

Please cite this paper as:

Quintini, G. and S. Martin (2014), "Same Same but Different: School-to-work Transitions in Emerging and Advanced Economies", *OECD Social, Employment and Migration Working Papers*, No. 154, OECD Publishing.  
<http://dx.doi.org/10.1787/5jzbb2t1rcwc-en>



OECD Social, Employment and Migration  
Working Papers No. 154

# Same Same but Different: School-to-work Transitions in Emerging and Advanced Economies

Glenda Quintini, Sébastien Martin

JEL Classification: I28, J08, J21, J38, J41

**DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS  
EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS COMMITTEE**

**OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS No. 154**

**SAME SAME BUT DIFFERENT:  
SCHOOL-TO-WORK TRANSITIONS IN EMERGING AND ADVANCED ECONOMIES**

**Glenda Quintini and Sébastien Martin**

*JEL Codes: J08, J21, J38, J41, J46, I28*

For further information please contact Glenda Quintini (Glenda.Quintini@oecd.org) +31 1 45 24 91 94). All Social, Employment and Migration Working Papers are available on [www.oecd.org/els/workingpapers](http://www.oecd.org/els/workingpapers)

**JT03351571**

Complete document available on OLIS in its original format

*This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.*

**DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS**

[www.oecd.org/els](http://www.oecd.org/els)

**OECD SOCIAL, EMPLOYMENT AND MIGRATION  
WORKING PAPERS**

[www.oecd.org/els/workingpapers](http://www.oecd.org/els/workingpapers)

This series is designed to make available to a wider readership selected labour market, social policy and migration studies prepared for use within the OECD. Authorship is usually collective, but principal writers are named. The papers are generally available only in their original language – English or French – with a summary in the other.

Comment on the series is welcome, and should be sent to the Directorate for Employment, Labour and Social Affairs, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France.

The opinions expressed and arguments employed here are the responsibility of the author(s) and do not necessarily reflect those of the OECD.

**Applications for permission to reproduce or translate  
all or part of this material should be made to:**

**Head of Publications Service  
OECD  
2, rue André-Pascal  
75775 Paris, CEDEX 16  
France**

**COPYRIGHT OECD 2010**

## ACKNOWLEDGEMENTS

Glenda Quintini is senior economist in the Employment Analysis and Policy Division of the Directorate for Employment, Labour and Social Affairs at OECD. Sébastien Martin is a statistician in the same unit.

This paper builds on a series of papers prepared to support the G20 Task Force on Youth Employment. As such, it has benefited from valuable comments, suggestions and advice from John P. Martin, Stefano Scarpetta and Mark Keese. The authors also wish to thank Stijn Broecke, Michele Pellizzari, Agnès Puyoyen and Theodora Xenogiani for help on specific issues and data. The views expressed in this paper are those of the authors, and do not necessarily reflect those of the OECD or of its member countries.

## EXECUTIVE SUMMARY

Improving school-to-work transitions and ensuring better career opportunities for youth after labour market entrance are common goals in emerging and advanced economies as they can contribute to raising the productive potential of the economy and to increasing social cohesion. However, the challenges faced in achieving these objectives and the policies required vary between emerging and advanced economies. This paper analyses youth labour market outcomes in 16 countries: eight emerging countries and eight advanced economies. In light of this analysis, it also discusses differences and similarities in the policy measures countries have at their disposal to tackle the key emerging challenges.

The paper finds that youth in emerging countries are less likely to be employed and more likely to be NEET – neither in employment nor in education and training – than their counterparts in advanced economies. They also tend to leave education earlier and have longer transitions to work, characterized by a higher incidence of NEET and informal employment. In addition, child labour remains common in some emerging countries, with deleterious effects on school achievement.

The paper looks at policy measures on both the education and labour market front to tackle the challenges facing youth leaving school and entering the world of work, highlight the differences and similarities between the two groups of countries. In terms of educational attainment, while advanced economies are focusing on school retention until high school completion, emerging economies need to act on lower secondary schooling – through better learning inputs and more equality of access – before they can turn to upper secondary education. In addition, while all countries are looking at work-based learning to help engage youth who are at-risk of leaving school too early and without qualifications, the challenges in this area are bigger for emerging countries where few youth attend vocational schools and even fewer have access to apprenticeship training. Finally, over-qualification is a particularly daunting challenge in emerging countries where, in addition to better career guidance and high-quality labour market information and projections, innovation policy is needed to increase the responsiveness of labour demand to the availability of a better educated workforce.

On the labour market side, differences are even more marked. While advanced economies are thinking of more and more sophisticated ways of providing individualised re-employment support to youth entitled to unemployment benefits, emerging economies often need to start from scratch. Some emerging countries covered in this paper do not have an unemployment insurance system while, in several others, the system exists but provides only limited support during non-employment spells. In addition, some emerging countries lack the institutional features required to run cost-effective activation programmes – notably, effective public employment services, employers' co-operation and good performance measurement systems for programme evaluation. In both sets of countries, high labour costs and stringent employment protection regulation are likely to discourage employers from hiring youth in stable entry jobs. However, the consequences, differ across countries, raising the incidence of temporary work in advanced economies while contributing to the growth of informality in emerging economies.

Of course, the 16 countries covered cannot always be easily classified into two homogeneous groups and country-specific characteristics need to be taken into account in policy design. This is particularly the case when it comes to employment protection regulation, labour costs and minimum wages where no clear distinction between emerging and advanced economies emerges. In addition, to be effective in improving school-to-work transitions, the policy measures analysed in this paper, need to be seen as a package rather

than in isolation. This requires further in-depth analysis of the barriers that youth face in individual countries and rigorous evaluation of existing youth programmes to ensure that limited resources are put to their best use. Finally, these measures also need to be part of wider policies to promote stronger, sustainable economic growth which will create more and better job opportunities for people at all ages.

## RÉSUMÉ

Améliorer les transitions de l'école à l'emploi et assurer aux jeunes des meilleures opportunités professionnelles après l'entrée sur le marché du travail sont des buts partagés par les pays développés et émergents car ils peuvent contribuer à augmenter le potentiel productif de l'économie et à accroître la cohésion sociale. Toutefois, les défis auxquels les pays sont confrontés pour atteindre ces objectifs et les politiques requises varient entre les pays émergents et les économies plus avancées. Ce document analyse la réussite des jeunes sur le marché du travail dans 16 pays : huit pays émergents et huit économies avancées. En vue de cette analyse, ce document expose les différences et similarités dans les mesures de politique économique que les pays ont à leur disposition pour faire face aux défis émergents.

Le document montre que les jeunes dans les pays émergents ont une probabilité plus faible d'être dans l'emploi mais une probabilité plus élevée d'être NEET – ni dans l'emploi, ni dans la formation ou à l'école – que dans les économies avancées. De même, ils quittent le système éducatif plus tôt et prennent plus de temps à trouver une position stable dans le marché du travail, avec une transition caractérisée par une incidence plus élevée de NEET et d'emploi informel. De plus, le travail des enfants reste courant dans certains pays émergents, avec des effets préjudiciables à la réussite scolaire.

Les politiques d'éducation et de l'emploi mises en places dans les différents pays pour faire face aux défis des jeunes quittant l'école et rentrant sur le marché du travail sont examinées et les différences et similarités entre les deux groupes de pays sont mises en lumière. En termes de réussite scolaire, les pays développés se concentrent sur le maintien des jeunes dans le système éducatif jusqu'à l'achèvement des études secondaires, tandis que les pays émergents doivent agir plutôt au niveau du premier cycle du secondaire – avec de meilleurs infrastructures et plus d'égalité d'accès à l'éducation – avant de pouvoir se concentrer sur le secondaire supérieur. De plus, tandis que tous les pays se tournent vers la formation au sein de l'entreprise pour engager davantage les jeunes qui risquent de quitter l'école avant l'obtention d'un diplôme, les défis dans ce domaine sont plus importants pour les pays émergents où peu de jeunes suivent une formation professionnelle et moins encore ont accès à l'apprentissage. Enfin, la surqualification est un défi considérable dans les pays émergents couverts par ce document où, en plus d'une meilleure orientation professionnelle et d'une information et des projections du marché du travail de haute qualité, des politiques de l'innovation sont nécessaires pour augmenter la réactivité de la demande de travail à la disponibilité d'une force de travail mieux formée.

Du côté du marché du travail, les différences sont encore plus marquées. Alors que les économies avancées envisagent des moyens de plus en plus sophistiqués pour fournir un soutien individualisé au réemploi des jeunes ayants droit aux prestations de chômage, les économies émergentes ont souvent besoin de partir de zéro. Certains pays émergents couverts dans ce document n'ont pas de système d'assurance-chômage, dans plusieurs autres, le système existe, mais fournit un soutien limité pendant les périodes de non-emploi. En outre, certains pays émergents n'ont pas les caractéristiques institutionnelles nécessaires à l'exécution de programmes d'activation rentables – notamment, des services publics de l'emploi efficaces, la coopération des employeurs et de bons systèmes de mesure de la performance pour l'évaluation des programmes. Dans les deux groupes de pays, les coûts salariaux élevés et une réglementation stricte de protection de l'emploi sont susceptibles de dissuader les employeurs d'embaucher des jeunes dans un premier emploi stable. Cependant, les conséquences diffèrent selon les pays, ce qui accroît l'incidence du travail temporaire dans les économies avancées, tout en contribuant à la croissance du secteur informel dans les économies émergentes.

Bien sûr, les 16 pays couverts ne peuvent pas toujours être facilement classés en deux groupes homogènes et les caractéristiques propres à chaque pays doivent être prises en compte dans la conception des politiques. Ceci est particulièrement le cas quand il s'agit de la réglementation de la protection de l'emploi, le coût du travail et le salaire minimum où aucune distinction claire entre les économies émergentes et avancées n'émerge. En outre, pour être efficace dans l'amélioration des transitions de l'école au travail, les mesures de politique analysés dans ce document, doivent être considérés comme un ensemble plutôt que séparément. Cela nécessite une analyse plus approfondie des obstacles auxquels font face les jeunes dans les différents pays et une évaluation rigoureuse des programmes existants pour les jeunes afin de s'assurer que les ressources limitées sont utilisées au mieux. Enfin, ces mesures doivent également faire partie de politiques plus larges pour promouvoir une croissance économique plus forte et durable qui permettra de créer plus et de meilleurs emplois pour les personnes à tous les âges.



## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	4
RÉSUMÉ .....	6
Introduction .....	9
PART A – Some key figures: comparing youth labour market outcomes in advanced and emerging economies.....	10
1. The demographic background.....	10
2. Standard measures of youth labour market performance.....	11
3. Key steps in the school to work transition: leaving education and finding the first job .....	15
Youth in emerging economies leave school 3 to 4 years earlier.....	15
4. The quality of youth entry jobs .....	20
5. Summing up the empirical evidence .....	24
PART B: (Slightly) different policies for similar problems .....	24
1. Investment in human capital to facilitate school-to-work transitions .....	24
2. The role of labour market policy and institutions in facilitating access to employment.....	35
Conclusions .....	47
REFERENCES .....	49

### Boxes

Box 1. Measuring the time needed to find a first job after leaving education.....	18
Box 2. Conditional Cash Transfers (CCTs) can boost investment in human capital .....	26
Box 3. Sustaining the demand for apprenticeships: examples of good practice .....	29
Box 4. Combining study and work: achieving the right balance.....	34
Box 5. Training programmes for disadvantaged youth in Argentina and Brazil.....	37
Box 6. The YouthBuild programme in the United States .....	38
Box 7. Duration and targeting make wage subsidies work better for youth .....	44

## Introduction

Improving the performance of youth in the labour market is a common objective in most advanced and emerging economies. Countries at all levels of development face the challenge of providing youth with the skills they need to enter the labour market, get rewarding jobs that are well-matched to their skills and embark on a positive career path. Achieving these goals is essential not only to the well-being of the young generations but also to improve the productive potential of the economy and social cohesion more generally.

Despite these common goals, the challenges faced by advanced and emerging economies are somewhat different. For one thing, demographic trends are different across countries. Most emerging economies face the daunting challenge of generating many more productive and rewarding jobs for large and growing numbers of youth. On the other hand, in most advanced economies, population ageing is looming and smaller youth cohorts are likely to provide more opportunities for youth, provided that young people possess the skills required in today's and tomorrow's labour market.

But the differences do not stop at demographics. Despite some recent convergence, patterns of educational enrolment and completion are rather different, with emerging economies often facing low enrolment rates in lower secondary education compared to advanced economies where lower secondary education is compulsory. On the labour market side, while the quality of entry jobs for youth is a major issue everywhere, the discussion is mostly focused on atypical work in advanced economies while informal employment is the key challenge in emerging countries

These key differences are often hidden behind standard measures of youth labour market performance, such as employment and unemployment rates. For instance, employment rates in advanced economies tend to be lower because youth stay longer in education. Also, under-employment rather than unemployment may be a better measure of youth labour market distress in countries where unemployment insurance coverage is very limited. To overcome these limitations this paper takes a closer look at the key steps in the process of transition from school to work, comparing key emerging countries with selected advanced economies. Through this analysis, it identifies the key challenges faced by youth at labour market entry and proposes policy responses drawn from international examples of good practice.

The paper builds on a series of in-depth OECD country reviews and two comparative synthesis reports (OECD, 2010a; and OECD, 2010b) as well as several papers prepared to support the G20 Task Force on youth employment. Countries are selected for inclusion based on data availability and to ensure coverage of a broad spectrum of institutional settings affecting transitions from school to work.

The paper is organised in two parts. Part A sheds light on the labour market challenges faced by youth in advanced and emerging economies. Part B discusses the key differences and similarities in the policies needed to address those challenges. More specifically, Part A is organised as follows: Section 1 sets the scene with current and projected youth shares in the total population; Section 2 presents some standard measures of youth labour market performance; Section 3 takes a closer look at the process of school-to-work transition; Section 4 discusses the quality of entry jobs for youth.

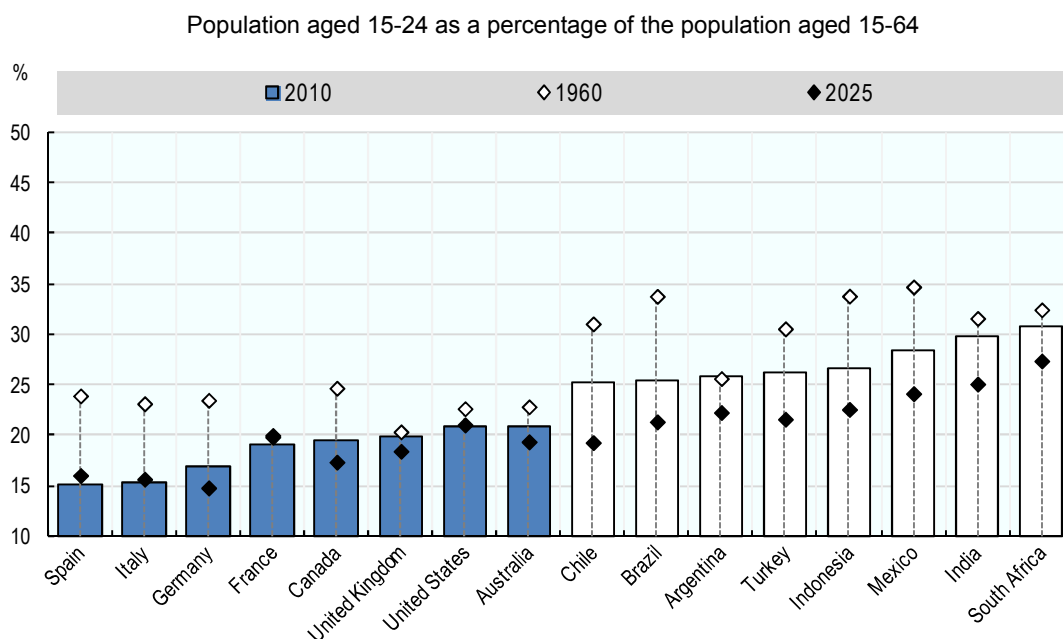
## PART A – Some key figures: comparing youth labour market outcomes in advanced and emerging economies

### 1. The demographic background

*Some countries face rapid population ageing while in others youth account for a large share of the population*

Providing education and good job opportunities for young people is a major challenge everywhere, but it is more daunting in countries where youth account for a large share of the working-age population (Figure 1). Differences across countries in the share of youth in the working-age population are large. For instance, youth aged 15-24 make up about a third of the working age population in South Africa and this share has declined only slightly over the past fifty years. At the other extreme, the same youth cohort is about half the size in Italy and Spain following major declines over the past half century. Over the coming years, population ageing is expected to slow in most countries with relatively small youth cohorts while it is likely to accelerate in countries where the share of youth in the working-age population is currently rather large – notably, India, Mexico and South Africa.

Figure 1. **Share of youth in the working age population, 1960-2025**



Source: United Nations, Department of Economic and Social Affairs, Population Division (2011), World Population Prospects: The 2010 Revision, CD-ROM Edition.

#### *Population ageing does not guarantee better youth outcomes*

At the same time, and contrary to common belief, shrinking youth cohorts do not automatically guarantee better labour market opportunities for young people, just as early retirement does not help free up jobs for youth. Both these ideas rely on the *lump-of-labour fallacy* according to which there is only a fixed number of jobs to be distributed between workers. In fact, across countries, the relationship between the employment rate of youth and that of older workers is positive (OECD, 2011a).<sup>1</sup> In addition,

1. This positive relationship could be due to complementarities or, at the very least, a lack of substitutability between the skills of youth and older workers.

while smaller youth cohorts in some countries are likely to create more opportunities for youth, young people can only benefit from them as long as they possess the skills required by the labour market.

## **2. Standard measures of youth labour market performance**

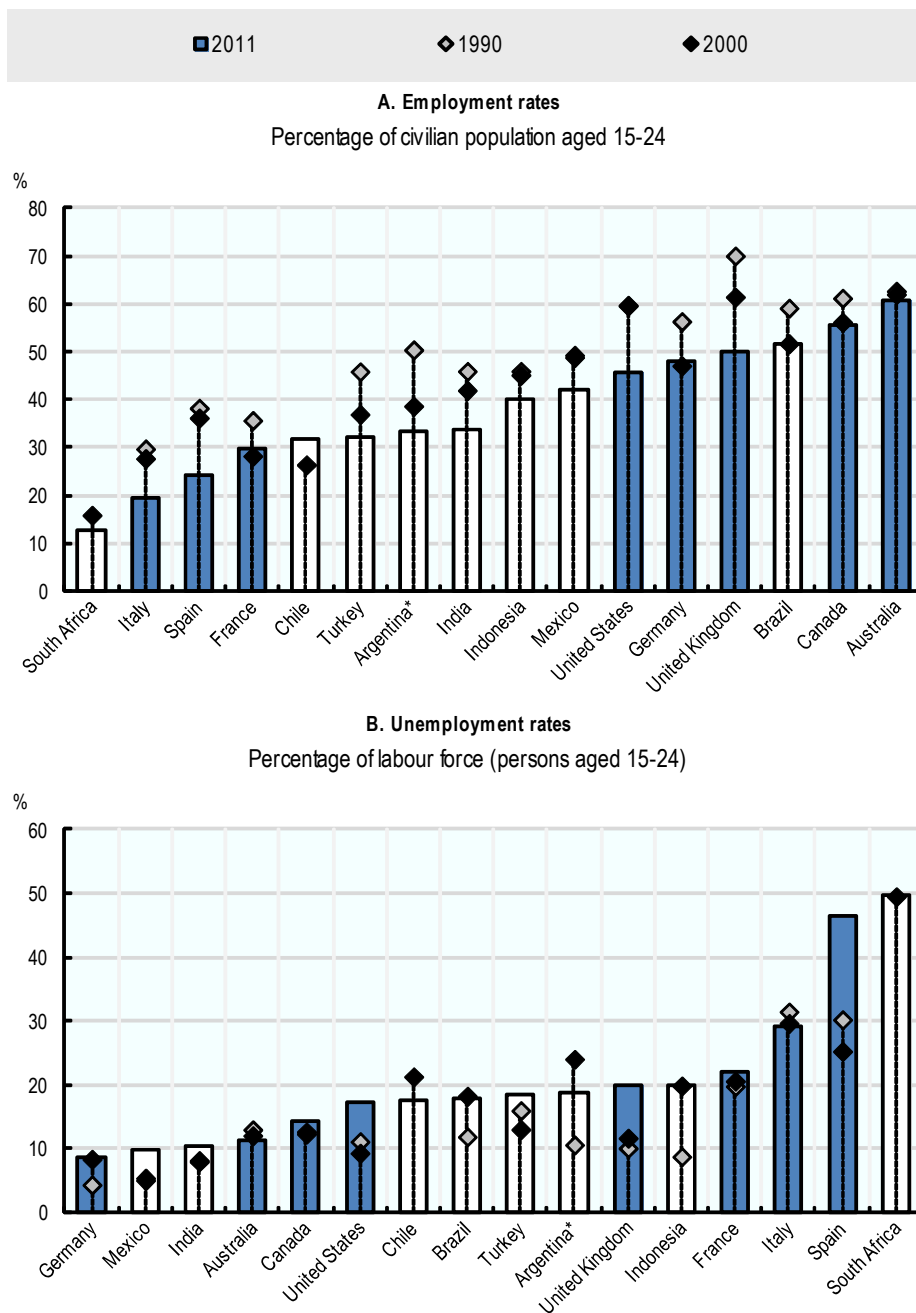
*The proportion of youth who are working varies considerably across countries but hides positive and negative developments*

Close to 60% of youth in Australia and Canada worked in 2011, compared with 20% or fewer in Italy and South Africa (Figure 2, Panel A). Underlying these differences are several phenomena affecting the figures in opposite directions. First, in most advanced economies and some emerging economies the labour market situation of youth deteriorated significantly between 2000 and 2011, mostly due to the negative impact of the recent global economic crisis. This is particularly the case in Spain, the United Kingdom and the United States where youth employment rates declined by between 10 and 15 percentage points. Second, lower employment rates also reflect positive developments such as higher enrolment rates in education and this tends to bias the youth employment rate downwards in more advanced economies. Finally, cross-country differences also reflect the extent to which youth combine work and study, with employment rates being lower in countries where youth have little contact with the labour market until they complete education.

*Unemployment rates are only part of the story to be complemented by under-employment and inactivity*

The unemployment rate – the ratio of unemployed youth to the total number of youth in the labour force – is the most widely used measure of the difficulties faced by young people in the labour market. Panel B of Figure 2 shows that the youth unemployment rate varies between 10% or less in Germany, Mexico and India and about 50% in Spain and South Africa. However, the reasons behind low unemployment rates in Germany or Mexico and India are rather different. In Germany, the good performance of youth in the labour market is often ascribed to smooth school-to-work transitions through apprenticeship training while the limited impact of the recent crisis has been attributed to the widespread use of short-time work schemes. On the other hand, in Mexico and India low youth unemployment rates hide significant under-employment and very poor income-support systems for the unemployed blurring the boundary between unemployment and inactivity.

Figure 2. Youth employment and unemployment rates, 1990-2010<sup>a</sup>



Note: Countries are ordered by ascending order of the rates in 2011.

\* Urban areas only. Data before 2004 are estimated.

a) In Panel A, 1990 refers to 1991 for Argentina, India, Indonesia and Mexico; 2000 refers to 1999 for Brazil and 2001 for South Africa; 2011 refers to 2009 for Brazil and 2010 for India. In Panel B, 1990 refers to 1991 for Argentina and Mexico, to 1992 for Brazil and Indonesia, and to 1993 for India; 2000 refers to 1999 for Brazil, 2001 for South Africa and 2004 for India; 2011 refers to 2009 for Brazil and India.

Source: OECD Labour Force Statistics Database, ILO Key Indicators of the Labour Market (KILM) for India and Indonesia and various national sources.

*Inactivity is a big problem among out-of-school youth, particularly for women in emerging economies*

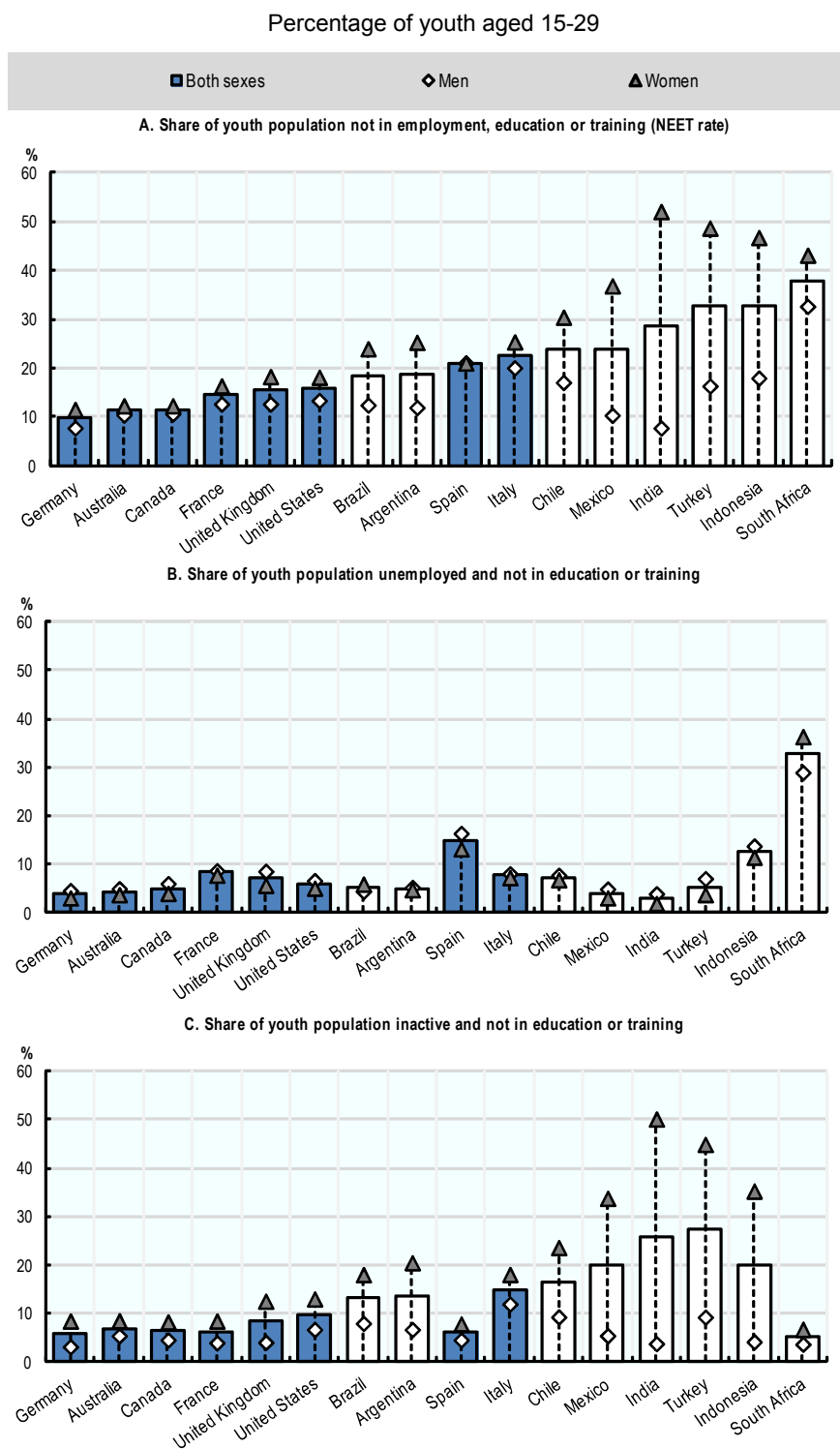
While the unemployment rate represents a good measure of the difficulties faced by young people in the labour market, it does not capture the situation of inactive young people who are not engaged in education or training – some of whom face a high risk of social and economic exclusion. In addition, the unemployment rate may include some students who are looking to combine work and study.<sup>2</sup> To address these limitations, Figure 3 presents the share of youth neither in employment nor in education and training – the so-called NEET rate. Among standard measures of youth labour market performance, the NEET rate is the one that better reflects the reality of emerging economies by capturing both the risk of unemployment and inactivity.

Internationally, the NEET rate ranges from under 10% in Germany to over 30% in Turkey, Indonesia and South Africa. Unemployment accounts for a significant share of NEET youth in several of the countries included in this paper. However, with the exception of France, Spain and South Africa, inactive youth not engaged in learning make up an even larger share, particularly in emerging economies. For many young people inactivity is the result of discouragement and marginalisation, which may reflect the accumulation of multiple disadvantages such as the lack of qualifications, health issues, poverty and other forms of social exclusion. In addition, evidence from the United States and some European countries suggests that NEET status can be very persistent (Quintini and Manfredi, 2009 and OECD, 2010c). However, some inactive youth may have chosen to withdraw from the labour market – notably, young women engaged in child bearing and rearing. This is supported by large differences across gender among inactive youth not in education, particularly in emerging economies where the average age of marriage and first childbearing tends to be lower.

---

2. Limited opportunities to combine work and study may harm young people's prospects in the longer run. However, by excluding students who are looking for work, the NEET rate allows focusing on the group of unemployed youth who are in need of immediate attention within the broader group of unemployed youth.

Figure 3. Youth neither in employment nor in education or training (NEET), 2011<sup>a</sup>



a) 2011 Q2 for Australia, 2010 for India and South Africa, 2009 for Chile, and 2004 for Indonesia.

b) Data refer to persons aged 15-29 for Australia.

Source: OECD estimates and Eurostat, dashboard on EU youth indicators. For further details on sources and methodology see Annex Table A.1.

### 3. Key steps in the school to work transition: leaving education and finding the first job

The labour market indicators presented above only provide an instantaneous picture of the position of youth in the labour market. While they are key to assess the impact of the business cycle on youth, they are less useful in interpreting cross-country differences in the process of transition from school to work and in identifying bottlenecks, particularly for countries at different levels of economic development. In an attempt to overcome these limitations, this section presents some alternative statistics relating to the school-to-work transition process including the median age of school leaving as well as some estimates of the time needed to enter the labour market after leaving school.

#### *Youth in emerging economies leave school 3 to 4 years earlier*

Figure 4 shows the activity status of young people aged 15 to 29 by single year or age, distinguishing between: education only; work and study; work only as employee; work only as self-employed, unpaid worker or other atypical employment relationships (notably, casual work); and neither in work nor in education. The vertical bar shows the age at which at least 50% of youth have left the education system – the *median age of leaving education*.<sup>3</sup>

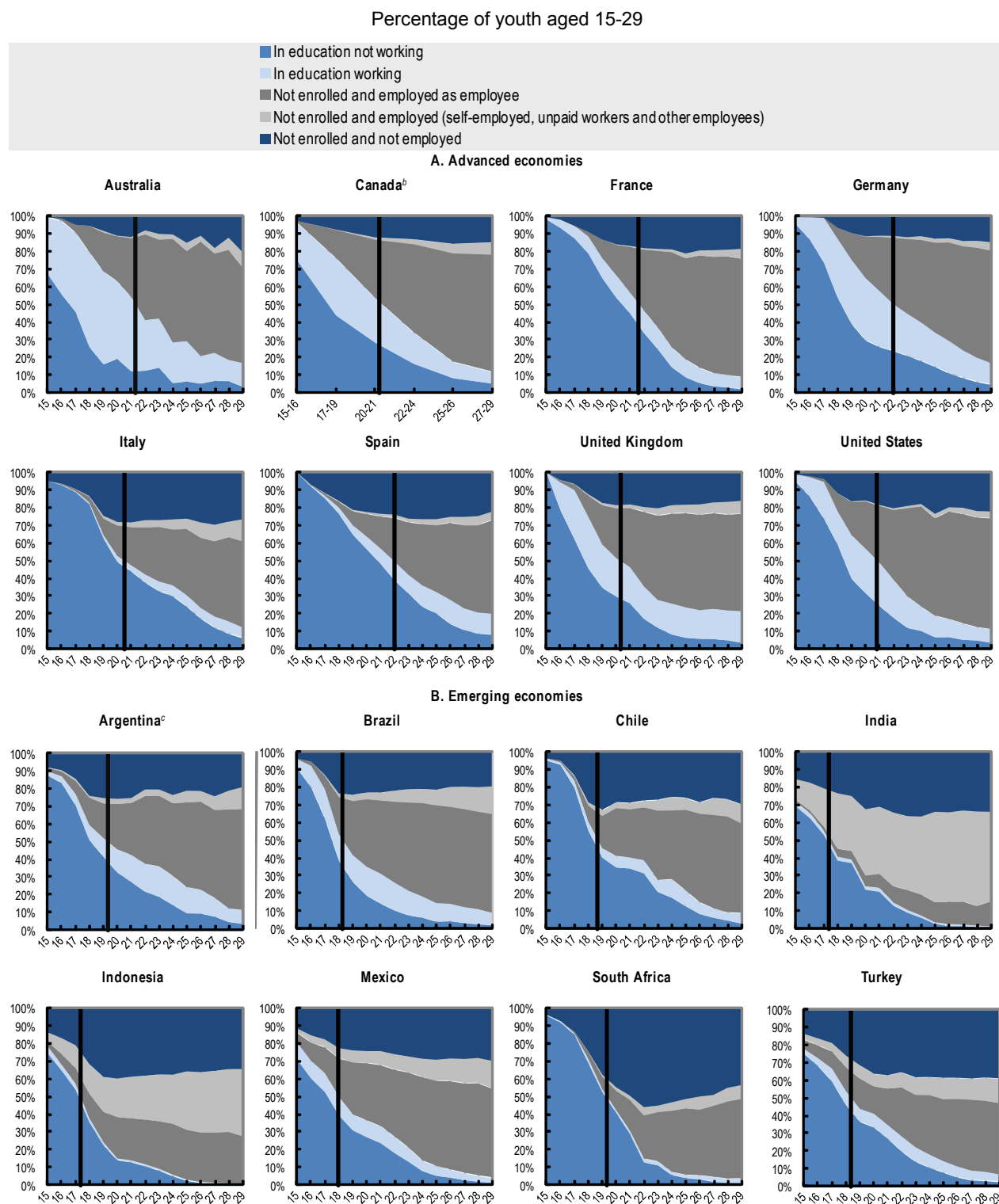
Unsurprisingly, in advanced economies youth tend to stay in education longer than in emerging countries – the median age of school leaving is around 21-22 in the advanced economies shown in Figure 4 compared with 17-18 in Brazil, India, Indonesia, Mexico and Turkey and 19-20 in Argentina, Chile and South Africa (see also Column 1 of Table 1). But major differences in school enrollment are already evident at younger ages. By age 15, many youth in emerging economies have already left education – 25-30% in Indonesia, India and Turkey, 20% in Mexico and 10% in Argentina. This compared with close to 100% enrollment among 15-year-olds in advanced economies where school is still compulsory at this age. Overall, these figures suggest that while the median young person enters the labour market with a few years of tertiary education in advanced economies, she does so with just a high-school diploma in emerging economies. Indeed, the share of youth leaving education before the typical age of completion of upper secondary education – a proxy for school drop outs and an education level that experts consider essential to embark on a promising career path – is higher in emerging economies.

---

3. Students who work and study are counted as being in education for the purpose of this statistic.



Figure 4. Activity status by single year of age, youth aged 15-29, 2011<sup>a</sup>



a) 2004 for Indonesia, 2009 for Australia and Chile, 2009/10 for India, and 2010 for South Africa.

b) Age is defined in two or three-year groups for Canada and the calculation is based on the average age in each class.

c) Selected urban areas only.

Source: OECD estimates based on national labour force surveys. See Annex Table A.1. for further details.

*Out-of-school youth in emerging countries are more likely to become NEET at school leaving and under-employment is more widespread*

Data on activity status by single year of age allow looking at what young people do after leaving education. In Argentina, Brazil, India, Indonesia, Mexico and Turkey, at the median age of school leaving, 25-30% of young people are working as employees or are self-employed or in unpaid work. This is comparable to employment shares at the median age of school leaving in Italy and Spain but well below employment shares of 40% or over in Australia, Canada and Germany. In addition, some emerging countries – notably, India and Indonesia and, to a lesser extent, Mexico and Turkey – have much higher incidences of self-employment and unpaid work among youth than advanced economies, suggesting that under-employment may be an issue in these countries.

These differences in employment shares are reflected in higher shares of inactive and unemployed youth not enrolled in education (NEET) at the median age of school leaving in emerging economies. South Africa is a particularly striking case, with around 40% of out-of-school youth in inactivity or unemployment at age 19, rising to 50% at age 22 as more youth leave education but fail to find employment quickly. By age 29, the share of NEET youth is still 30% or more in India, Indonesia, South Africa and Turkey compared to shares of just over 10% in Canada and Germany.

*School-to-work transitions tend to be longer in emerging economies*

The cross-sectional data used to draw Figure 4 can be used to derive several proxy measures of the length of school-to-work transitions. Two such measures are reported in Table 1 which also shows their correlation.<sup>4</sup> Box 1 describes the pros and cons of each measure in detail.

One first proxy for the length of school to work transitions is the difference between the age at which 50% of youth are in employment – the *median age of employment* – and the *median age of leaving education*, in other words the time needed to get 50% of the youth population into work after school leaving. As Column 3 in Table 1 shows, school-to-work transitions measured this way appear to be extremely long. This partly reflects the fact that this measure takes into account young people who do not find work, or at least not within the age bracket used for calculations (i.e. 15-29) rather than focusing solely on completed transitions. While this could be seen as a problem, the fact that a significant share of the youth population does not transition to work by age 29 – i.e. they become persistently NEET – is an important piece of information when attempting to gauge the nature of school-to-work transitions. Beyond level comparisons, this measure yields much longer transitions in emerging countries than in developed economies, with the longest transitions in Turkey and South Africa and the shortest in Australia but also in Canada, France and the United States.

---

4. Table 1 shows the spearman ranking correlation to see whether the two different measures rank countries in similar ways.

### Box 1. Measuring the time needed to find a first job after leaving education

Several methods can be employed to obtain an estimate of the time needed to find a first job after leaving education, using either panel data that follows individuals over time or cross-section data with information on activity status at different ages. Because of data availability issues, this paper uses two measures derived from cross-sectional data, namely:

- The *time needed for 50% of youth to find work after school leaving*: the difference between the age at which 50% of youth are employed and the age at which 50% have left education; and
- The *average duration of completed transitions*: the difference between the weighted average of the age of entry into employment and the weighted average of the age of exit from education where the age distributions of employment entry and education exit are constructed using pseudo cohorts (e.g. the difference between the number of young people employed at 17 and the number employed at 16 is taken to be the number of people who found work at age 17 and is used as weight for age 17 in the distribution of the age of employment entry)

Both measures suffer from a number of limitations. First, because they are derived from cross-sectional data, both measures tend to bias results for countries where there have been considerable changes in labour market and education participation over time. Second, both measures exploit annual data – data that reflects the activity status at a specific point in time, missing short employment spells – hence they are less precise than measures derived from longitudinal sources that include information on employment spells throughout the year. Third, both measures disregard jobs that are held while studying. In addition, the *time needed for 50% of youth to find work after school leaving* yields longer transitions in countries with a large share of youth who never actually make the transition into account – notably countries where female participation in the labour market is small even among the young.<sup>a</sup>

Although longitudinal data are not available for all countries covered in this paper, for a small number of countries, it is possible to compare transition lengths based on different methods. For instance, panel data yield an average transition duration of just 6 months in the US and about 13 months in the United Kingdom for cohorts of youth leaving education in the late 1990s. These figures compare with transitions of over 2 years when computing the *time needed for 50% of youth to find work after school leaving* using cross-section data but are not too dissimilar from the *average duration of completed transitions*. Given that the more precise figures obtained using longitudinal data come at the cost of excluding emerging economies without long-running longitudinal surveys, the measures derived using cross-sectional data appear to be an acceptable compromise.

a) It is noteworthy that some of these limitations also apply to longitudinal measures. For instance, independently of the data source (longitudinal or cross section data), students who combine study and work are generally counted as studying. In addition, the length of transitions calculated using longitudinal data can also be bias upwards by the inclusion of uncompleted transitions – which are often attributed the maximum number of years for which youth can be followed after school leaving. Concerning the latter issue, however, evidence shows that the bias tends to be relatively small (Quintini et al., 2007). More broadly, all methods mentioned above put an excessive emphasis on the first job which may well be found very quickly but be short-lived, with the young person returning to unemployment/inactivity shortly afterwards. In fact, this risk is likely to be higher with longitudinal data which use monthly calendars of labour market status and, by doing so, are able to capture relatively short employment spells. To overcome this limitation, Quintini and Manfredi, use an alternative statistical technique that allows identifying pathways and evaluating the stability of employment after school leaving (Quintini and Manfredi, 2009). Unfortunately, this technique requires longitudinal data and large samples and cannot be applied in emerging economies.

Table 1. Average duration of school-to-work transitions, 2011<sup>a</sup>

Number of years

	School leaving age <sup>b</sup>	Age of entry into work <sup>c</sup>	Time needed for 50% of youth to get work after school leaving <sup>d</sup>	Average duration of completed transitions <sup>e</sup>
	Column 1	Column 2	Column 3	Column 4
Australia	21.3	22.3	1.0	0.3
Canada <sup>f</sup>	21.0	22.6	1.7	0.4
France	21.6	23.5	1.8	0.8
United States	20.8	22.9	2.1	0.5
Germany	22.0	24.2	2.3	0.4
United Kingdom	20.3	22.8	2.5	1.0
Spain	22.0	26.7	4.7	1.8
Italy	20.5	26.3	5.9	1.7
Brazil	18.3	21.7	3.4	1.0
India	17.4	21.8	4.4	0.9
Indonesia	17.4	22.0	4.6	1.3
Mexico	18.0	22.7	4.7	0.7
Argentina	19.7	24.9	5.2	1.2
Chile	18.7	24.6	5.9	1.2
Turkey	18.4	26.0	7.6	1.3
South Africa	19.3	27.7	8.3	2.7
Spearman's Rho				0.8442***

\*\*\* Statistically significant at 1%

a) 2004 for Indonesia, 2009 for Australia and Chile, 2009/10 for India and 2010 for South Africa.

b) Age at which 50% of youth are enrolled in school.

c) Age at which 50% of youth are employed and no longer enrolled in school.

d) Difference between the age at which 50% of youth are employed and the age at which 50% of youth are no longer enrolled in school.

e) Difference between the weighted average of the age of entry into employment and the weighted average of the age of exit from education.

f) Age is defined in two or three-year groups for Canada and the calculation is based on the average age in each class.

Source: OECD estimates based on national labour force surveys. See Annex Table A.1 for further details.

Table 1 (Column 4) also reports a measure of the length of school-to-work transitions which takes into account only completed transitions – i.e. it excludes those young people who do not successfully transition to work before they turn 29. Unsurprisingly, this measure of *completed transitions* yields much shorter durations, below 2 years in all countries except for South Africa. As for the time needed to get 50% of youth into work, transitions tend to be longer in emerging economies although the differences are much less marked, probably due to the exclusion of young people who never make the transition to work – i.e. a group which is likely to be larger in some emerging economies where few young women work. It is noteworthy that the two measures of the length of school-to-work transitions are highly correlated and yield very similar country rankings.

The cross-country differences emerging from the measures described above could be due to different labour market barriers faced by young people in the two sets of countries but could also be explained by compositional effects, with the median young person in emerging countries leaving school at a younger age – hence presumably with lower qualifications – than in advanced economies. However, things are not binary: irrespective of the measure used, youth in many emerging economies experience shorter transitions than youth in Spain and Italy.

#### 4. The quality of youth entry jobs

As shown in Figure 2, self-employment and unpaid work make up a large share of employment among youth in emerging economies. In many instances, these involve subsistence jobs, in self-employment or as unpaid family workers. In addition, some out-of-school youth in dependent employment are employed on fixed-term contracts or through temporary work agencies, particularly in some advanced economies, such as France, Italy and Spain. Finally, both categories of employed out-of-school youth include young people working in the informal sector. This section explores the incidence of these poor-quality jobs.

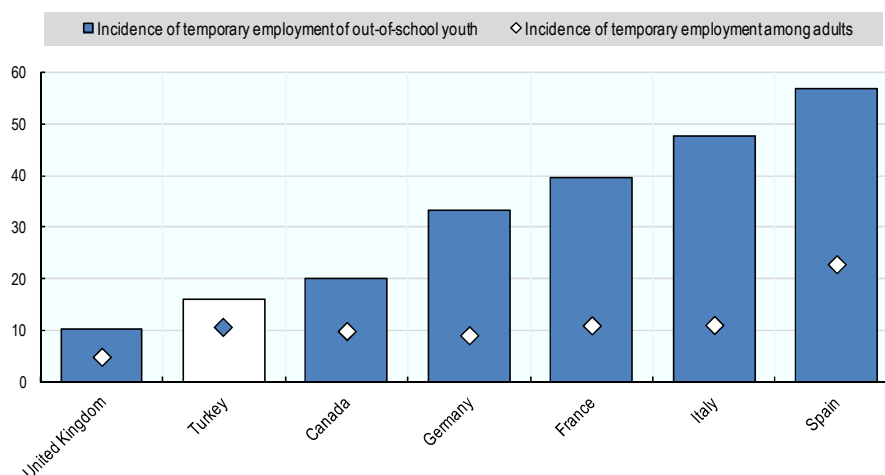
##### *More than half employed youth in Spain and Italy work on temporary contracts*

In many countries, particularly in Europe, youth are over-represented in fixed-term and temporary work agency (TWA) jobs, often lacking the stability and social protection that is granted to workers hired on permanent contracts. This also makes young people more vulnerable to business-cycle fluctuations, as hiring freezes, non-renewal of temporary contracts and mass layoffs of temporary workers are often the first steps taken by employers facing economic difficulties. In addition, the recovery phase is often accompanied by uncertainty, making firms wary of hiring through permanent contract and preferring temporary ones, especially for youth.

Figure 5 shows the incidence of temporary work among young people not in education or training in countries for which comparable data are available. In 2011, the incidence of temporary work among employed Spanish youth was extremely high, attaining 45%. While the incidence was already high prior to the crisis, the recession has brought about a staggering 10 percentage point rise in the share of young workers in temporary jobs, probably because of the combined effect of the collapse of youth employment and the fact that most job creation has happened so far in temporary jobs. Temporary work is also relatively wide-spread in France, Italy and the United Kingdom where it concerns over a third of employed youth. Outside Europe, temporary contracts often take on a different significance. In Australia, so called *casual workers* are not entitled to paid holiday or sick leave but receive a higher rate of pay to compensate for this. As a result, they often choose this flexible form of employment of their own will. In the United States, the *employment at will* norm, by which either employer or employee can terminate a work relationship at any time, makes the distinction between permanent and temporary workers meaningless.

Figure 5. Incidence of temporary jobs, by age group

Incidence of temporary employment among employed out-of-school youth and adults<sup>a</sup>, 2011



a) Youth who have left education and are aged 15-24 and adults aged 25 and over.

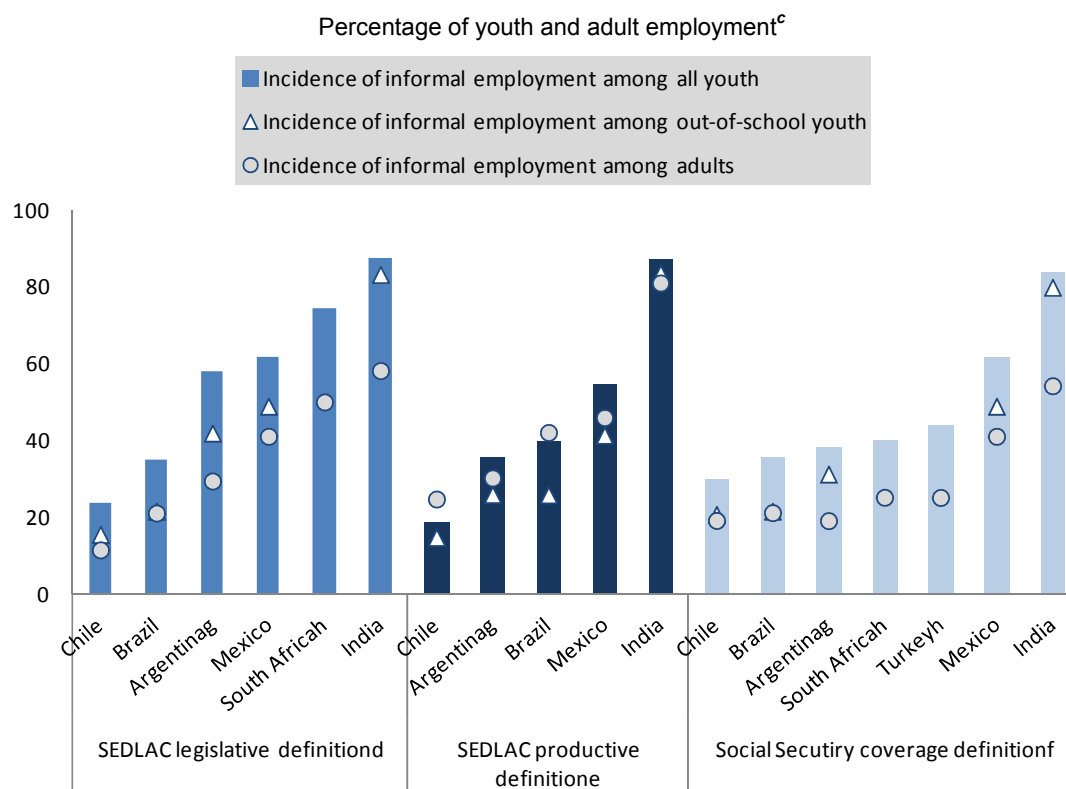
Source: OECD estimates based on various national sources. For further details see Annex Table A.2.

*Youth are more likely to work in informal jobs than adults, especially while in school*

In many emerging economies, youth tend to be more involved than their adult counterparts in informal employment as well as situations of unprotected work in the formal sector (Figure 6).<sup>5,6</sup> However, the difference between youth and adults depends on the definition adopted and reduces significantly when focusing on out-of-school youth. The gap is most striking in Argentina, with young people almost twice as likely as adults to engage in informal employment according to the pension eligibility (SEDLAC *legislative definition*) and social security eligibility definitions, but it is sizeable in most countries. Interestingly, this negative relationship between age and the incidence of informality does not hold when using work sector, education and wages to define informality (SEDLAC *productive definition*).<sup>7</sup> Also noteworthy is the fact that the incidence of informality is significantly lower among out-of-school youth, suggesting that general estimates may over-state informal work among youth by including students.

As the definitions suggest, informal work leaves many young people without the social protection and entitlements of formal employees.<sup>8</sup> In addition, recent experience in Argentina and Mexico suggests that informal workers are also more vulnerable to economic cycles. In Argentina, during the major economic crisis that began in 2000, the share of youth employed in the informal economy (SEDLAC *legislative definition*) reached 75% and that of adults attained 44%. Robust post-crisis economic recovery, coupled with significant reforms of labour market institutions, managed to curb informality among both adult and young workers. By 2005, the incidence of informal employment among youth had declined to 67% and a further decline was observed in the following years. Although the recent global economic crisis slowed the fall somewhat, in 2011, as Figure 6 shows, the share of employed Argentinean youth in informal employment had attained 58%. Similarly, the share of Mexican young workers in the informal economy<sup>9</sup> increased during the recent economic crisis.

- 
5. The three alternative definitions of informal employment used here are: *i*) regular employees who are not eligible for any pension (this is the *legislative-approach* definition adopted by the Socio-Economic Database For Latin America and the Caribbean, SEDLAC); *ii*) salaried workers in small private sector firms and non-professional (non-tertiary educated) self-employed workers and zero-income workers (this is the *productive-approach* definition adopted by the SEDLAC); and *iii*) workers not eligible for social security benefits and services. Figures in definitions *i*) and *iii*) are expressed as percentages of dependent employment (because the benefit considered are mostly limited to dependent employees) while figures for definition *ii*) are expressed as percentages of total employment. It is important to underline that making cross-country comparisons is complicated by the lack of harmonized data. Nevertheless, the data presented here do allow reasonable cross-country comparisons of the relative likelihood that youth and adults are employed in the informal economy.
  6. See also Gasparini and Tornarolli (2009), OECD (2008a), and Reis et al. (2009) for evidence that the likelihood of informal employment declines with age.
  7. This may be due to the fact that youth are less likely to get access to credit or that they are more risk averse than their adult counterparts. Cunningham and Bustos Salvagno (2011) find that the latter is a more valid explanation for lower rates of self-employment among youth than adults in Argentina, Brazil and Mexico.
  8. The European Commission's report on the Eurobarometer undeclared work survey (European Commission, 2007) notes that undeclared 15-24-year-old workers are paid significantly lower hourly wages than their older undeclared counterparts. Evidence of a wage penalty for younger workers in informal employment is also found by Bargain and Kuenda (2010) for South Africa.
  9. This is the share of young Mexicans engaged in informal work, thus not covered by the provisions of the Federal Employment Law, including social security entitlements. Even though this law stipulates that there should be no prejudice for worker entitlements in the absence of a written contract, the reality is often different. In general, the lack of a contract creates an unclear employment relationship and reduces labour protection, especially among young workers. This negatively affects the entitlements foreseen by labour

Figure 6. Informal employment, by age group<sup>a</sup>, selected G-20 countries, 2011<sup>b</sup>

a) Youth aged 15-24 and adults aged 25 and over.

b) Figures for Chile refer to 2009 and for India to 2009/10.

c) Dependent employment for SEDLAC legislative definition and Social Security coverage definition. Total employment for SEDLAC production definition.

d) Includes regular employees who are not eligible/access to any pension.

e) Includes salaried workers in small private sector firms and non-professional (non-tertiary educated) self-employed workers and zero-income workers (this is the official definition adopted by the Socio-Economic Database For Latin America And The Caribbean, SEDLAC).

f) Includes workers not eligible to social security benefits and services.

g) Selected urban areas only.

h) For Turkey, estimates based on the SEDLAC definitions are not available and those based on the social security definition are not available for out-of-school youth; for South African, estimates based on the SEDLAC productive definition are not available and those based on the SEDLAC legislative definition and the social security definition are not available for out-of-school youth.

Source: OECD estimates based on various national sources. For further details see Annex Table A.2.

### *Child labour is a source of major concern in several emerging economies*

In some emerging countries, child labour is still widespread, with its deleterious effects on children's health and investment in education.

In 2010, about 210 million children aged 5-14 were at work worldwide (ILO, 2010) and child labour posed significant challenges in a number of emerging economies. To gauge the size of the phenomenon, Figure 7 below shows the incidence of child labour among 5-14-year-old children in the emerging countries covered in this paper. The share of children who work is found to vary significantly across

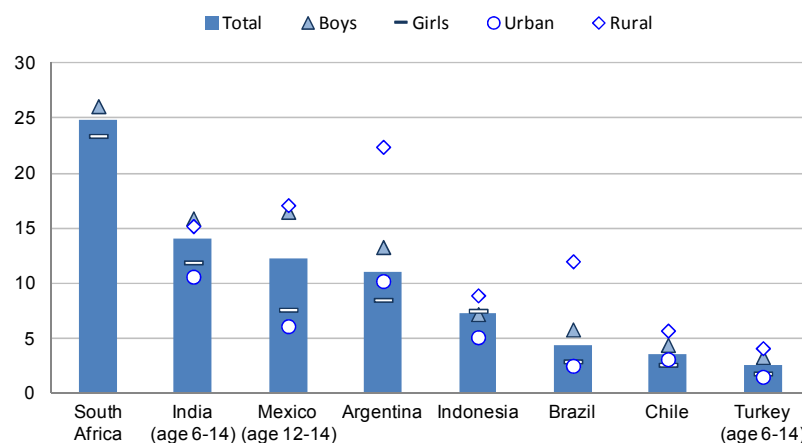
---

law (e.g. remuneration, hours of work, paid days of weekly rest, annual leave and sick leave, and contribution to social security).

countries, ranging from just 2% in Turkey to 25% in South Africa, although the figures do not refer to the same time period. Also, male children and children living in rural areas are more likely to work than their female and urban counterparts.

Figure 7. **Incidence of child labour, by gender and location, selected G-20 countries<sup>a</sup>**

Share of economically active 5-14-year-old children in the population aged 5 to 14<sup>b</sup>



a) Data refers to 1999 for South Africa, 2000 for Indonesia, 2003 for Chile, 2004 for Argentina, 2005 for India, 2006 for Turkey, 2008 for Brazil, 2009 for Mexico.

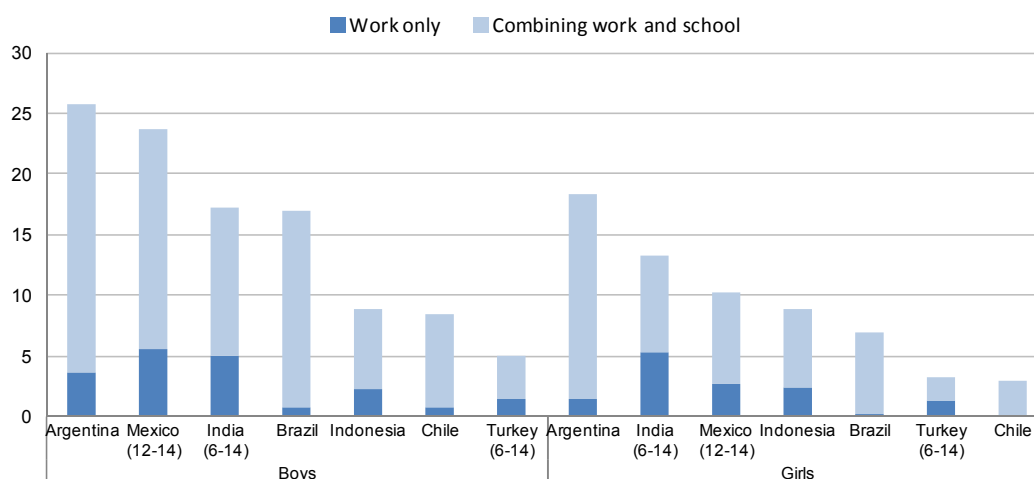
b) Slightly different age groups (in parenthesis) are used for India, Mexico and Turkey.

Source: UNICEF's Understanding Children's Work project, [www.ucw-project.org](http://www.ucw-project.org).

The majority of working children combine economic activity and some schooling. However, in some cases, working prevents children from attending school, undermining their literacy and numeracy as well as their future labour market outcomes. As Figure 8 below shows, as many as 5% of male child labourers in rural areas of India and Mexico do not attend school at all.

Figure 8. **Incidence of child labour in rural areas, by activity status, selected G-20 countries<sup>a</sup>**

Share of economically active 5-14-year-old children in the population aged 5 to 14<sup>b</sup>



a) Data refers to 2000 for Indonesia, 2003 for Chile, 2004 for Argentina, 2005 for India, 2006 for Turkey, 2008 for Brazil and 2009 for Mexico. Data for South Africa broken down by area of residence are not available.

b) Slightly different age groups (in parenthesis) are used for India, Mexico and Turkey.

Source: UNICEF's Understanding Children's Work project, [www.ucw-project.org](http://www.ucw-project.org). The role of initial education in ensuring a smooth transition to work



## 5. Summing up the empirical evidence

- Emerging and advanced economies face opposing demographic trends, but the gap is expected to diminish over the next two decades.
- Low unemployment rates in some emerging economies hide under-employment while low employment rates in advanced economies hide high educational enrollment.
- NEET rates are more appropriate for comparison across countries and show higher youth disadvantage in emerging economies.
- Youth in emerging economies leave education earlier and take longer to find their first job.
- In all countries, young people are more likely to be found in poor-quality jobs than their adult counterparts – but while temporary jobs are the main source of precariousness for youth in advanced economies, it is informality that affects youth in emerging economies most.
- Child labour is common in some emerging economies, with many children combining work and study, particularly in the countryside and among boys.

## PART B: (Slightly) different policies for similar problems

As seen above, while there is some overlap in the challenges faced by youth in the labour market in advanced and emerging economies, the size of the challenges, their causes or their specific nature are often different across countries. This justifies different policy stances, although often pursuing very similar broad objectives. This section discusses policies to overcome some of the challenges faced by youth when leaving education and entering the world of work, highlighting what policies are most suitable for countries at different stages of development. It focuses on two policy areas: initial education and labour market policies including remedial programmes for disadvantaged youth.

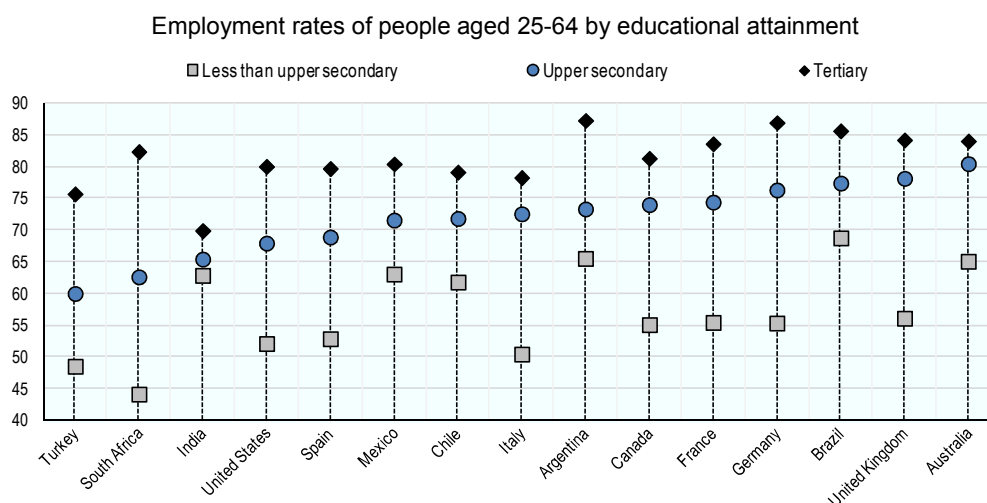
### 1. Investment in human capital to facilitate school-to-work transitions

Investment in human capital is a key factor in facilitating transitions from school to work and putting youth on promising career tracks. This is the case in both emerging and advanced economies but the specific challenges related to education and training systems vary across countries at different stages of economic development. For instance, as seen above, the median age of school leaving is lower in emerging economies than in advanced countries, justifying policy actions at different stages of the education system. This section highlights the importance of initial education for youth labour market outcomes, while stressing the differences and similarities in policy interventions across countries.

#### *Improving educational attainment*

Access to productive and rewarding jobs improves as the level of education increases. As mentioned above, completion of upper secondary schooling (i.e. high school, mostly between the age of 15-16 and 18) is becoming a key policy goal for a smooth transition to work, participation in life-long learning and career progression. As Figure 9 shows, in most countries for which data is available, employment opportunities for workers without an upper secondary qualification are much poorer than for their better educated counterparts. Even in countries where the demand for low-qualified employment remains substantial – notably Argentina, Brazil, India and Mexico – the employment rates of tertiary graduates are much higher than those of youth with less than upper secondary qualifications.

Figure 9. Educational attainment and labour market outcomes, 2005



Source: OECD Education Database.

However, while all countries face the challenge of ensuring that more youth stay on in school until the end of upper secondary education, for some countries the challenge is much bigger. As Figure 4 above suggests, drop-out rates are higher and dropping out happens at an earlier age in emerging countries than in advanced economies. As a result, school retention strategies differ between the two sets of countries.

In advanced economies, where enrolment in education through lower secondary education (i.e. up to age 15-16) is almost universal, the focus has been on improving retention in upper secondary education, in some cases by raising the age of compulsory participation in learning. This is the case in the United Kingdom and the Netherlands, in some Länder in Germany, in some Australian and United States and in two Canadian provinces. In the most recent reforms – notably in the United Kingdom and the Netherlands – attendance obligations have been linked to turning 18 or achieving an upper secondary qualification, whichever comes earlier (OECD, 2008b).

On the other hand, in emerging countries, interventions earlier in the education system are needed before the focus can turn to upper secondary achievement. While primary education is generally available in every local community in most emerging economies, secondary education may require travelling or moving to bigger towns, making attendance more difficult for children from disadvantaged households and girls who are expected to spend some time working or helping with house chores. The lack of role models for girls hampers the reduction of the education gap between genders in several emerging economies (Chimombo, 2005). In India, the language of instruction also represents a key barrier to the educational attainment of ethnic minorities. To encourage educational enrolment of children from disadvantaged backgrounds, some countries have added school attendance as a condition to the receipt of cash transfers through so-called Conditional Cash Transfer schemes (CCTs). Many of these schemes have proved successful at improving school enrolment and attendance as well as child nutrition and health (Box 2).

### Box 2. Conditional Cash Transfers (CCTs) can boost investment in human capital

CCT programmes started to emerge in the late 1990s in countries such as Mexico, Brazil and Bangladesh. Today they represent an important component of social protection in many developing and emerging economies and in certain cases, such as *Bolsa Familia* in Brazil and *Oportunidades* in Mexico, they cover a significant proportion of the total population. CCTs have multiple objectives: they provide income support to poor families in the short run, but also aim to increase educational enrolment, attendance and performance for young children and improve the health status of children and pregnant women, hence promoting investment in human capital among future labour market entrants.

The positive effects of CCTs on child nutrition, health, school attendance and enrolment are well established and hold true in various countries and programmes (see OECD 2010d and Annex 2.A3 in OECD, 2011b for a review of relevant studies). Evidence from Mexico, Brazil and South Africa suggests that CCTs receipt reduces child labour, possibly because CCTs reduce the opportunity cost of having the children attend school rather than enter the labour market (Skoufias and Parker, 2001; Ferro and Nicollela (2007); Williams, 2007 and Edmonds, 2004). However, the effects of CCTs on school performance are less clear-cut. Possible explanations for the lack of a strong impact include the fact that the test measures used are appropriate and the importance of non-monetary factors affecting the learning capacity of children (e.g. nutrition, parenting skills and the value placed on education). A remaining important question lies in the longer-term impact of any improved educational outcomes at a young age. Unfortunately, evidence of the long-term impact of CCTs is still limited, as beneficiaries of early CCTs are only now beginning to enter the labour market and solid empirical evidence on their labour market outcomes is still scarce and mixed (Rodríguez-Oreggia and Freije, 2010; and McKee and Todd, 2011).

CCT effects are found to be larger among poor households (Fiszbein and Schady, 2009; Williams, 2007; and Edmonds, 2004) and for children at transition grades, e.g. those moving from primary to secondary or from lower secondary to upper secondary education (Schultz, 2004). The limited evidence available also suggests that the impact of CCTs may be larger for girls than for boys (Hamoudi and Thomas, 2005) due to the fact that higher effects of CCTs are found in cases where initial enrolment is low, which is often the case for girls. Who receives the cash transfer also seems to matter for the impact of the transfer on children's outcomes: a majority of CCT programmes make payments to mothers as they are thought to have a stronger preference for investing in children than fathers do and because they may place a relatively higher value in investments on girls relative to boys (Fiszbein and Schady, 2009). Evidence from the United Kingdom's Education Maintenance Allowance (Ashworth et al., 2002) also suggests that paying the benefit directly to the child, especially when this is a teenage person, may yield higher positive effects than paying the allowance to his/her parents.

CCTs can also be helpful in adjusting to temporary shocks. Indeed, existing CCT schemes have made it easier for many developing and emerging economies to respond to the increasing needs created by the recent global financial crisis and/or to face the consequences of natural disasters (OECD, 2010e). In particular, through the conditionalities they impose, CCTs can mitigate any long-term effects of economic and natural shocks on school attendance and the health status of children. Such programmes also allow for exceptional transfers to those already receiving benefits in case of temporary shocks.

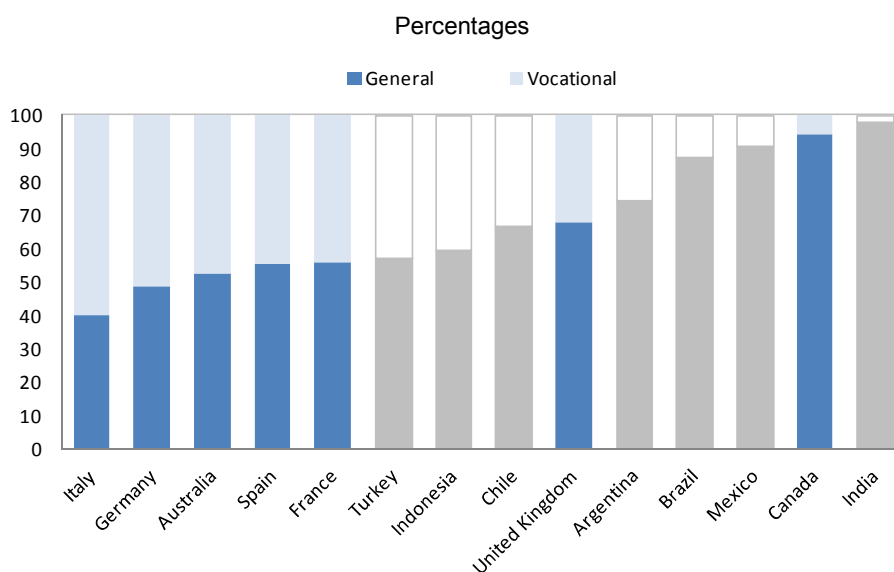
Despite these positive aspects, CCTs still face several challenges associated with their administration and effectiveness (OECD, 2011c). First, the effectiveness of the conditions imposed on children and pregnant women depends crucially on the monitoring of compliance with these conditions and on the enforcement of sanctions in the event of non-compliance. In most cases, such monitoring and enforcement are rather limited due to weak administrative capacity and budget constraints. Second, fairly generous means-tests which are rarely re-assessed are likely to increase the extent to which better-off groups receive benefits (i.e. errors of inclusion) and reduce the efficiency of the scheme.

### *Promoting vocational learning to boost educational attainment and improve labour market outcomes*

One policy area where both emerging and advanced economies converge is the one related to the improvement and expansion of vocational education. Indeed, there is ample evidence suggesting that high-quality vocational education pathways in upper secondary education can help engage youth who have become disaffected with academic education, improve graduation rates and ensure smooth transitions from school to work (Quintini and Manfredi, 2009). However, in many of the countries covered by this paper, vocational education accounts for only a small share of enrolled students. For instance, just 10% or fewer

upper secondary students attend vocational courses in Brazil, Canada, India and Mexico and there is no vocational education pathway at all in upper secondary education in the United States (Figure 10). Overall, there appears to be a tendency for lower vocational enrollment in emerging economies but the difference is not clear-cut. Chile, Indonesia and Turkey have enrollment rates comparable to those of some advanced economies while Canada is placed at the low end of the distribution, second to last before India. Also, it is important to keep in mind that, irrespective of the share of youth enrolled, vocational education may be of low quality.

Figure 10. **Distribution of upper secondary students by programme orientation, 2010<sup>a</sup>**



a) Data for India refer to 2008.

Source: OECD (2012) *Education at a Glance*, OECD Publishing, Paris.

In light of this evidence, many countries, including both emerging and advanced economies, are envisaging reforms to strengthen their vocational education routes in order to improve retention rates of at-risk youth who have disengaged from academic education. In this respect, *dual* schooling systems combining class-based learning with work-based apprenticeships have received significant attention. This is partly because of the good performance in terms of low youth unemployment in countries with a long tradition of apprenticeship systems – notably Austria, Denmark, Germany and Switzerland – along with evidence that apprenticeship training helps make transitions from school to work smoother even for youth who are not subsequently retained by the firm providing the training (Quintini and Manfredi, 2009). Indeed, youth leave apprenticeship programmes with skills that can be immediately used at work with no or little need for further training by their prospective employer.

However, it is important to keep in mind that there is no perfect apprenticeship system or one-size-fits all solution. Even well-established apprenticeship systems face challenges. In the early 2000s, acting on an alarming drop in the number of apprenticeship places available, the German government initiated talks with the social partners to upgrade the dual vocational education system. The outcome was a National Pact for Training and Young Skilled Staff signed in June 2004, committing employers to offering sufficient apprenticeship places over the following three years and the government to reshaping the apprenticeship framework to pay more attention to employers' training needs and to adapt to new skill requirements and work organisation practices.

The structure of apprenticeship programmes varies markedly across countries, particularly along the following dimensions:

- Age groups covered (e.g. only youth in Brazil and Spain, mostly youth in dual-systems, adults too in Australia, Canada and England).
- Duration (e.g. 1-2 years in England but approximately 3 years in Australia and Germany).
- Employers and unions involvement (strong in dual-systems but weak in England, France).
- Apprenticeship level (up to degree level in France as opposed to upper secondary level for most other countries with apprenticeship systems).
- Type of occupations (service-sector occupations account for 30% of all apprenticeships in France, 60% in Germany and 70-80% in Australia and England).
- Gender balance (just under half of apprentices are male in England compared to 61% in Germany, 65% in Australia and 67% in France).
- Apprenticeship pay, a key determinant of the attractiveness of apprenticeships to both employers and prospective apprentices, also vary markedly, as shown in Table 1 below. In most countries, minimum apprenticeship pay is set at a fraction of the minimum wage or the wage of a skilled worker in the same occupation.

Table 1. **Apprenticeship pay, by country, 2012**

Country	Apprenticeship pay/allowances
Australia	55% to 95% of minimum wage, depending on tenure
Brazil	General minimum wage applies
Canada	40% to 90% of skilled employee wages, depending on tenure
England	43% of adult minimum wage
France	25% to 78% of minimum wage, depending on age and tenure.
Germany	approx. 30% of skilled-employee wages in relevant occupation (varies by sector and region)
Spain	General minimum wage applies
Turkey	30% of minimum wage
United States	General minimum wage applies

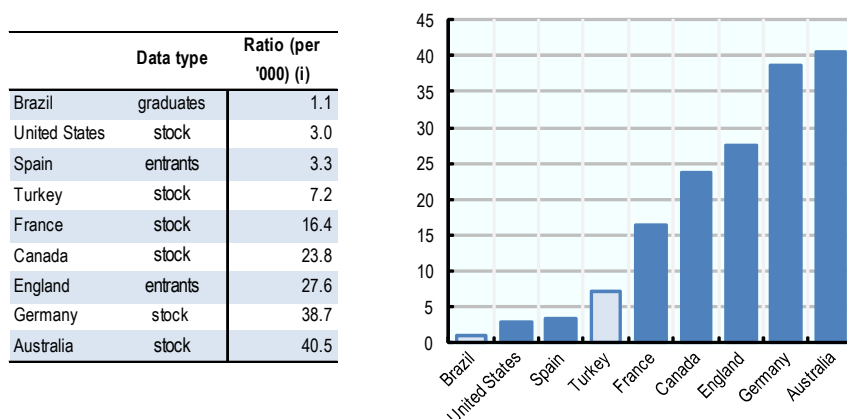
Source: OECD secretariat, based on G20 questionnaire on apprenticeships and Steedman (2010)

These differences in features result in marked differences in programme performance and size. For instance, Steedman (2010) reports that less than 10% of employers offer apprenticeship places in England compared with 30% in Australia and 25% in Germany. Completion rates also range from 80% in Germany, to 70% in England, to 50% in Australia. Figure 11 shows how the number of participants relative to total employment<sup>10</sup> also varies markedly across countries, from close to 40% in countries like Australia and Germany to 3% or less in Brazil, Spain and the United States.

10. The figures are expressed in percent of total employment to ensure comparability across countries. This will result in a downward bias in countries – notably Brazil, France and Spain – where youth are the main target of apprenticeship programmes. However, using the same denominator allows better comparisons across countries and total employment is chosen over youth employment in view of the fact that it would be desirable that access to apprenticeships is not restricted by age.

Figure 11. Participants in apprenticeship training, 2011<sup>a</sup>

Thousands and percentage of total employment



a) In Brazil, France and Spain, youth are the primary target of apprenticeships training so dividing by total employment tends to bias the figures down.

Source: OECD (2012) *Education at a Glance*, OECD Publishing, Paris.

As obvious from Figure 11, countries vary in the extent to which they would need to expand apprenticeship programmes. Further expansion does not seem to be necessary in Australia or Germany while it would certainly be desirable in Brazil, the United States, Spain and Turkey, possibly along with improvements in the quality of training provided by the programme. Policy tools aimed at expanding and improving apprenticeship training include: financial incentives, programme flexibility, the involvement of social partners, and the participation of disadvantaged youth. Box 3 presents examples of good practice in each of these areas.

### Box 3. Sustaining the demand for apprenticeships: examples of good practice

Countries wishing to expand and improve the quality of apprenticeship training can appeal to a number of policy tools, each with its own costs and benefits. The main policy instruments are summarised in the table below.

**Table What can be done to expand and improve apprenticeships?**

Measures	Direct costs	Benefit
Financial incentives	High	Stimulates demand for apprentices
Flexibility of programme	Low	Stimulates demand for apprentices
Involvement of employers and unions	Low	Keeps system in line with sector skill needs
Encourage participation of disadvantaged youth	High (pre-apprenticeship courses; additional subsidies)	Increase government returns if school drop-out rate falls

**Box 3. Sustaining the demand for apprenticeships: examples of good practice (cont.)**

Government financial support is offered in many countries and takes a variety of forms (social security rebates as well as direct subsidies). In Canada, the Apprenticeship Training Tax Credit is a refundable tax credit for companies and businesses employing apprentices in certain skilled trades during the first three years of an apprenticeship programme. The employer can claim up to CAD 5 000 each year for a total of CAD 15 000 per apprentice. In France, public subsidies take the form of various exemptions from employer and employee social security contributions. In addition, since 2005, employers hiring apprentices also benefit from a tax credit, which amounts to EUR 1 600 per apprentice (on a full-year equivalent basis). The drawback of these financial measures is that they can be quite expensive for the public purse, especially in countries with large apprenticeship programmes. In Australia, large scale financial incentives paid to employers have raised doubts about the cost effectiveness of the programme (Dolphin and Lanning, 2011).

Rigid rules concerning the hiring of apprentices and the management of apprenticeships often represent a barrier to expanding the system as employers are more reluctant to take on apprentices. Australia has recently reformed and strengthened its apprenticeship system, putting more emphasis on flexibility particularly by supporting competency-based progression through the Accelerated Australian Apprenticeships Program. Competency-based progression is defined as progression through an apprenticeship or a traineeship which is dependent on the satisfactory demonstration of occupational competencies prescribed as part of the qualification, and is not solely tied to a specific duration. The programme is expected to encourage participation in apprenticeships by employers, who have been shown to favour shorter schemes or schemes that allow apprentices to graduate early if they have acquired the key competences required by their trade.

Other forms of rigidity remain undealt with. For instance, in Brazil, employers have the legal obligation to take apprentices on based on the size of their workforce, without any form of financial subsidy from the government. This rule has given rise to widespread non-compliance with the obligation, with employers suggesting that the number of apprentices to be hired should be based on the workforce in occupations susceptible to be learnt through apprenticeship training rather than the whole workforce. Similarly, in Italy, employers have the legal obligation to hire a certain share of apprentices upon training completion and a recent reform has increased the applicable ratio. Again, while this aims at ensuring that apprenticeships are a stepping stone into the labour market for young people, there is a risk that the obligation undermines the willingness of employers to take on apprentices while helping only a small share of apprentices to find work. In dual systems, such as in Germany, such obligation to hire does not exist but the quality of the programme ensures that the vast majority of apprentices find work upon graduation, either with the training employer or with another firm.

The direct involvement of unions along with employers' representatives and government has been key in the success of apprenticeship programmes in dual-system countries such as Germany. In particular, it ensures that a sufficient number of places are created to meet demand and that training content is periodically revised to keep up with technological and organisational progress. In Germany, a comprehensive system is in place whereby the Ministry of Economic Affairs regulates the overall programme, the Economic Chambers advise training companies and supervise on-the-job training, landers fund vocational schools while employers pay for on-the-job training and all social partners are engaged in updating the training content for each qualification.

Apprenticeships can be particularly effective for disadvantaged youth, who have become disaffected with academic education and more likely to engage when learning is hands-on and on-the-job. For them, apprenticeships can help re-establish a connection with school and the labour market. Unfortunately, in most countries, take up rates for low-skilled youth are low, calling for pre-apprenticeship programmes to prepare them for standard apprenticeship training as well as extra financial subsidy as an incentive for employers to take them on as apprentices. In Ontario (Canada), the government offers CAD 1 000 scholarships to young people (16-24 years of age) who have dropped out from school to complete their education and be able to register as apprentices. A CAD 2 000 lump-sum payment per apprentice is also available for the employer who sign up at-risk youth. In France, a higher tax credit, EUR 2 200 per apprentice (on a full-year equivalent basis) rather than EUR 1 600 is paid to employers who hire a young disabled person or a disadvantaged youth.

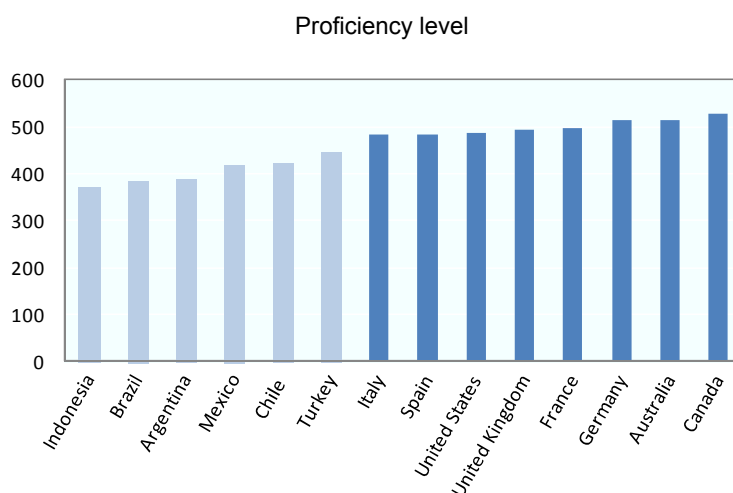
In addition, some labour market programmes for disadvantage youth act as pre-apprenticeships. This is the case of the United States Job Corps programme. The programme is targeted towards youth aged 16-24 from low-income backgrounds who face one or more barriers to employment such as lacking qualifications, or being a foster child, a teenage parent or a homeless youth. Job Corps services are provided at 122 centres nationwide, where most participants reside in campus-like living quarters. Programme content includes academic education and vocational training aimed at attaining an upper secondary qualification and it is also recognised as a pre-apprenticeship programme, allowing entry to apprenticeships.



*Improving the quality of learning provision and equality of access*

Raising participation in education cannot be an end in itself. Rather it is a means to raising learning outcomes and improving the competences of the workforce. Unfortunately, measuring learning outcomes is not easy. Some comparable information is available on the level of cognitive skills of 15-year-olds for those countries/regions included in the OECD Programme for International Student Assessment (PISA) and it shows a marked variation in cognitive outcomes. In emerging economies – notably, Argentina, Brazil, Chile, Indonesia and Mexico – 15-year-olds perform rather poorly in mathematics (Figure 12) as well as in the other two cognitive domains covered in PISA (reading and science) relative to the advanced economies covered in this paper.

Figure 12. **PISA scores in mathematics, G-20 countries**



Source: OECD Programme for International Student Assessment (PISA), 2009.

While poor outcomes are partly explained by socio-economic characteristics – including, in particular, family background – low quality of education unquestionably affects students' performance in emerging economies. In many of the countries at the low end of the PISA performance scale, critical inputs for students and teachers, including infrastructure, textbooks and other learning material are often lacking. For instance, in Brazil, in 2011, 33.5% of upper secondary students attend school in the evening (INEP, 2012).<sup>11</sup> Class size, another input in the learning process, is also the largest in emerging economies both in primary and lower and upper secondary education, although large class sizes are observed in some advanced economies as well (OECD, 2012).

Differences in the amount countries spend on education per student explain these differences in the quality of infrastructure. As Figure 13 shows, emerging countries spend very little per student, in both primary and secondary education, compared to advanced economies. However, it is noteworthy that expenditure does not fully explain educational outcomes – for instance, in all three PISA domains, the United States are outperformed by several countries spending much less on education (per student but also as a percentage of GDP). Moreover, the size of youth cohorts and lower level of GDP per capita in emerging countries are such that catching up to advanced economies would call for raising expenditure on

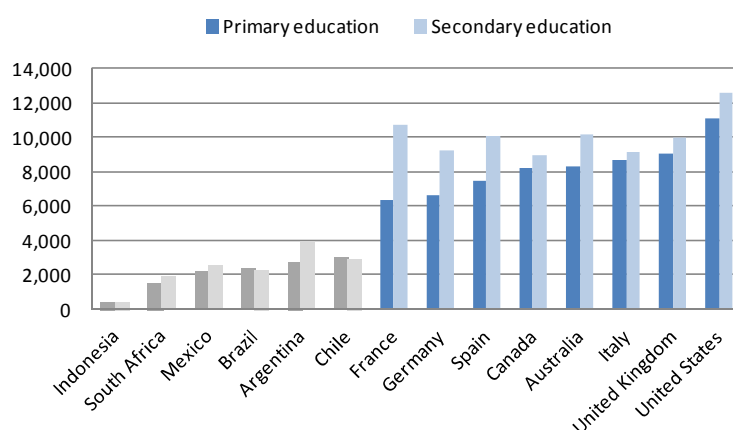
11 . In Brazil, the school day is often divided in three shifts – morning, afternoon, and evening – lasting approximately 3.5-4 hours each. As a result, students attending evening classes cumulate short instruction time with the fact of attending at a time when they are less productive. However, it is also important to note that some youth may elect to study in the evening so that they can reconcile school and work.



education to a major share of their GDP. As this may not be feasible and given limited resources, a better distribution of available inputs may help improve outcomes. Indeed, inequalities of opportunities significantly affect student performance. Poor children frequently enter formal schooling with serious nutritional deficiencies and inadequate levels of cognitive and socio-emotional development. These findings suggest that more and better distributed key education inputs – infrastructure, learning resources and instructional time – have the potential to improve learning achievement. They also justify allocating additional resources to schools serving disadvantaged students such as poor, rural and ethnic minorities.

Figure 13. **Annual expenditure per student, 2009**

In equivalent USD converted using PPPs for GDP, by level of education, based on full-time equivalents



Note: No breakdown available for China and for below-tertiary education in Canada and the Russian Federation. Figures reported refer to the total (China) or below-tertiary sub-total (Canada and Russian Federation) expenditure.

Source: OECD (2012) *Education at a Glance*, OECD Publishing, Paris.

Finally, while increasing inputs and improving access to education are key policy measures for emerging countries, some advanced economies face other but equally daunting challenges calling for different policy tools. With the exception of Australia and Canada, 15-year-olds in the other advanced economies covered by this paper score poorly compared to the best performers – Finland and several Asian countries<sup>12</sup> – in all three PISA domains. Most countries are focusing on improving teaching quality, particularly by attempting to attract better skilled professionals through more attractive pay packages and a better image of the profession but also by improving the motivation of existing teachers through better incentive structures. Some countries are also attempting to improve results by lengthening instruction time. This is notably the case of France where the government has been trying to lengthen the school week to 4.5 days from the current 4 days.<sup>13</sup>

#### *Improving educational choice through better labour market information and career guidance*

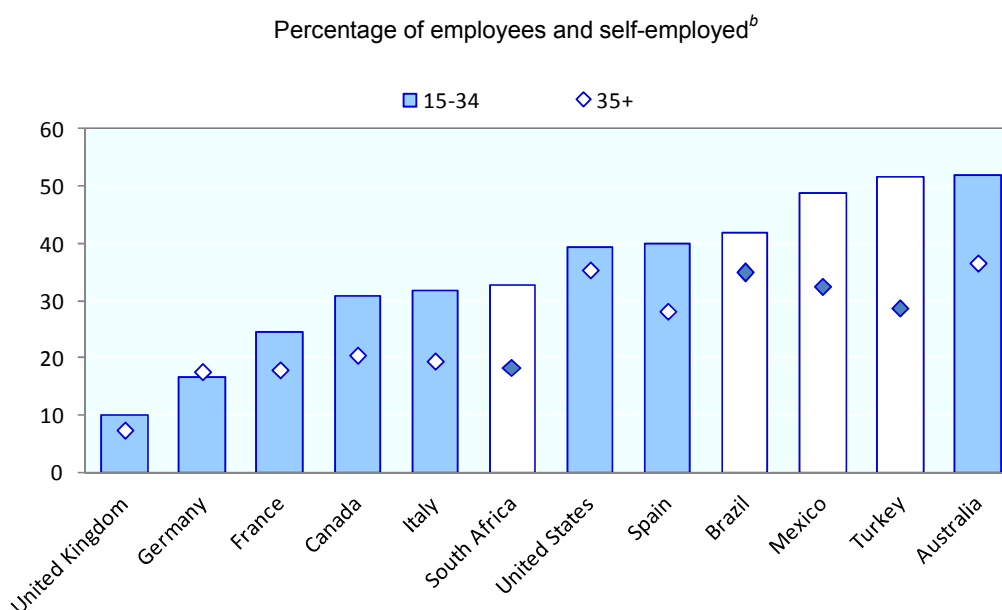
Many youth leave the education system unprepared for the labour market, even in countries with low school drop-out rates, high expenditure on education and high PISA scores. The current focus on improving and expanding vocational education, including apprenticeships, may help address this issue, as

12. Japan, Korea, Singapore as well as Hong Kong and Shanghai in China rank very high based on the performance of 15-year-olds in PISA.

13. The issue of instruction time is relevant to several emerging economies as well. As mentioned above, Brazil secondary students attend school for just 3.5-4 hours.

discussed above. However, in some cases, it is youth themselves – particularly those from disadvantaged backgrounds – who make unwise educational decisions and embark in courses for which there is only limited labour market demand. This can result in high youth unemployment rates but also in large shares of youth working in fields unrelated to what they have studied. The latter is a major source of *over-qualification*,<sup>14</sup> whereby workers are employed in jobs that require lower qualifications than those they possess. In this particular area, differences between emerging and advanced economies are blurred. Although Brazil, Mexico and Turkey have high rates of over-qualification, the same is true for Australia and Spain while South Africa experiences rather moderate rates (Figure 14).<sup>15</sup>

Figure 14. **Over-qualification at work,<sup>a</sup> youth and adults 2005**



a) Over-qualified workers are those whose qualifications are higher than required by their occupation. The modal qualification in each occupational group at the two-digit level is used to measure qualification requirements.

b) Trainees and apprentices are excluded.

Source: International Social Survey Programme (2005) for Australia, Brazil, Canada, Mexico, the United States and South Africa. European Survey of Working Conditions (2005) for all other countries.

High-quality career guidance can help youth make better informed decisions about their future (OECD, 2004; OECD, 2010d; and OECD, 2011b) but requires: *i*) early action in lower secondary education; *ii*) highly qualified guidance personnel; and *iii*) timely and high-quality data on local labour market needs and employment prospects by occupation. This is a common challenge to all the countries covered in this paper. In fact, even in advanced economies, career guidance programmes suffer from severe under-funding, are provided by untrained teachers and cannot rely on accurate labour market statistics and projections by region and occupation.

14. Field-of-study mismatch contributes to explain about 40% of over-qualification OECD (2011b).

15. Of course, there are other factors that may influence the likelihood of over-qualification and are unrelated to education outcomes. For instance, in some countries the demand for high-level skills may take time to adjust to an increase in supply. This is particularly likely to be the case in emerging economies where the share of youth attending tertiary education is increasing rapidly.

The combination of work and study would also help youth acquire some of the skills required in the labour market before they leave the education system (Box 4). To encourage the acquisition of work experience, some advanced economies are considering whether to apply the apprenticeship model to students pursuing academic pathways. Internships are being strengthened and expanded in a number of countries and some guidelines have started to emerge. To prevent abuses and ensure that internships are true learning experiences for students rather than a cheap form of labour for employers, several countries have introduced a number of requirements, including: *i)* internship agreements can only be entered in with students, i.e. internships result from an agreement between an educational establishment and the employer; *ii)* tutors from school and at work are appointed to follow closely the development of the work-experience spell; *iii)* the training content of the internship is documented and verified; *iv)* interns are paid a moderate wage, at least beyond a certain length; and *v)* participation gives rise to certification or credits towards the intern's qualification.

On the other hand, in emerging economies, the trend has been to give young people the means to study without having to work at the same time, particularly in secondary education. This was, for instance, the motivation behind the introduction of a supplement for 16-17-year-old adolescents within the Brazilian *Bolsa Familia* programme. While this trend deviates from the tendency to encourage the combination of work and study in advanced economies, it is important to keep country background in mind. In many emerging economies, working adolescents are employed in the informal labour market, in poor quality jobs that provide little training and labour market experience and rarely improve their future labour market prospects. In addition, because these jobs tend to be in the unregulated sector, there is little way to ensure that work takes place outside school hours, with many young people working during the day and studying in the evening, thus compromising their learning outcomes.

#### Box 4. **Combining study and work: achieving the right balance**

The impact of combining study and work on future labour market outcomes has been thoroughly investigated. The number of hours worked is recognised in most analyses as being key, with positive returns emerging when work is half-time or less. The fact that it provides students with some income is also important as this may help cover part of the costs of their studies or the cost of living while studying.

##### *Impact of early work experience while in high school*

On the one hand, evidence suggests that early work experience, while enrolled in high school, may hinder school performance, as the individual falls behind in his/her schoolwork to the point where dropping out of school and entering the labour market is the preferred option. The pupil may also simply lose interest in schoolwork and enter the labour force early on a full-time basis.

On the other hand, some moderate exposure to the labour market *via* internships, summer jobs or in jobs of no more than 15 hours a week during the school year should not compromise school achievement. It could actually improve teenagers' prospects of graduating from high school as it might lead them to develop life-skills, such as a greater sense of responsibility, improved work ethics, and better discipline. It might also help teenagers decide what they intend to do later.

Whether high-school employment is beneficial or not has been extensively researched in the United States over the past three decades. While some of the earlier studies (e.g. Greenberger and Steinberg, 1986) tend to find negative impacts, more recent work shows that modest involvement in work activities actually leads to positive outcomes. In particular, Ruhm (1997) finds strong evidence that early work experience leads to higher future wages and better fringe benefits. Additionally, he finds that students working ten hours per week during their senior year have a higher graduation probability from high school than those who do not work at all, although heavier work commitment is associated with a lower probability of graduation.

**Box 4. Combining study and work: achieving the right balance (cont.)**

*Impact of student jobs while in tertiary education*

In a number of countries, tertiary students work to off-set the costs of their studies. However, it is not the only reason for student work. Countries where student work is very widespread are not necessarily those where tertiary fees are high. In Nordic countries, where all students receive a study allowance and tertiary studies are free, almost all students work to be financially independent and to leave the parental home. By contrast, in France where tertiary fees are low, student work is perceived as a necessity for students not lucky enough to benefit from the financial support of their parents and constitutes a source of additional income on top of public scholarships for young people from disadvantaged backgrounds.

Overall, most analyses provide evidence that working a moderate number of hours helps youth in post-education labour market outcomes without compromising school achievement (Dundes and Marx, 2006).

In some European countries, emphasis is also put on the relation between work content and the student's field of study. Evidence from France (Befy et al., 2009) shows that work experience acquired while studying has a clear positive effect on future labour market outcomes only if the job is related to the student's field of study.

## **2. The role of labour market policy and institutions in facilitating access to employment**

While leaving education with the skills required in the labour market is important to facilitate transitions to work, labour market policies and institutions can play a major role in supporting youth in their job search and in promoting labour demand. Labour market policies can assist job search by providing adequate income support combined with effective employment services. At the same time, institutional features affecting labour demand may also have an important impact on the job prospects of young people and the quality of the jobs they hold. This section discusses the role of labour market policies in supporting job search and skills acquisition as well as policies and institutions affecting labour demand.

### *Programmes for unemployed youth and those facing specific challenges*

Youth who leave school without an upper secondary qualification as well as youth facing multiple disadvantages find it difficult to access stable, formal employment. While the educational policies described above address the problem at its root, unemployment benefits and active labour market programmes represent important sources of financial help and re-employment support. However, not all of the countries covered in this paper have well-functioning benefit and employment. Even in advanced economies, public employment services and programmes for disadvantaged youth sometimes provide poor quality, expensive services that are rarely evaluated to assess cost-effectiveness. These issues tend to be exacerbated in emerging economies.

Starting from income support provided to unemployed youth, most countries do not distinguish between age groups as far as entitlement to unemployment benefits is concerned. However, eligibility requirements tend to exclude youth from unemployment benefits on the basis of their insufficient contributory history. Very few countries provide unemployment assistance benefits to youth without work experience – among the countries covered in this paper, this is the case in Australia, Germany and the United Kingdom – and in most cases these payments are a fraction of what is perceived by the adult unemployed (OECD, 2010a).

Youth in emerging countries are even less well covered than their counterparts in more advanced economies: Indonesia and Mexico do not have unemployment insurance systems; in Chile and Brazil, unemployment insurance exists but its duration is rather short, reaching 5 months at the maximum; and required contribution periods are quite long in India and Turkey – 20 months out of the latest 36 months

and 5 years respectively – but also in Argentina and Chile – one year – making access unlikely for youth who have just entered the labour market. Only in South Africa, does the unemployment insurance system resemble those in advanced economies (OECD, 2011b). On the other hand, in most emerging economies, additional income support for job losers is provided through individual saving accounts (Brazil, Chile and Mexico) and/or severance pay systems (Chile, India, Indonesia, Mexico, South Africa and Turkey), sometimes in conjunction with unemployment insurance. Although in most emerging economies youth without work experience and/or working in the formal sector have right to little financial support during unemployment spells, the existence of individual saving accounts as a form of income support may benefit them in other ways. Notably, it may help reduce hiring barriers in the formal sector due to strict employment protection regulations, hence indirectly increasing unemployment benefit coverage.

In recent years, access to safety nets in advanced economies has been made conditional on active job-search following the “mutual obligations” principle whereby income support for the unemployed is combined with strict job-search requirements and compulsory participation in effective re-employment programmes under the threat of moderate benefit sanctions in the event of non-compliance. Unfortunately, even in countries where the “mutual obligations” principle works well, identifying effective re-employment programmes for unemployed and other disadvantaged youth is far from easy and many programmes have yielded disappointing outcomes. Summing up what works and what does not is not straightforward and outcomes of different programmes may reflect broader institutional settings that are specific to each country. Nevertheless, drawing on the existing programmes evaluation literature covering many emerging and advanced economies, successful programmes appear to share the following characteristics (Martin and Grubb, 2001; Betcherman et al., 2004; Betcherman et al., 2007):

- *Job-search assistance programmes* are often found to be the most cost-effective for youth, providing positive returns in the form of higher earnings and employment. Some wage and employment subsidy programmes have yielded positive returns, but these measures tend to perform poorly in terms of their *net* impact on the future employment prospects of participants unless they are designed very carefully;
- *Training programmes* work best when they are carefully tailored to local or national labour market needs. In this respect, mobilising and involving the private sector, the social partners and community leaders to assess local or national demand for skills is important. In Argentina and a number of other Latin American countries, youth programmes that combine training with other services, such as job readiness and job-search assistance, have shown that they improve employment and earnings prospects of participants (Elias et al., 2004; and Pagés et al., 2009; see Box 5). In the United States, the YouthBuild programme for disadvantaged youth focuses on training in the construction sector and has been replicated in a number of other countries (see Box 6).

#### Box 5. Training programmes for disadvantaged youth in Argentina and Brazil

The *Proyecto Joven* in Argentina was launched in 1993 to improve the labour market outcomes of disadvantaged 16-29-year-old youth, including youth with low educational attainment living in low-income households and young workers in the informal economy. The programme combined classroom-based learning with on-the-job training. Training institutions provided foundation skills – such as literacy and numeracy – as well as vocational and employability skills – notably, communication and interpersonal skills. On-the-job training was contracted from private enterprises working under the supervision and coordination of the public agency managing the programme. Job-search assistance and self-employment training complemented these training modules, as well as follow-up training after recruitment, if required.

A similar youth programme – *Capacitación Solidaria* – was launched in Brazil in 1996. The Brazilian programme, which is still being implemented, is financed by the State. Funding is granted through competitive bidding to private training institutions and civil society organizations, as well as trade unions. These institutions are required to ensure ex-ante that training services are linked to work experience and opportunities for internships.

Programme evaluations have shown an improvement in the employment opportunities and earnings of participants. For instance, impact evaluation of the *Proyecto Joven* in Argentina has shown that it increased the probability of employment of young adult women (21 years and older) by 10 percentage points and raised the monthly wages of participants by 10%, with more favourable results for young men and young adult women (Aedo and Nuñez, 2001; de Moura Castro, 1999 and Elias et al., 2004). The common characteristics identified as contributing to the success of programmes of this kind are: *i)* effective coordination between the State, social partners, private companies and civil society; *ii)* outreach to the targeted population; *iii)* decentralized implementation through competitive bidding; and *iv)* an integrated package of training services.

- Good *targeting* of the programmes is important. For instance, there is a need to distinguish between teenagers and young adults, and to devote particular attention to early school leavers. The most desirable solution to the employment problems of teenagers is to help them to remain in (or return to) school to acquire a useful *qualification*, whereas for young adults in their twenties, it is more important to help them to acquire *work experience*;
- To the extent possible given administrative capacity, it would be important to make participation in programmes *compulsory* for youth after a period of job search (e.g. six months). While this may imply an increase in costs and possibly a reduction in the average effectiveness of the programmes, making participation compulsory is likely to be the only way to ensure that the programmes reach the youth who are most at risk of social exclusion;
- Programmes that integrate and combine services and offer a comprehensive package adapted to individual needs seem to be the most successful (e.g. the Work Programme in the United Kingdom and Job Services Australia);
- For the most disadvantaged youth at high risk of social and labour market exclusion, residential programmes with a strong focus on remedial education, work experience and adult mentoring – e.g. the Job Corps programme in the United States – have shown some positive outcomes, particularly for young adults (Schochet et al., 2001; and Schochet et al., 2003).

### Box 6. The YouthBuild programme in the United States

The YouthBuild programme in the United States supports disconnected 16-24-year-olds from low-income families to obtain a high-school diploma or GED – a test-based upper secondary qualification – and provides occupational training in the construction field. The programme was initially introduced as Youth Action in East Harlem in 1979. It was originally operated by the Department of Housing and Urban Development but was transferred to the Department of Labor in 2006. This change led to a change in the main focus of the programme, from community development and building of affordable housing, to the employability of disconnected youth. Since 2006, the programme has been subject to performance measures set by the Department of Labor, including a follow up of participants up to 90 days after leaving the programme. The programme lasts between six months and two years and participants spend at least 50% of their time in education and related services and at least 40% of their time in workforce investment activities (work experience, occupational skills training, job search, internships, etc.). In addition, beneficiaries participate in counseling, peer support groups, and life-planning exercises which encourage them to pursue life goals and develop their leadership skills while providing community services.

Funding is provided mainly by the Federal government but other government agencies, private foundations and individual donors also contribute. All initiatives are linked through a centralized national office that provides implementation support, including staff training and information on best practices and programme innovations. In 2009, the YouthBuild budget doubled thanks to USD 50 million in additional funding that the programme received as part of the US Recovery Act which included several measures aimed at limiting the consequences of the economic downturn. The budget was expanded further to USD 120 million in 2010 and 2011. However, the cost per participant is high at between USD 15 000 and USD 18 000. The programme serves approximately 10 000 youth per year but the high cost per participant means that, despite the generous budget, about 14 000 applicants are turned down every year because of the lack of funds.

Available evidence suggests that YouthBuild is a successful alternative education programme. More than one third of its participants move from the programme to post-secondary education and hence increase their chances of successful labour market entry.<sup>a</sup>

Although the vast majority of YouthBuild centres are based in the United States, the programme's model has been replicated in several other countries including Brazil, Canada, Mexico, South Africa<sup>b</sup> and the United Kingdom.<sup>c</sup> Outside the United States, YouthBuild programmes are managed/funded by government, NGOs or private initiatives.<sup>d</sup> The cost of running YouthBuild outside the United States varies, mostly due to differences in the cost of living across countries. The length of the programme also varies and is shorter in emerging countries where youth cannot afford to train and be out of work for too long.

a) The Department of Labour has funded a rigorous national evaluation of the programme to be undertaken by MDRC, Mathematica Policy Research and Social Policy Research Associates. The evaluation will use a random assignment design to measure the impact of YouthBuild on employment, educational attainment, criminal justice involvement, and other important outcomes and will be completed in 2017.

b) The content of the programme varies slightly across countries. For instance, in South Africa, YouthBuild students construct affordable housing and provide trauma counseling to refugees.

c) In addition, YouthBuild International is currently working with private sector, government, education and training systems in China, India and Indonesia to build or redesign youth employment support.

d) In Mexico, the YouthBuild network raised USD 7 in public funding for every USD 1 invested by the Kellogg Foundation, its main funder.

The good functioning of these active programmes hinges on several institutional features such as: the availability of financial support – e.g. in the form of unemployment insurance or assistance or other social benefits – to attract NEET youth to the programmes and keep them involved through the threat of benefit sanctions if need be; the image of public employment offices, also crucial to ensure youth participation; the involvement of employers, particularly their willingness to hire disadvantaged/unemployed youth for internships or subsidized jobs; and the collection and availability of good performance data to ensure that the programmes can be evaluated and that fine-tuning can take place in the event of poor performance. Unfortunately, these features are present in only very few of the countries included in this paper.



*Employment protection regulation could affect the quantity and quality of jobs for youth*

Regulations concerning the hiring and firing of workers play an important role in ensuring a fair treatment of workers and avoid abuses. By increasing employment security, they also raise employers' incentives to invest in human capital through on-the-job training as well as employees' incentives to participate in firm-specific training and co-operate with the implementation of productivity-enhancing work practices or new technologies. In addition, as mentioned above, severance pay, can represent an important source of income support during unemployment spells, particularly in emerging economies with weak unemployment benefit systems.

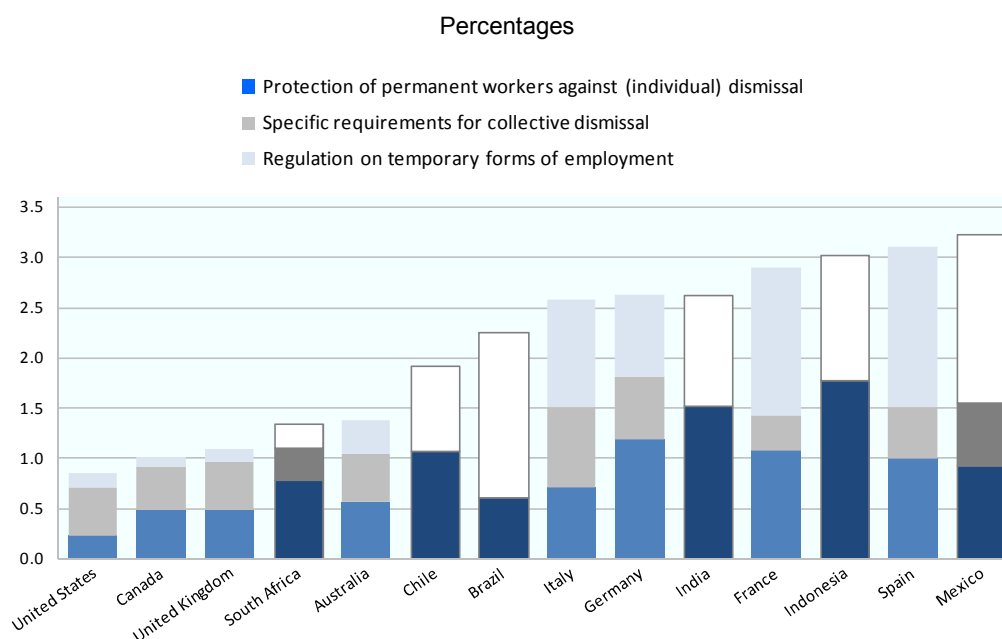
However, designing and enforcing employment protection regulations involve trade-offs between the degree of effective protection to the workers and the incentives for firms to hire, particularly among inexperienced youth and other new labour market entrants.<sup>16</sup> In particular, strict and uncertain procedures concerning the firing of permanent workers along with high severance payments tend to make employers reluctant to hiring youth on open-ended contract.<sup>17</sup> Figure 15 shows an index of employment protection regulations compiled by OECD for most of the countries covered in this paper. The index is mostly based on legislation and collective bargaining outcomes. In 2008, according to this indicator, the strictest regulations were found in Turkey and the least strict were observed in the United States. The only clear distinction between emerging and advanced economies is that several emerging countries do not have specific requirements for collective dismissals. It is important to note that, as it stands, this OECD indicator does not incorporate any information concerning the enforcement of employment regulations. This implies that in countries where labour inspections are not systematic and sanctions are low or where many youth are involved in the informal sector or in temporary forms of employment, the actual degree of employment protection is much lower than what is stated by the indicator.

---

16 . Although evidence on the impact of employment regulations on the overall level of employment remains mixed, cross-country evidence suggests that strict employment protection regulations tend to be associated with higher youth unemployment even when controlling for a host of other factors that could affect youth employment (see e.g. Bassanini and Duval, 2006; and the OECD, 2006).

17 . Theoretically, the effects of employment regulations on productivity are uncertain. On the one hand, the effects on human capital investment point to a potential positive role of employment protection regulations on labour productivity. On the other hand, there is a risk of a negative effect as these regulations tend to restrict the movement of labour into emerging, high-productivity activities, firms or industries. Overall, there is evidence of a significant negative effect of overly strict employment protection regulations on labour turnover and, given the importance of labour mobility to promote reallocation of resources to most productive uses, on productivity growth (see Martin and Scarpetta, 2011 for a review).



Figure 15. **Employment protection regulation, OECD index, 2008**

Source: Venn (2009) based on the OECD's database of indicators of the strictness of Employment Protection Legislation.

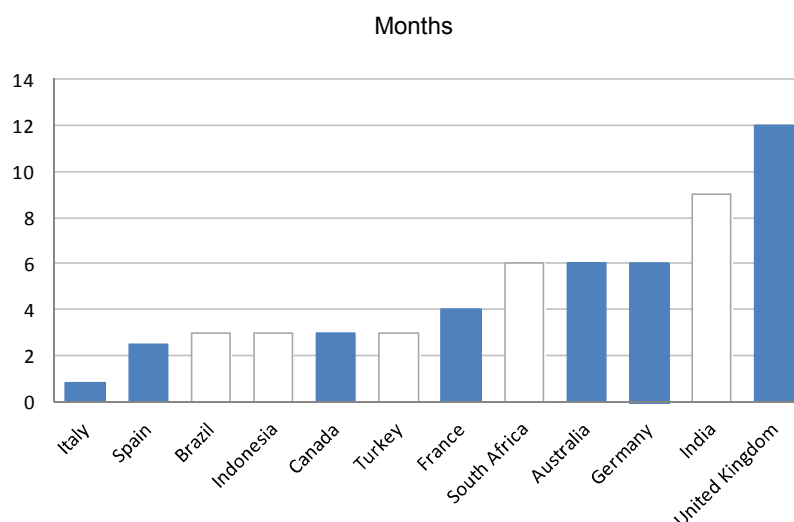
In countries where strictly-regulated permanent contracts are combined with easy-to-use temporary ones, inexperienced young people tend to be hired on short-term contractual arrangements, notably fixed-term and temporary work agency contracts (see Figure 5). This is the case in Germany and Italy but also in France and Spain where the share of workers in temporary contracts suggests that their use is much more widely spread than suggested by the indicator shown in Figure 15 possibly because of limited inspections and/or sanctions. Temporary contracts may represent a stepping stone into the labour market opening the door to more stable employment later on or they may become traps whereby short-term work and unemployment spells alternate through one's working life. Overall, as the nature and duration of temporary contracts as well as their training content vary, both effects are likely to co-exist, with longer temporary contracts facilitating youth's access to work and shorter ones more likely to become dead ends. On balance, countries that have enhanced the adaptability of the labour market mainly by easing regulations on temporary (or other atypical) contracts while leaving in place strict regulations on permanent contracts have often seen an increase in labour market dualism, with no significant reduction in youth unemployment. Consequently in these countries youth are considerably over-represented in temporary work and, as a result, more vulnerable to economic downturns (Blanchard and Landier, 2002; and Dolado et al., 2002).

On the other hand, in some emerging economies, strict regulations on permanent contracts are also accompanied by strict rules on the use of temporary forms of employment and this is likely to result in high and persistent youth unemployment or in a high incidence of informal employment among youth (see Figure 6).

One aspect of employment protection regulation that is particularly relevant to the hiring of youth is the duration of the trial period – i.e. the initial period during which regulations protecting workers against unfair dismissal are not applicable. Across the countries included in this paper, the length of trial periods varies between 12 months in the United Kingdom and no statutory period at all in Chile and

Mexico (Figure 16).<sup>18</sup> Both these extremes have potential drawbacks. While overly-long trial periods could be used by employers to rotate new hires and reduce firing costs, very short ones may discourage the hiring of young people without experience for fear of incurring high firing costs should the new hire turn out not to be a suitable match for the position.

Figure 15. Trial period length, OECD index, 2008



a) In the United States, trial periods can be set in collective agreements or individual contracts and vary widely. There is no trial period in Chile and Mexico.

Source: OECD Employment Protection database, [www.oecd.org/employment/protection](http://www.oecd.org/employment/protection).

Re-balancing the protection offered by different types of contracts would have positive effects for many low-skilled workers and those with intermittent employment spells, and youth are likely to be among the main beneficiaries. This would help youth (as well as other workers with limited work experience) to move gradually from entry jobs, which are very often atypical, to more stable career jobs. In this context, as mentioned above, some countries have either introduced (Brazil, Chile, Mexico and Turkey) or are considering (Spain) a system of individual savings accounts that complement or substitute severance pay schemes. Distinct from the severance pay, the benefits are paid whatever the reason or initiator of the separation and thus these accounts tend to reduce firms' defaults on severance payments. Moreover, since payments are prepaid, they do not hinder employment adjustment and simplify separation procedures.<sup>19</sup> Less radical options include the possibility of limiting the use of temporary contracts more narrowly to jobs/projects having a temporary nature. However, this is already the case in some countries with very high incidences of temporary work – notably Spain – which suggests that moving further in this direction would require a significant increase in labour inspections and a marked rise in sanctions incurred in the event of non-compliance. Finally, youth may benefit from trial periods of moderate length – approximately six months. This would encourage employers to hire young people on permanent contracts as it would allow sufficient time for the skills of new hires to be tested.

18. In the United States, trial periods can be set in collective agreements or individual contracts and vary widely.

19. In these systems, design is crucial to ensure that the right incentives are provided for all parties involved, notably employers and workers. For instance, the initial design of the Brazilian *Fundo de Garantia por Tempo de Serviço* left room for negotiation between workers and firms to agree on fake dismissals, by which firms simulated that they were firing workers for just cause and paid a firing penalty that was later returned so that workers could access the funds in their personal account (Gonzaga, 2003). Recent changes in the system design have reduced incentives for this behaviour.

*Labour costs can be a barrier to youth employment in some G-20 countries*

Total labour costs can significantly affect labour demand. Part of these costs, notably non-wage costs associated with the payment of social security contributions, play an important role in financing essential social services, in particular in countries where the tax base for income tax is limited. However, if non-wage labour costs are too high, they risk hindering labour demand, particularly for the low-skilled and for new labour market entrants whose productivity is not easily assessed at hiring by employers.<sup>20</sup> For this reason, several countries have attempted to encourage employers to hire youth by lowering social security contribution rates.

Good measures comparing labour costs in emerging and advanced economies are hard to produce. The OECD computes tax wedges for its member countries, including social security contributions (both employers' and employees' contributions) and taxes on labour income expressed as a percentage of average wages for a number of socio-demographic groups (Figure 17, top panel). These figures suggest very high labour taxation rates, of 45% and over, in continental Europe – notably, Germany, Italy and France – compare with rates of about 20-25% in Anglo-Saxon countries – notably Australia, Canada, the United States and the United Kingdom – and very low rates in Chile and Mexico where contributions are below 15%. Although the composition of the tax wedge (not shown) is theoretically irrelevant<sup>21</sup>, employer's social security contributions make up a large part of the total tax wedge in France, Italy and Spain and this may represent a particular barrier to the hiring of inexperienced youth. This is particularly the case in Spain and Italy where employer's social security contributions are regressive – i.e. they are lower for those hired at a wage equivalent to 100% of the country's average than for those hired at 67% of the average wage. On the other hand, these contributions appear to be progressive in France where employers of low-wage earners pay two percentage points less.<sup>22</sup>

The bottom panel of Figure 17 shows the sum of employers' and employees' social security contributions for a number of benefits, including old age and sickness benefits. The values reported are based on descriptive information provided by the US Social Security Administration and should be taken as only indicative of social security contributions around the world rather than precise estimates. It is noteworthy that not all emerging economies have low social security contributions but coverage is often very limited – e.g. in India. The figures confirm that labour costs are unlikely to be a barrier to the hiring of youth (in the formal sector) in Mexico and Chile and suggest that this may be the case in Indonesia as well. On the other hand, policies aimed at reducing labour costs may be justified in Argentina, Brazil and Turkey.

---

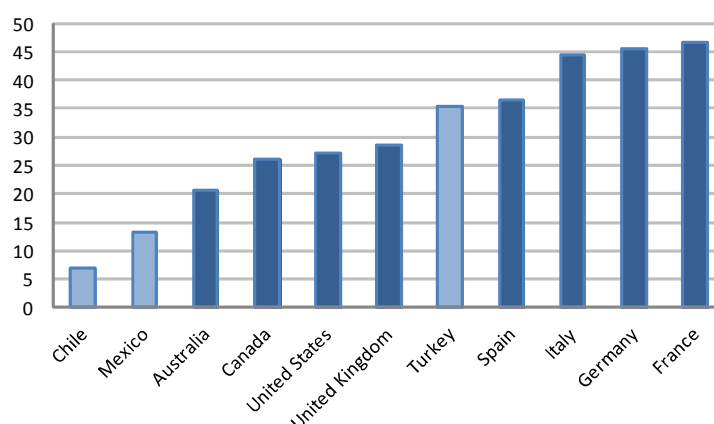
20 . Cazes and Nesporova (2003) find that unemployment, and in particular long-term and youth unemployment, tend to rise with higher payroll taxes. Bassanini and Duval (2006) also find a negative effect of the total tax wedge on youth employment.

21 . Theoretically, the role played by labour taxes in reducing employment depends on the extent to which employers can shift the cost onto workers in the form of lower wages. If this is possible, the effect on employment will be limited as wages will adjust accordingly. However, the presence of a wage floor (e.g. statutory minimum wages) can prevent employers from passing on increases in labour taxes through lower wages, hence reducing employment *ceteris paribus*.

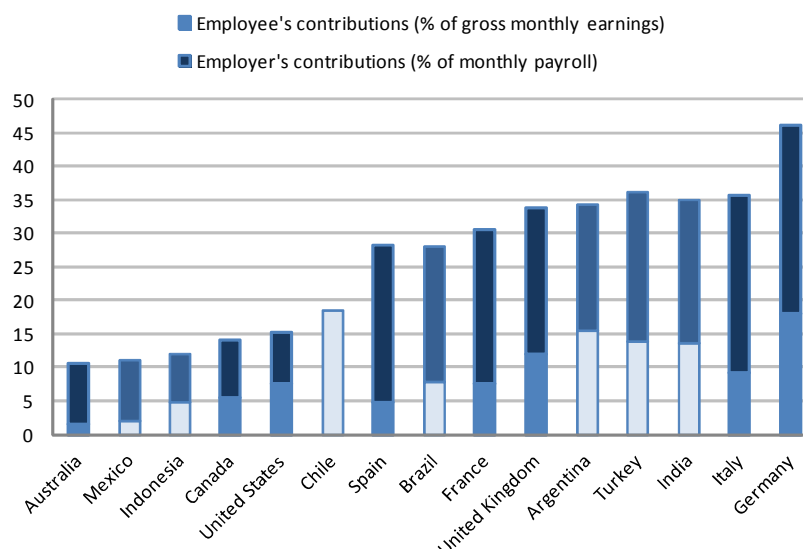
22 . Only in the United Kingdom does the rate of employee's social security contributions increase with income. Unsurprisingly, income tax rates are progressive in every country shown in Figure 17.

Figure 17. Tax wedge in selected countries, 2011

Tax wedge including social security contributions (employer's and employee's) and income tax - single worker, no children, earning 67% of average wage



Contributions to old age, disability, survivor, sickness and maternity benefits<sup>a</sup>



- a) If different rates apply to different earnings levels, the rate applying to the lowest level is used in these calculations; If different rates apply to different firm sizes or sectors, the average is used in these calculations; figures for Mexico exclude medical contributions because these are expressed as a percentage of the difference between the worker's monthly wage and a reference multiple of the minimum wage, making it difficult to estimate a rate; values for South Africa are not available. Please note that employee's and employer's contributions are expressed as a percentage of different amounts and summing them represents only a ballpark estimate of total contributions rather than a precise one.

Source: OECD Taxing Wages database and Social Security Programmes Around the World, <http://www.ssa.gov/policy/docs/progdsc/ssptw/>.

Some advanced economies have been experimenting with lower social security contribution rates to encourage employers to hire young people for several years.<sup>23</sup> Some lessons can be learnt from these experiences that may be useful for emerging economies attempting to follow this path in order to stimulate youth employment. In terms of implementation, across-the-board reductions risk incurring significant dead-weight losses, i.e. employers exploiting subsidies to hire youth they would have hired anyway, and substitution effects, i.e. employers firing other workers in order to qualify for subsidies when hiring youth.

23 . Since the early 1990s, public authorities in France have influenced labour costs at the minimum-wage level by reducing employer social security charges on low wages.

To ensure effectiveness, reductions in labour costs could be targeted on low-skilled or other disadvantaged youth and could require that no workforce reduction occurs around the time of hiring (see Box 7).<sup>24</sup>

**Box 7. Duration and targeting make wage subsidies work better for youth**

Wage subsidies and other financial incentives (e.g. tax or social security exemptions for a limited period of time) for employers who recruit young people can help improve school-to-work transitions. Indeed, these financial incentives can offset the cost of the initial training that young workers require or compensate for their limited work experience and initial lower productivity (Rosas and Rossignotti, 2005; and Betcherman et al., 2007).

In advanced economies, there is a wide array of measures for sharing initial hiring costs between employers and government. The main features include: duration, amount of subsidy or employer's compensation, and type of contractual arrangement. In some countries, employers receive the equivalent of the national minimum wage per person hired or apprenticed. In others, subsidies are paid for the hiring of young people on limited-term employment contracts, on the grounds that these contracts can serve as stepping stones onto the labour market. For instance, in France and Italy, financial incentives are granted to employers who recruit and provide on-the-job training to young jobseekers.

Wage subsidies can be particularly effective in improving the employment rates of young workers facing labour market disadvantages (e.g. low-educated and low-skilled youth, young disadvantaged women, young people exposed to discrimination in employment and occupation) provided they are specifically targeted on these at-risk youth. An efficient monitoring system is also essential to avoid abuses and achieve the policy objective of improving employability of young workers, rather than turning them into cheap labour.

Overall, in advanced and emerging economies, wage subsidies have in general had positive effects on improving the employment outcomes of youth.<sup>a</sup> Existing evaluations of wage subsidies show that wage subsidies work best when they are designed and targeted to address specific labour market disadvantages faced by young people and when they are provided for a limited period of time. Therefore, generalized subsidies that target young people mainly on the basis of their age are unlikely to have a long-term impact on their employment and earnings. If not targeted, these subsidies often result in labour market distortions in terms of deadweight and substitution effects, with employment lasting only as long as the subsidy is perceived. Evaluation results also stress the benefit of combining subsidies with on-the-job training and other measures in the form of comprehensive service packages offered to young workers.

a) For instance, in 2010, South Africa introduced a wage subsidy scheme aimed at improving youth employment rates in formal-sector firms. The subsidy is worth ZAR 5000 – approximately, EUR 670 – and is paid over a period of six months. This compares with a national median monthly wage for 20-24-year-old youth of approximately ZAR 1500, i.e. slightly less than twice the monthly amount of the subsidy. Unfortunately, no evaluation of the impact that the subsidy has had so far on the hiring of young people have been carried out yet.

*Setting the right minimum wage*

The primary objective of minimum wages is to help prevent working poverty. By redistributing income to workers at the low-end of the pay scale, they are also likely to boost aggregate demand through a multiplier effect. Finally, minimum wages play an important role in preventing labour market discrimination on any ground.

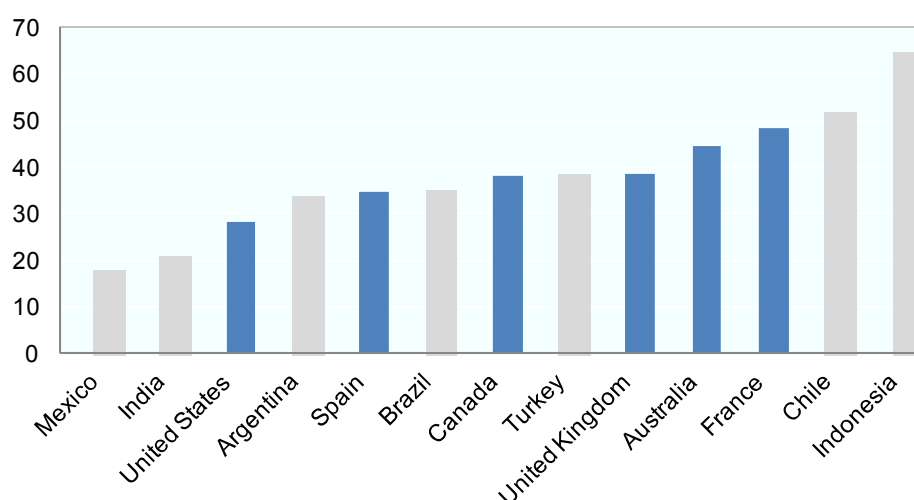
However, if minimum wages are set too high they could discourage employers from hiring low-skilled youth or encourage them to hire youth informally.<sup>25</sup> It is hard to pinpoint the appropriate level of

24 . It is noteworthy that substitution effects could be smaller in countries with strict firing regulations.

25 . While there has been considerable controversy and mixed empirical results concerning the impact of minimum wages on employment, the international empirical evidence suggests that, on balance, the impact is negative for youth employment if the minimum wage is set at a high level, and especially if it is combined with high non-wage labour costs (e.g. OECD, 1998; Neumark and Wascher, 1998 and 1999; and Kramarz and Philippon, 2001). However, it should be added that analysts are not unanimous on this and some studies have failed to find significant negative employment effects (e.g. Card and Krueger, 1995; Stewart, 2003; and Hyslop and Stillman, 2004). Too-high minimum wages may also have a negative effect

the minimum wage. This depends on several factors such as the wage distribution, the degree of employer power in setting wages and the nature of other labour market institutions. Keeping this in mind, Figure 18 shows the ratio of the minimum wage to the average wage in the countries covered in this paper which have a statutory minimum wage and for which this information is available.<sup>26,27</sup> The ratio of the minimum to average wage is just 18% in Mexico. At the other extreme, the highest ratio is found in Indonesia where, on average across provinces, the minimum wage corresponds to 65% of the average wage.<sup>28</sup> Australia, Chile and France also have relatively high ratios, all above 45%.

Figure 18. **Minimum wages, 2009<sup>a</sup>**  
Percentage of average wages



a) All ratios refer to 2009, except for Argentina and Brazil (2010), and India (2008).

b) India: National rate; regional rates exist; United States: Federal rate, state rates above the Federal minima are allowed; Sub-minima for youth can be applied at the state level but must be above the Federal minima (in 2009, only Illinois had a binding youth sub-minima); A federal sub-minimum for youth under 20 during the first 90 days of work with a new employer also exists and is equivalent to 65% of the adult wage. United Kingdom: Sub-MW applies to youth under 22; Two different rates apply: a development rate for youth aged 18-21 and an additional sub-minimum for youth aged 16-17; Australia: Youth are subject to a reduced MW to be set in collective agreements. France: Youth aged 17 and 18 with less than 6 months experience receive 90% of the adult MW and youth 16 or younger receive 80% of the adult MW. Indonesia: Average of provincial rates.

Source: OECD Minimum Wages database for Australia, Canada, Spain, France, Mexico, Turkey, United Kingdom and United States; ILO minimum wage database for Argentina, Brazil, and Chile; EMO (2007) for India; and [http://dds.bps.go.id/booklet/boklet\\_mei\\_2010.pdf?](http://dds.bps.go.id/booklet/boklet_mei_2010.pdf?) for Indonesia.

on educational enrolment (Neumark and Wascher, 1995; Landon, 1997; Chaplin et al., 2003; and Pacheco and Cruickshank, 2007). Empirical evidence on the effect of higher minimum wages on the provision of on-the-job training is more mixed, with some authors finding statistically significant negative effects (Neumark and Nizalova, 2007) and others finding that minimum wages increase training provision (Arulampalam et al., 2002).

26. Although a wage policy may be regarded as less relevant in countries where most young workers are in the informal economy, evidence from some countries (e.g. Argentina, Brazil and Mexico) suggests that minimum wages can affect wage determination in both the formal and the informal economy.

27. Germany, Italy and South Africa do not have a statutory minimum wage. In these countries, minimum wages are negotiated in collective agreements. Argentina has a statutory minimum wage but internationally comparable figures – relative to average wage – could not be constructed.

28. In Indonesia, legislation provides for exceptions to be made for companies that are not in a position to pay minimum wages and these exceptions seem to be granted fairly easily. As a result, the minimum wage can be seen as an effective wage in the formal economy and not as a threshold at the low end of the labour market (Saget, 2008).

To compensate for a relatively high ratio, some countries set sub-minimum rates applicable to youth. France allows for lower rates to apply to youth with limited work experience (as well as by lowering employer social security contributions for low-wage workers). Other countries with sub-minimum wage rates applying to youth include India, the United Kingdom and the United States. In India, reduced youth rates have been established in some sectors (e.g. agriculture, tea plantations). In the United States, state-level sub-minima are allowed provided they are higher than the federally-set rate. In addition, a lower rate applies to youth under 20 in the first 90 days of work with a new employer. On the other hand, the United Kingdom has two sub-minima rates applying to young people: a development rate for youth aged 18-21 equivalent to 32% of the average wage; and a lower rate equivalent to 24% of the average wage for youth aged 16-17.

The application of lower wages to young workers may be justified when the job offered requires higher skills. In this event, a differentiated wage would have the specific purpose of encouraging enterprises to invest in training and to share the costs with young workers. Examples of this include apprenticeship programmes in Germany and the United Kingdom, where salaries are initially lower in recognition of the lower productivity expected during the training period and are adjusted as the training programme progresses.<sup>29</sup> If a sub-minimum wage is introduced, the critical issue is to determine how much lower it should be compared to the adult rate in order to compensate for lower productivity. The social partners have an important role in determining a suitable level of remuneration. Furthermore, sub-minima subject to training provision call for regular monitoring to avoid abuses.

#### *Policies to reduce informal work among youth and improve access to formal-sector employment*

Section 1 highlighted the fact that youth are more likely to work in the informal sector than their adult counterparts (Figure 6). This limits their social security coverage, reduces their job security and wages and makes them more vulnerable at times of economic slowdowns.

Combating informal employment requires a comprehensive approach to reduce the costs and increase the benefits to businesses and workers of operating formally and ensure that regulations are adequately enforced. OECD (2008a) looks at informality in Mexico and Turkey among other countries and identifies some key determinants. Few of the findings are specific to young workers but some are particularly relevant to them.

First, high wage floor in some countries as well as high non-wage labour costs create incentives for informal employment or under-declaration of earnings among employees. For instance, in Turkey, high labour costs result from the combination of binding minimum wages in the formal sector and high labour taxes, partly driven by generous pension systems.

Second, the characteristics and complexity of tax systems are found to play a key role in the spreading of informal employment. For instance, granting preferential tax treatment to the self-employed, notably through taxes on turnover instead of net income, is found to encourage false self-employment and under-declaration. It is easier for the self-employed to evade taxes than for wage earners and it can be difficult for tax authorities to detect their true income accurately. Simplified taxes for small businesses may, however, be appropriate in countries where many self-employed are not equipped to establish proper book-keeping procedures. However, these simplified tax regimes should be designed so as to provide incentives to declare employees' wages. In addition, complex tax systems increase compliance costs for taxpayers and encourage under-declaration.

---

29. Even in this case, some may argue that initial lower productivity would be compensated by higher levels after the training period, hence invalidating the need for a sub-minimum wage for trainees.

Third, there is a close link between informality and the rules governing the use of temporary contracts. Relaxing restrictions on the use of temporary or fixed-term contracts and reducing firing costs for young or inexperienced workers may improve incentives for firms to hire formal workers. In fact, informal employment is used by firms to increase internal flexibility in some emerging economies, where regulations limit the use of temporary and fixed-term contracts. Introducing probationary periods for new workers on permanent contracts could reduce informality, especially among young workers.

Finally, workers' perceptions of the value of the benefits they are likely to receive from social protection schemes may be a factor encouraging formal work or the full declaration of earnings if workers have some say in whether or not they are employed formally. Along similar lines, improving trust in government and the quality of public services can play an important role in reducing informality by increasing the perceived benefit to taxpayers of paying taxes.

Along with the measures listed above to improve incentives for formalisation, effective enforcement of labour, tax and social security regulations is essential to combat informal employment. Existing enforcement resources in countries where informality is a major issue can be used more efficiently by implementing or increasing the use of risk-assessment processes to target inspections and increasing coordination and information-sharing between enforcement agencies. Combating informality also requires broadening the current focus of most enforcement bodies from revenue maximisation (for tax authorities) and occupational health and safety (for labour inspectorates) to include formalisation by targeting new groups, such as small firms or the service sector, where informal employment is prevalent, providing advice and technical assistance to small firms and improving income detection for small firms and the self-employed.

## Conclusions

Improving school-to-work transitions and ensuring better career opportunities for youth after labour market entrance are common goals in emerging and advanced economies as they can contribute to raising the productive potential of the economy and to increasing social cohesion. However, the challenges faced in achieving these objectives and the policies required vary between emerging and advanced economies. Youth in emerging countries are less likely to be employed and more likely to be NEET – neither in employment nor in education and training – than their counterparts in advanced economies. They also tend to leave education earlier and have longer transitions to work, characterized by a higher incidence of NEET and informal employment. In addition, child labour remains common in some emerging countries, with deleterious effects on school achievement. In some areas, these differences warrant different policy responses.

In terms of educational attainment, all countries have been focusing on helping youth complete upper secondary education. However, while most advanced economies have raised or are planning to raise the age of compulsory schooling to 18, emerging economies need to act earlier. Indeed, before they can turn to upper secondary education, most emerging countries need to support enrolment in lower secondary education, improve education inputs – such as infrastructure, learning resources and instruction time – and focus on equality of access. In addition, both sets of countries are looking at work-based learning to help engage youth who are at-risk of leaving school too early and without qualifications. While all countries face big challenges in this area, the hurdles are even more daunting in emerging economies where few youth attend vocational schools and even fewer have access to apprenticeship training. Finally, in all the countries covered, even youth who leave education with good qualifications often lack key skills required to enter and progress in the labour market. This is particularly the case in emerging economies where large shares of youth are found in jobs for which their qualifications are too high. To tackle this phenomenon, better career guidance supported by good-quality labour market information and projections are key in all countries. However, emerging countries also need to strengthen innovation policies as the reason for



over-qualification may, at least partly, rest in the speed with which labour demand adjusts to the availability of better skilled labour supply.

On the labour market side, differences are even more marked. While advanced economies are thinking of more and more sophisticated ways of providing individualised re-employment support to youth entitled to unemployment benefits, emerging economies often need to start from scratch. Some emerging countries covered in this paper do not have an unemployment insurance system while, in several others, the system exists but provides only limited support during non-employment spells. In addition, some emerging countries lack the institutional features required to run cost-effective activation programmes – notably, effective public employment services, employers' co-operation and good performance measurement systems for programme evaluation. In both sets of countries, high labour costs and stringent employment protection regulation are likely to discourage employers from hiring youth in stable entry jobs. However, the consequences, differ across countries, raising the incidence of temporary work in advanced economies while contributing to the growth of informality in emerging economies.

Of course, the 16 countries covered cannot always be easily classified into two homogeneous groups and country-specific characteristics need to be taken into account in policy design. This is particularly the case when it comes to employment protection regulation, labour costs and minimum wages where no clear distinction between emerging and advanced economies emerges. In addition, to be effective in improving school-to-work transitions, the policy measures analysed in this paper, need to be seen as a package rather than in isolation. This requires further in-depth analysis of the barriers that youth face in individual countries and rigorous evaluation of existing youth programmes to ensure that limited resources are put to their best use. Finally, these measures also need to be part of wider policies to promote stronger, sustainable economic growth which will create more and better job opportunities for people at all ages.

## REFERENCES

- Aedo, C. and S. Nuñez (2001), “The Impact of Training Policies in Latin America and the Caribbean: the Case of Programa Joven”, ILADES – Georgetown University, Santiago de Chile.
- Arulampalam, W., A. Booth and M. Bryan (2002), “Work-Related Training and the New National Minimum Wage in Britain”, *IZA Discussion Paper*, No. 595, Bonn, November.
- Ashworth, K., J. Hardman, Y. Hartfree, S. Maguire, S. Middleton, D. Smith, L. Dearden, C. Emmerson, C. Frayne, and C. Meghir, (2002), “Education Maintenance Allowance: The First Two Years. A Quantitative Evaluation”, Research Report RR352, Department for Education and Skills. Nottingham, UK: Queen’s Printer.
- Bargain, O., and P. Kwenda (2010), “Is Informality Bad? – Evidence from Brazil, Mexico and South Africa”, *IZA Discussion Paper*, No. 4711.
- Bassanini, A., and R. Duval (2006), “Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions”, *Social, Employment and Migration Working Paper*, No. 35.
- Beffy, M., D. Fougère and A. Maurel (2009), “L’impact du travail salarié des étudiants sur la réussite et la poursuite des études universitaires”, *Économie et Statistique*, No. 422, Paris.
- Betcherman, G., K. Olivas and A. Dar (2004), “Impacts of Active Labour Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries”, *World Bank Social Protection Discussion Paper*, No. 0402, Washington DC.
- Betcherman, G., M. Godfrey, S. Puerto, F. Rother and A. Stavreska (2007), “A Review of Interventions to Support Young Workers: Findings of the Youth Employment Inventory”, *World Bank Social Protection Discussion Paper*, No. 0715.
- Blanchard, O. and A. Landier (2002), “The Perverse Effects of Partial Labour Market Reform: Fixed-Term Contracts in France”, *The Economic Journal*, Vol. 112, pp. 214-244, June.
- Card, D., and A. Krueger (1995), *Myth and Measurement: the new Economics of the Minimum Wage*, Princeton University Press, Princeton.
- Cazes, S. and A. Nesporova (2003), *Labour Markets in Transition: Balancing Flexibility and Security in Central and Eastern Europe*, ILO Publishing, Geneva.
- Chaplin, D., M. Turner and A. Pape (2003), “Minimum Wages and School Enrollment of Teenagers: A Look at the 1990’s”, *Economics of Education Review*, Vol. 22, pp. 11-21, February.
- Chimombo, J. (2005). “Issues in Basic Education in Developing Countries: an exploration of Policy Options for Improved Delivery”, *Journal of International Cooperation in Education*, Vol. 8, No. 1, pp. 125-152.
- Cunningham, W. and J. Bustos Salvagno (2011), “Youth Employment Transitions in Latin America”, *World Bank Policy Research Paper*, No. 5521.

- De Moura Castro, C. (1999), "Projecto Joven: New Solutions and Some Surprises", Inter-American Development Bank, Washington DC.
- Dolado, J., C. Garcia-Serrano and J. Jimeno (2002), "Drawing Lessons from the Boom of Temporary Jobs in Spain", *The Economic Journal*, Vol. 112, pp. 270-295.
- Dolphin, T. and T. Lanning (2011), "Rethinking Apprenticeships", Institute for Public Policy Research report.
- Dundes, L. and J. Marx (2006), "Balancing Work and Academics in College: Why Do Students Working 10 to 19 Hours per Week Excel?", *Journal of College Student Retention: Research, Theory and Practice*, Vol. 8, No. 1.
- Edmonds, E. V., (2004), "Does Illiquidity Alter Child Labor and Schooling Decisions? Evidence from Household Responses to Anticipated Cash Transfers in South Africa", *NBER Working Papers*, 10265, National Bureau of Economic Research, Inc.
- Elias, V., F. Ruiz-Nuñez, R. Cossa and D. Bravo (2004), "An Econometric Cost-Benefit Analysis of Argentina's Youth Training Program", *Inter-American Development Bank, Research Network Working Paper*, No. R-482, Washington DC.
- European Commission (2007), "Undeclared Work in the European Union", Special Eurobarometer No. 284.
- Ferro, A. R., Nicollela, A.C. (2007). *The Impact of Conditional Cash Transfers Programs on Household Working Decision in Brazil*, [www.iza.org/conference\\_files/worldb2007/ferro\\_a3468.pdf](http://www.iza.org/conference_files/worldb2007/ferro_a3468.pdf)
- Fiszbein, A. and N. Schady (2009), *Conditional Cash Transfers: Reducing Present and Future Poverty*, World Bank, Washington DC.
- Gasparini, L. and L. Tornarolli (2009), "Labor Informality in Latin America and the Caribbean: Patterns and Trends from Household Survey Microdata", *Revista Desarrollo y Sociedad*. Universidad de los Andes-CEDE.
- Gonzaga, G. (2003), "Labor Turnover and Labor Legislation in Brazil", Pontifical Catholic University of Rio de Janeiro, Department of Economics, Working paper No. 475.
- Greenberger, E. and L.D. Steinberg (1986), *The Psychological and Social Costs of Adolescent Employment*, Basic, New York.
- Hamoudi, A. and D. Thomas (2005), "Pension Income and the Well-Being of Children and Grandchildren: New Evidence from South Africa", California Center for Population Research Online Working Paper Series, *CCPR-043-05*.
- Hyslop D., S. Stillman (2007), "Youth Minimum Wage Reform and the Labour Market in New Zealand", *New Zealand Treasury Working Paper*, No. 03.
- ILO (2010), *Accelerating action against child labour - ILO Global report on child labour 2010*, ILO Publishing, Geneva.
- INEP (2012), "Sinopses Educação Básica", Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira.
- Kramarz, F. and T. Philippon (2001), "The Impact of Differential Payroll Tax Subsidies on Minimum Wage Employment", *Journal of Public Economics*, Vol. 82, No. 1, pp. 115-146, October.

- Landon, S. (1997), “High School Enrollment, Minimum Wages and Education Spending”, *Canadian Public Policy*, Vol. 23, No. 2, pp. 141-163, June.
- Martin, J.P. and S. Scarpetta (2011), “Setting It Right: Employment Protection, Labour Reallocation and Productivity”, *IZA Policy Paper*, No. 27.
- McKee, D. and P. Todd, (2011), “The Longer-term Effects of Human Capital Enrichment Programs on Poverty and Inequality: *Oportunidades* in Mexico”, *Estudios de Economía*, Vol. 38, No.1, pp. 67-100.
- Neumark, D. and O. Nizalova (2007), “Minimum Wage Effects in the Longer Run”, *Journal of Human Resources*, Vol. 42, No. 2, pp. 435-452, University of Wisconsin Press, Madison, Wisconsin, Spring.
- Neumark, D. and W. Wascher (1995), “Minimum-Wage Effects on School and Work Transitions of Teenagers”, *American Economic Review*. Vol. 85, No. 2, pp. 244-249, American Economic Association, Nashville, Tennessee, May.
- Neumark, D. and W. Wascher (1998), “Minimum Wages and Training Revisited”, NBER Working Paper, No. 6651, Cambridge, Massachusetts, July.
- Neumark, D. and W. Wascher (1999), “A Cross-National Analysis of the Effects of Minimum Wages on Youth Employment”, NBER Working Paper, No. 7299, Cambridge, Massachusetts, August.
- OECD (1998), *Employment Outlook*, OECD Publishing, Paris.
- OECD (2004), *Career Guidance and Public Policy: Bridging the Gap*, OECD Publishing, Paris.
- OECD (2008a), *Employment Outlook*, OECD Publishing, Paris.
- OECD (2008b), *Jobs for Youth: United Kingdom*, OECD Publishing, Paris.
- OECD (2010a), *Off to a Good Start?*, OECD Publishing, Paris.
- OECD (2010b), *Learning for Jobs: Synthesis Report of the OECD Review of Vocational Education and Training*, OECD Publishing, Paris.
- OECD (2010c), *Jobs for Youth: Greece*, OECD Publishing, Paris.
- OECD (2010d) *Employment Outlook*, OECD Publishing, Paris.
- OECD (2011a), “Paying For The Past, Providing For The Future: Intergenerational Solidarity”, OECD Ministerial Meeting On Social Policy held in Paris, on 2-3 May 2011.
- OECD (2011b), *Employment Outlook*, OECD Publishing, Paris.
- OECD (2011c), Further material for Chapter 2 “The Labour Market Effects of Social Protection Systems in Emerging Economies” of the 2011 OECD Employment Outlook, available online only at [www.oecd.org/employment/outlook](http://www.oecd.org/employment/outlook) (to come).
- OECD (2012) *Education at a Glance*, OECD Publishing, Paris.
- Pacheco, G.A. and A.A. Cruickshank (2007), “Minimum Wage Effects on Educational Enrollments in New Zealand”, *Economics of Education Review*, Vol. 26, No. 5, pp. 574-587, Auckland, October.
- Pagés-Serra, C., P. Gaele and S. Scarpetta (2009), “Job Creation in Latin American and the Caribbean. Recent Trends and the Policy Challenges”, Inter-American Development Bank, Washington DC.

- Quintini, G. and T. Manfredi (2009), “Going Separate Ways? School-to-Work Transitions in the United States and Europe”, OECD Social, Employment and Migration Working Papers, No. 90.
- Reis, J., D. Angel-Urdinola and R. Torres (2009), “Informality in Turkey: Size, Trends, Determinants and Consequences”, Background paper for the World Bank Country Economic Memorandum (CEM) – *Informality: Causes, Consequences, Policies*.
- Rodriguez-Oreggia, E. and S. Freije, (2008), “Una Evaluación de Impacto sobre el Empleo, los Salarios y la Movilidad Ocupacional Intergeneracional del Programa Oportunidades”, capítulo 2 en SEDESOL “A Diez Años de Intervención en Zonas Rurales (1997-2007).Evaluación Externa del Programa Oportunidades 2008” Tomo 1, Secretaria de Desarrollo Social, Mexico, D.F.
- Rosas G. and G. Rossignotti (2005), “Stating the New Millennium Right: Decent Employment for Young People”, *International Labour Review*, Vol. 144, No. 2.
- Ruhm, C.J. (1997), “Is High School Employment Consumption or Investment?”, *Journal of Labor Economics*, No. 15.
- Saget, C. (2008), “Fixing Minimum Wage Levels in Developing Countries: Common Failures and Remedies”, ILO Country Office for Indonesia, ILO publishing, Geneva.
- Schochet P., J. Brughardt and S. Glazerman (2001), “National Job Corps Study: The impacts of Job Corps on Participants' Employment and Related Outcomes”, Princeton, NJ, Mathematica Policy Research, Inc.
- Schochet P., J. Burghardt and S. McConnell (2003), “National Job Corps Study: Findings Using Administrative Earnings Records Data”, Princeton, NJ, Mathematica Policy Research, Inc.
- Schultz, T. P. (2004), “School Subsidies for the Poor: Evaluating the Mexican PROGRESA Poverty Program”, *Journal of Development Economics*, Vol.74, No. 1, pp. 199–250.
- Skoufias, E., and S. W. Parker, (2001), “Conditional Cash Transfers and Their Impact on Child Work and Schooling: Evidence from the PROGRESA Program in Mexico”, *Economía*, 2 (1), pp. 45–96.
- Steedman, H. (2010), “The State of Apprenticeship in 2010”, Report for the Apprenticeship Ambassadors Network, Center for Economic Performance, London School of Economics.
- Stewart, M. (2003), “The Impact of the Introduction of the UK Minimum Wage on the Employment Probabilities of Low Wage Workers”, mimeo, University of Warwick, UK.
- Venn (2009), “Legislation, Collective Bargaining and Enforcement: Updating the OECD Employment Protection Indicators”, *Social, Employment and Migration Working Paper*, No. 89.
- Williams, M. J. (2007), “The Social and Economic Impacts of South Africa’s Child Support Grant”, Economic Policy Research Institute Working Paper 40, Cape Town.

**OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS**

Most recent releases are:

- No. 153 *A NEW MEASURE OF SKILLS MISMATCH: THEORY AND EVIDENCE FROM THE SURVEY OF ADULT SKILLS (PIAAC)*, Michele Pellizzari and Anne Fichen (2013)
- No. 152 *CATASTROPHIC JOB DESTRUCTION*, Anabela Carneiro, Pedro Portugal and José Varejão (2013)
- No. 151 *THE PERVERSE EFFECTS OF JOB-SECURITY PROVISIONS ON JOB SECURITY IN ITALY: RESULTS FROM A REGRESSION DISCONTINUITY DESIGN*, Alexander Hijzen, Leopoldo Mondauto, Stefano Scarpetta (2013)
- No. 150 *REDISTRIBUTION POLICY IN EUROPE AND THE UNITED STATES: IS THE GREAT RECESSION A 'GAME CHANGER' FOR WORKING-AGE FAMILIES?* Herwig Immervoll, Linda Richardson (2013)
- No. 149 *A BIRD'S EYE VIEW OF GENDER DIFFERENCES IN EDUCATION IN OECD COUNTRIES* Angelica Salvi Del Pero and Alexandra Bychkova (2013)
- No. 148 *TRENDS IN POVERTY AND INEQUALITY IN DECENTRALISING INDONESIA* Riyana Miranti, Yogi Vidyattama, Erick Hansnata, Rebecca Cassells and Alan Duncan (2013)
- No. 147 *WOMEN ENTREPRENEURS IN THE OECD: KEY EVIDENCE AND POLICY CHALLENGES* Mario Piacentini (2013)
- No. 146 Forthcoming
- No. 145 *DRIVERS OF FEMALE LABOUR FORCE PARTICIPATION IN THE OECD* Olivier Thévenon (2013)
- No. 144 *THE ROLE OF SHORT-TIME WORKING SCHEMES DURING THE GLOBAL FINANCIAL CRISIS AND EARLY RECOVERY*, Alexander Hijzen, Sébastien Martin (2012)
- No. 143 *TRENDS IN JOB SKILL DEMANDS IN OECD COUNTRIES*, Michael J. Handel (2012)
- No. 142 *HELPING DISPLACED WORKERS BACK INTO JOBS AFTER A NATURAL DISASTER: RECENT EXPERIENCES IN OECD COUNTRIES*, Danielle Venn (2012)
- No. 141 *LABOUR MARKET EFFECTS OF PARENTAL LEAVE POLICIES IN OECD COUNTRIES*, Olivier Thévenon & Anne Solaz (2012)
- No. 140 *FATHERS' LEAVE, FATHERS' INVOLVEMENT AND CHILD DEVELOPMENT: ARE THEY RELATED? EVIDENCE FROM FOUR OECD COUNTRIES*, Maria C. Huerta, Willem Adema, Jennifer Baxter, Wen-Jui Han, Mette Lausten, RaeHyuck Lee and Jane Waldfogel (2012)
- No. 139 *FLEXICURITY AND THE ECONOMIC CRISIS 2008-9 – EVIDENCE FROM DENMARK*, Tor Eriksson (2012)
- No. 138 *EFFECTS OF REDUCING GENDER GAPS IN EDUCATION AND LABOUR FORCE PARTICIPATION ON ECONOMIC GROWTH IN THE OECD*, Olivier Thévenon, Nabil Ali, Willem Adema and Angelica Salvi del Pero (2012)
- No. 137 *THE RESPONSE OF GERMAN ESTABLISHMENTS TO THE 2008-2009 ECONOMIC CRISIS*, Lutz Bellman, Hans-Dieter Gerner, Richard Upward (2012)
- No. 136 Forthcoming *THE DYNAMICS OF SOCIAL ASSISTANCE RECEIPT IN GERMANY* Sebastian Königs
- No. 135 *MONEY OR KINDERGARTEN? DISTRIBUTIVE EFFECTS OF CASH VERSUS IN-KIND FAMILY TRANSFERS FOR YOUNG CHILDREN*, Michael Förster and Gerlinde Verbist (2012)
- No. 134 *THE ROLE OF INSTITUTIONS AND FIRM HETEROGENEITY FOR LABOUR MARKET ADJUSTMENTS: CROSS-COUNTRY FIRM-LEVEL EVIDENCE*, Peter N. Gal (VU University Amsterdam), Alexander Hijzen and Zoltan Wolf (2012)
- No. 133 *CAPITAL'S GRABBING HAND? A CROSS-COUNTRY/CROSS-INDUSTRY ANALYSIS OF THE DECLINE OF THE LABOUR SHARE*, Andrea Bassanini and Thomas Manfredi (2012)
- No. 132 *INCOME DISTRIBUTION AND POVERTY IN RUSSIA*, Irinia Denisova (2012)

- No. 131 *ELIGIBILITY CRITERIA FOR UNEMPLOYMENT BENEFITS*, Danielle Venn (2012)
- No. 130 *THE IMPACT OF PUBLICLY PROVIDED SERVICES ON THE DISTRIBUTION OF RESOURCES: REVIEW OF NEW RESULTS AND METHODS*, Gerlinde Verbist, Michael Förster and Maria Vaalavuo (2012)
- No. 129 *AN OVERVIEW OF AUSTRALIA'S SYSTEM OF INCOME AND EMPLOYMENT ASSISTANCE FOR THE UNEMPLOYED*, Peter Davidson, Peter Whiteford (2012)
- No. 128 *THE INTEGRATION OF IMMIGRANTS AND THEIR CHILDREN INTO THE LABOUR MARKET IN SWITZERLAND*, Thomas Liebig, Sebastian Kohls and Karoline Krause (2012)
- No. 127 *THE LABOUR MARKET INTEGRATION OF IMMIGRANTS AND THEIR CHILDREN IN AUSTRIA*, Karolin Krause and Thomas Liebig (2011)
- No. 126 *ARE RECENT IMMIGRANTS DIFFERENT? A NEW PROFILE OF IMMIGRANTS IN THE OECD BASED ON DIOC 2005/06*, Sarah Widmaier and Jean-Christophe Dumont (2011)
- No. 125 *EARNINGS VOLATILITY AND ITS CONSEQUENCES FOR HOUSEHOLDS*, Danielle Venn (2011)
- No. 124 *CRISIS, RECESSION AND THE WELFARE STATE*, Willem Adema, Pauline Fron and Maxime Ladaique (2011)
- No. 123 *AGGREGATE EARNINGS AND MACROECONOMIC SHOCKS* Andrea Bassanini (2011)
- No. 122 *REDISTRIBUTION POLICY AND INEQUALITY REDUCTION IN OECD COUNTRIES: WHAT HAS CHANGED IN TWO DECADES?* Herwig Immervoll, Linda Richardson (2011)
- No. 121 *OVER-QUALIFIED OR UNDER-SKILLED*, Glenda Quintini (2011)
- No. 120 *RIGHT FOR THE JOB*, Glenda Quintini (2011)
- No. 119 *THE LABOUR MARKET EFFECTS OF UNEMPLOYMENT COMPENSATION IN BRAZIL* , Alexander Hijzen (2011)
- No. 118 *EARLY MATERNAL EMPLOYMENT AND CHILD DEVELOPMENT IN FIVE OECD COUNTRIES*, Maria del Carmen Huerta, Willem Adema, Jennifer Baxter, Miles Corak, Mette Deding, Matthew C. Gray, Wen-Jui Han, Jane Waldfogel (2011)
- No. 117 *WHAT DRIVES INFLOWS INTO DISABILITY? EVIDENCE FROM THREE OECD COUNTRIES* Ana Llana-Nozal and Theodora Xenogiani (2011)
- No. 116 *COOKING, CARING AND VOLUNTEERING: UNPAID WORK AROUND THE WORLD*, Veerle Miranda (2011)
- No. 115 *THE ROLE OF SHORT-TIME WORK SCHEMES DURING THE 2008-09 RECESSION*, Alexander Hijzen and Danielle Venn (2010)
- No. 114 *INTERNATIONAL MIGRANTS IN DEVELOPED, EMERGING AND DEVELOPING COUNTRIES: AN EXTENDED PROFILE*, Jean-Christophe Dumont, Gilles Spielvogel and Sarah Widmaier (2010)
- No. 113 *ACTIVATION POLICIES IN JAPAN* , Nicola Duell, David Grubb, Shruti Singh and Peter Tergeist (2010)
- No. 112 *ACTIVATION POLICIES IN SWITZERLAND*, Nicola Duell and Peter Tergeist with contributions from Ursula Bazant and Sylvie Cimper (2010)
- No. 111 *ECONOMIC DETERMINANTS AND CONSEQUENCES OF CHILD MALTREATMENT* Lawrence M. Berger, Jane Waldfogel (forthcoming)
- No. 110 *DISTRIBUTIONAL CONSEQUENCES OF LABOR DEMAND ADJUSTMENTS TO A DOWNTURN: A MODEL-BASED APPROACH WITH APPLICATION TO GERMANY 2008-09*, Herwig Immervoll, Olivier Bargain, Andreas Peichl, Sebastian Sieglöcher (2010)
- No. 109 *DECOMPOSING NOTIONAL DEFINED-CONTRIBUTION PENSIONS: EXPERIENCE OF OECD COUNTRIES' REFORMS*, Edward Whitehouse (2010)

- No. 108 *EARNINGS OF MEN AND WOMEN WORKING IN THE PRIVATE SECTOR: ENRICHED DATA FOR PENSIONS AND TAX-BENEFIT MODELING*, Anna Cristina D'Addio and Herwig Immervoll (2010)
- No. 107 *INSTITUTIONAL DETERMINANTS OF WORKER FLOWS: A CROSS-COUNTRY/CROSS-INDUSTRY APPROACH*, Andrea Bassanini, Andrea Garnero, Pascal Marianna, Sebastien Martin (2010)
- No. 106 *RISING YOUTH UNEMPLOYMENT DURING THE CRISIS: HOW TO PREVENT NEGATIVE LONG-TERM CONSEQUENCES ON A GENERATION?*  
Stefano Scarpetta, Anne Sonnet and Thomas Manfredi (2010)
- No. 105 *TRENDS IN PENSION ELIGIBILITY AGES AND LIVE EXPECTANCY, 1950-2050*  
Rafal Chomik and Edward Whitehouse (2010)
- No. 104 *ISRAELI CHILD POLICY AND OUTCOMES*  
John Gal, Mimi Ajzenstadt, Asher Ben-Arieh, Roni Holler and Nadine Zielinsky (2010)
- No. 103 *REFORMING POLICIES ON FOREIGN WORKERS IN ISRAEL*  
Adriana Kemp (2010)
- No. 102 *LABOUR MARKET AND SOCIO-ECONOMIC OUTCOMES OF THE ARAB-ISRAELI POPULATION*  
Jack Habib, Judith King, Asaf Ben Shoham, Abraham Wolde-Tsadick and Karen Lasky (2010)
- No. 101 *TRENDS IN SOUTH AFRICAN INCOME DISTRIBUTION AND POVERTY SINCE THE FALL OF APARTHEID*  
Murray Leibbrandt, Ingrid Woolard, Arden Finn and Jonathan Argent (2010)
- No. 100 *MINIMUM-INCOME BENEFITS IN OECD COUNTRIES: POLICY DESIGN, EFFECTIVENESS AND CHALLENGES*  
Herwig Immervoll (2009)
- No. 99 *HAPPINESS AND AGE CYCLES – RETURN TO START...? ON THE FUNCTIONAL RELATIONSHIP BETWEEN SUBJECTIVE WELL-BEING AND AGE*  
Justina A.V. Fischer (2009)
- No. 98 *ACTIVATION POLICIES IN FINLAND*  
Nicola Duell, David Grubb and Shruti Singh (2009)
- No. 97 *CHILDREN OF IMMIGRANTS IN THE LABOUR MARKETS OF EU AND OECD COUNTRIES: AN OVERVIEW*  
Thomas Liebig and Sarah Widmaier (2009)

A full list of Social, Employment and Migration Working Papers is available at [www.oecd.org/els/workingpapers](http://www.oecd.org/els/workingpapers).

Other series of working papers available from the OECD include: [OECD Health Working Papers](#).



**RECENT RELATED OECD PUBLICATIONS:**

- OECD EMPLOYMENT OUTLOOK 2013*, <http://www.oecd.org/els/emp/oecdemploymentoutlook.htm>
- CLOSING THE GENDER GAP: ACT NOW*, <http://www.oecd.org/gender/closingthegap.htm>
- OECD PENSIONS OUTLOOK 2012*, [www.oecd.org/finance/privatepensions/](http://www.oecd.org/finance/privatepensions/)
- INTERNATIONAL MIGRATION OUTLOOK 2012*, [www.oecd.org/els/internationalmigrationpoliciesanddata/](http://www.oecd.org/els/internationalmigrationpoliciesanddata/)
- OECD EMPLOYMENT OUTLOOK 2012*, [www.oecd.org/employment/employmentpoliciesanddata](http://www.oecd.org/employment/employmentpoliciesanddata)
- SICK ON THE JOB: Myths and Realities about Mental Health and Work (2011)*, [www.oecd.org/els/disability](http://www.oecd.org/els/disability)
- DIVIDED WE STAND: Why Inequality Keeps Rising (2011)*, [www.oecd.org/els/social/inequality](http://www.oecd.org/els/social/inequality)
- EQUAL OPPORTUNITIES? The Labour Market Integration of the Children of Immigrants (2010)*, via [OECD Bookshop](#)
- OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: ESTONIA (2010)*, [www.oecd.org/els/estonia2010](http://www.oecd.org/els/estonia2010)
- JOBS FOR YOUTH: GREECE (2010)*, [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)
- JOBS FOR YOUTH: DENMARK (2010)*, [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)
- OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: ISRAEL (2010)*,  
[www.oecd.org/els/israel2010](http://www.oecd.org/els/israel2010)
- JOBS FOR YOUTH: UNITED STATES (2009)*, [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)
- JOBS FOR YOUTH: POLAND (2009)*, [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)
- OECD EMPLOYMENT OUTLOOK: Tackling the Jobs Crisis (2009)*, [www.oecd.org/els/employmentpoliciesanddata/](http://www.oecd.org/els/employmentpoliciesanddata/)
- DOING BETTER FOR CHILDREN (2009)*, [www.oecd.org/els/social/childwellbeing](http://www.oecd.org/els/social/childwellbeing)
- SOCIETY AT A GLANCE – ASIA/PACIFIC EDITION (2009)*, [www.oecd.org/els/social/indicators/asia](http://www.oecd.org/els/social/indicators/asia)
- OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: SLOVENIA (2009)*, [www.oecd.org/els/slovenia2009](http://www.oecd.org/els/slovenia2009)
- INTERNATIONAL MIGRATION OUTLOOK: SOPEMI (2010)* [www.oecd.org/els/migration/imo](http://www.oecd.org/els/migration/imo)
- PENSIONS AT A GLANCE 2009: Retirement-Income Systems in OECD Countries (2009)*,  
[www.oecd.org/els/social/pensions/PAG](http://www.oecd.org/els/social/pensions/PAG)
- JOBS FOR YOUTH: FRANCE (2009)*, [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)
- SOCIETY AT A GLANCE 2009 – OECD Social Indicators (2009)*, [www.oecd.org/els/social/indicators/SAG](http://www.oecd.org/els/social/indicators/SAG)
- JOBS FOR YOUTH: AUSTRALIA (2009)*, [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)
- OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: CHILE (2009)*, [www.oecd.org/els/chile2009](http://www.oecd.org/els/chile2009)
- PENSIONS AT A GLANCE – SPECIAL EDITION: ASIA/PACIFIC (2009)*, [www.oecd.org/els/social/pensions/PAG](http://www.oecd.org/els/social/pensions/PAG)
- SICKNESS, DISABILITY AND WORK: BREAKING THE BARRIERS (VOL. 3) – DENMARK, FINLAND, IRELAND AND THE NETHERLANDS (2008)*, [www.oecd.org/els/disability](http://www.oecd.org/els/disability)
- GROWING UNEQUAL? Income Distribution and Poverty in OECD Countries (2008)*, [www.oecd.org/els/social/inequality](http://www.oecd.org/els/social/inequality)

*JOBS FOR YOUTH: JAPAN* (2008), [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)

*JOBS FOR YOUTH: NORWAY* (2008), [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)

*JOBS FOR YOUTH: UNITED KINGDOM* (2008), [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)

*JOBS FOR YOUTH: CANADA* (2008), [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)

*JOBS FOR YOUTH: NEW ZEALAND* (2008), [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)

*JOBS FOR YOUTH: NETHERLANDS* (2008), [www.oecd.org/employment/youth](http://www.oecd.org/employment/youth)

For a full list, consult the OECD online Bookshop at [www.oecd.org/bookshop](http://www.oecd.org/bookshop)