. 10(1), pp. 25-42, Winter.
- . (1999): “Disadvantaged young men and crime”, in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- ; Holzer, H.J. (1986): *The black youth employment crisis* (Chicago, Illinois, University of Chicago Press and NBER).
- ; Lindauer, D.L. (1999): *Why not Africa* (Cambridge, MA, NBER Working Paper No. 6942)
- ; Rodgers, W.M (1999): *Area economic conditions and the labour market outcomes of young men in the 1990s expansion* (Cambridge, MA, NBER Working Paper No. 7073)

- ; Wise, D. (1982): *The youth labour market problem: Causes and consequences* (Chicago, Illinois, University of Chicago Press and NBER).
- Gill, I. (1989): *Technological change, education, and obsolescence of human capital*, Economics Ph.D. Dissertation, University of Chicago.
- Gill, I.S.; Khandker, S.R. (1991): *How structure of production determines the demand for human capital* (Washington, DC, The World Bank, PHRD Working Paper WPS No. 725).
- Galiani, S. (1999): *Wage determination in Argentina: An econometric analysis with methodology discussion* (Wolfson College, Oxford University).
- Ghelab, Y. (1998): *Minimum wages and youth unemployment* (Geneva, ILO, Employment and Training Department, Employment and Training Papers No. 7).
- Godley, A. (1996): “Jewish soft loan societies in New York and London and immigrant entrepreneurship, 1880-1914”, in *Business History*, Vol. 38(3), July, pp. 101-116.
- Gonzalez J.R.; Puebla, J.M.A. (1996): “Spain: return to the South, metropolitan deconcentration and new migration flows”, in *Population migration in the European Union*, P. Rees, J. Stillwell, A. Convey and M. Kupiszewski and John Wiley eds. (Chichester, England).
- Govt. of India (1999): *Economic survey of India 1998-98*, Ministry of Finance, February.
- Green, F.; Hoskings, M.; Montgomery, S. (1996): “The effects of company training, further education and the youth training scheme on the earnings of young employees”, in *Oxford Bulletin of Economics and Statistics*, 58, pp. 469-488.
- Gregg, P.; Machin, S. (1999): “Child development and success or failure in the youth labour market”, in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Harrison, A. (1995): *Openness and growth: A time series cross-section analysis for developing countries* (Cambridge, MA, NBER Working Paper No. 5221).
- Heckman, J.J. (1993): *Assessing Clinton’s programme on job training, workfare, and education in the workplace* (Cambridge, MA, NBER Working Paper No. 4428).
- Heckman, J.J. (1999): “Doing it right: Job training and education”, in *The Public Interest*, Spring, pp. 86-107
- ; Smith, J.A.(1999a): “The pre-program earnings dip and the determinants of participation in a social programme. Implications for simple evaluation strategies”, in *Economic Journal*, July, 109, pp. 313-348.

- ; —. (1999b): “The sensitivity of experimental impact estimates: Evidence from the national JTPA study”, in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER).
- ; LaLonde, R.; Smith, J.A. (1996): “Experimental and nonexperimental evaluation”, in *International handbook of labour market policy evaluation*, Gunter Schmid, Jacqueline O’Reilly and Klaus Schonmann, Edward Elgar eds. (London).
- ; —; —. (1999): “The economics and econometrics of active labour market policies”, in *Handbook of labour economics*, David Card and Orley Ashenfelter, North-Holland eds. (Amsterdam).
- Hoddinott, J. (1996): “Wages and unemployment in an urban African labour market”, in *Economic Journal*, 106, 1610-1626.
- Hollister, R.; Kemper, P.; Maynard, R. eds. (1984): *The national supported work demonstration*, (Madison, WI, The University of Wisconsin Press).
- Holtz-Eakin, D.; Joulfaian, D.; Rosen, H.S. (1994): “Entrepreneurial decisions and liquidity constraints”, in *Rand Journal of Economics*, 25 (Summer), 334-347.
- Hunt, J. (1999): *Post-unification wage growth in East Germany* (Cambridge, MA, NBER Working Paper No. 6878).
- ILO (1995): *World Employment Report* (Geneva)
- ILO (1998): *Youth and employment*, Report prepared by the ILO, World Conference of Ministers Responsible for Youth, Lisbon, Portugal, 8-12 August.
- ILO (1999a): *Strategies to combat youth unemployment and marginalisation in Anglophone Africa*, unpublished (ILO/SAMAT, May).
- ILO (1999b): *Strategies to combat youth unemployment and marginalisation in Mali* (ILO/SAMAT, May).
- Jacinto, C.; Gallart, M.A. (1997): *La evaluación de programas de capacitación de jóvenes desfavorecidos*. Informe de consultoría realizado para el Instituto Internacional de Planeamiento Educativo (Buenos Aires, IPE/UNESCO.CENEP, November).
- Jimeno, J.F.; Bentolila, S. (1998): “Regional Unemployment Persistence” (Spain, 1976-1994), in *Labour Economics*, 5(1), pp. 25-52.
- Jouro, U. (1998): *Youth unemployment in Indonesia: Causes and action programme* (Geneva, ILO).
- Kanyenze, G. (1997): *Youth unemployment in Zimbabwe* (Geneva, ILO).
- Katz, L.F.; Freeman, R.B. eds. (1995): “Introduction and summary”, in *Differences and changes in wage structures* (Chicago, Illinois, University of Chicago Press and NBER).

- ; Loveman, G.W.; Blanchflower, D.G.(1995): “A comparison of changes in the structure of wages in four OECD countries”, in *Differences and Changes in Wage Structures*, R.B. Freeman and L.F. Katz eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Keune, M. (1998): *Youth unemployment in Hungary and Poland*, (Geneva, ILO, Employment and Training Papers No. 20, Action Programme on Youth Unemployment).
- Khalaf, M. (1997): *Youth unemployment in Lebanon* (Geneva, ILO).
- Kingdon, G.; Knight, J. (1998): *Unemployment and wages in South Africa: A spatial approach* (mimeo, CSAE, Institute of Economics and Statistics, Oxford University).
- Kollo, J. (1998): “Three stages in Hungary’s labour market transition”, in *Models of transition*, Simon Commander ed.
- Korenman, S.; Neumark, D. (1999): “Cohort crowding and youth labour markets: a cross-national analysis”, in *Youth employment and joblessness in advanced countries*, David G. Blanchflower and Richard B. Freeman eds. (Chicago, Illinois, University of Chicago Press and NBER,).
- Krueger, A.B.; Lindahl, M. (1998): *Education for growth: Why and for whom?* (Princeton, NJ).
- ; Pischke, J.S. (1995): “A comparative analysis of East and West German labour markets: Before and after unification”, in *Differences and changes in wage structures*, R.B. Freeman and L.F. Katz eds. (Chicago, Illinois, University of Chicago Press and NBER).
- Langan, P.A.; Farrington, D.P. (1998): *Crime and justice in the United States and in England and Wales, 1981-1996* (Bureau of Justice Statistics, US Department of Justice).
- Layard, P.R.G.; Nickell, S.; Jackman R.(1991): *Unemployment: Macroeconomic performance and the labour market* (Oxford University Press).
- Lindh, T.; Ohlsson, H. (1994): “Self-employment and self-financing”, in *Economic Journal*, 106 (November), pp. 1515--26.
- Lustig, N.C.; Mcleod, D. (1997): “Minimum wages and poverty in developing countries: Some empirical evidence”, in *Labour markets in Latin America: Combining social protection with market flexibility*, S. Edwards, S. and N. C. Lustig eds. (Washington, DC, Brookings Institution Press).
- Lynch, L.M. (1994): *Training in the private sector: International comparisons* (Chicago, University of Chicago Press and NBER).
- Machin, S.; Van Reenen, J. (1998): “Technology and changes in skill structure: Evidence from seven OECD countries”, in *Quarterly Journal of Economics*, 113(4), pp. 1215-1244.

- Main B.G.; Shelley, M.A. (1990): "The effectiveness of the youth training scheme as a manpower policy", in *Economica*, 57, pp. 485-514.
- Maloney, T. (1997): *Benefit reform and labour market behaviour in New Zealand* (Wellington, NZ, Institute of Policy Studies, Victoria University).
- _____. (1998): *Five years after: The New Zealand labour market and the employment contracts Act* (Wellington, NZ, Institute of Policy Studies, Victoria University).
- _____; Savage, J.; (1996): "Labour markets and policy", in *A study of economic reform: The case of New Zealand*, B. Silverstone, A. Bollard and R. Lattimore eds. (Elsevier Science, BV).
- Mamder, J.S. (1997a): *Strategies against youth unemployment and marginalization in Cameroon*, unpublished (Geneva, ILO, Development Policies Department).
- _____. (1997b): *The case of Côte d'Ivoire. The strategy against youth unemployment and marginalization* (Geneva, ILO, Development Policies Department).
- Marrar, C.; Kerachsky, S.; Thornton, C.; Long, D. (1982): *Evaluation of the economic impact of the Job Corps Programme: Third follow-up report* (Princeton, Mathematica Policy Research).
- Messina, G. (1995): "Education and training for the informal sector. Chile", in Leach, F. (ed.) *Education and training for the informal sector*, vol. 2 (London, Overseas Development Administration)
- Mincer, J.; Higuchi, Y. (1988): "Wage structures and labour turnover in the United States and Japan", in *Journal of Japanese and International Economics*, 2 (June) pp. 99-133.
- MSYCD. 1996. *Report of Workshop on the National Programme of Action for Youth in Zambia* (Pamodzi Hotel, Lusaka, 29th February-2nd March, 1996). Lusaka: Ministry of Sport, Youth and Child Development. March.
- Mjema, G.D. (1997): *Youth unemployment in the United Republic of Tanzania: Nature, extent and proposals to deal with the problem* (Geneva, ILO).
- Moll, P. G. (1993): "Black South African Unions: Relative wage effects in international perspective", in *Industrial and Labour Relations Review*; vol. 46(2), January.
- Morley, S.A. (1995): *Poverty and inequality in Latin America. The impact of adjustment and recovery in the 1980s* (Baltimore, Johns Hopkins University Press).
- Neumark, D; Wascher W. (1996): "Reconciling the evidence on employment effects of minimum wages: A review of our research findings", in *The effects of minimum wages on employment*, Marvin Koster ed. (Washington, DC, American Enterprise Institute).

- ___; Wascher, W. (1999): *A cross-national analysis of the effects of minimum wages on youth employment* (Cambridge, MA, NBER Working Paper No. 7299).
- Nickell, S.J. (1997): "Unemployment and labour market rigidities, Europe versus North America", in *Journal of Economic Perspectives*, 11, Summer, pp. 55-74.
- ___; Layard, R. (1999), "Labour market institutions and economic performance", in *The Handbook of Labour Economics*, O. Ashenfelter and D. Card eds. (North Holland).
- ___; Van Ours, J. (1999): *The Netherlands and the United Kingdom: A European unemployment miracle?* (London School of Economics, UK, Working Paper).
- Nguyen, D.T. (1997): *Youth unemployment in Vietnam* (Geneva, ILO).
- OECD (1978): *Youth unemployment: A report on the High Level Conference, 15-16 December 1977*, (Paris).
- ___ (1984): *The nature of youth unemployment* (Paris).
- ___ (1993): *Employment outlook* (Paris).
- ___ (1994): *Employment outlook* (Paris).
- ___ (1994): *The OECD jobs study: Evidence and explanations* (Paris).
- ___ (1997a): *Literacy skills for the knowledge society* (Paris).
- ___ (1997b): *Employment outlook* (Paris).
- ___ (1998): "Getting started, settling in; The transition from education to the labour market", in *Employment Outlook* (Paris).
- ___ (1999a): "Preparing youth for the 21st Century: The policy lessons from the past two decades", background paper for Conference organized by the OECD and the US Departments of Labour and Education, Washington DC, 23-24th February, 1999.
- ___ (1999b): *Employment Outlook* (Paris).
- O'Higgins, N. (1994): "YTS, employment and sample selection bias", in *Oxford Economic Papers*, 46, pp. 605-628.
- ___ (1997): "The challenge of youth unemployment" (Geneva, ILO, Employment and Training Papers No. 7, *Action Programme on Youth Unemployment*).
- Oswald, A.J. (1996): *A conjecture on the explanation for high unemployment in the industrialized nations*; Part 1 (University of Warwick, Department of Economics, November).
- ___ (1997a): *The missing piece of the unemployment puzzle*, Inaugural Lecture (University of Warwick, Department of Economics, November).
- ___ (1997b): "Happiness and economic performance", in *Economic Journal*, 107, pp. 1815-1831.

- _____. (1999): *The housing market and Europe's unemployment: A non-technical paper* (Warwick University, May).
- Pritchett, L. (1997): *Where has all the education gone?* (Washington, DC, World Bank, Policy Research Working paper No. 1581, Policy Research Department).
- Reynolds, L.; Gregory, P. (1965): *Wages, productivity and industrialization in Puerto Rico* (Homewood, Illinois, Richard D. Irwin Inc.).
- Rodgers, V.D.M.; Y. Nataraj, (1998): *Labor market flexibility in East Asia: Lessons from Taiwan* Working paper.
- Sachs, J.D.; Warner, A.M. (1995): "Economic reform and the process of global integration", in *Brookings Papers on Economic Activity* 1, pp. 1-118.
- Schultz, T. P. and G. Mwabu (1998): "Labor Unions and the distribution of wages and employment in South Africa", in *Industrial and Labour Relations Review*; 51(4), July, pp. 680-703.
- Schultz, T. P. *Integrated approaches to human resource development* <http://www.worldbank.org/html/extdr/hnp/hddflash/hcwp/hrwp038.html>
- Tardanico, R. (1997): "From crisis to restructuring: Latin American transformations and urban employment in world perspective", in *Global restructuring, employment, and social inequality in urban Latin America*, R. Tardanico and R.M. Larin eds. (Florida, University of Miami, North-South Center Press).
- _____; Larin, R.M. (1997): "Restructuring, employment, and social inequality: Comparative urban Latin American patterns", in *Global restructuring, employment, and social inequality in urban Latin America*, R. Tardanico and R.M. Larin eds. (Florida, University of Miami, North-South Center Press).
- Todd, H. (1996): *Women at the center. Grameen Bank borrowers after one decade* (Boulder, Colorado, Westview Press).
- Topel, R.H. (1999): "Labor markets and economic growth", in *Handbook of labor economics*, David Card and Orley Ashenfelter eds. (Amsterdam, North-Holland).
- Visaria, P. (1998): "Unemployment among youth in India: Level, nature and policy implications" (Geneva, ILO, Employment and Training Papers No. 36, *Action Programme on Youth Unemployment*).
- Winkelmann, R.; Winkelmann, L. (1998): "Why are the unemployed so unhappy? Evidence from panel data", in *Economica*, vol. 65, no. 257, pp. 1-15.
- Yaron, J. (1994): "What makes rural finance institutions successful?", in *The World Bank Research Observer*, 9(1), January, pp. 49-70.

