OECD Development Pathways

# Multi-dimensional Review of Uruguay

## VOLUME 1. INITIAL ASSESSMENT

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# Multi-dimensional Review of Uruguay

## VOLUME 1. INITIAL ASSESSMENT

OECD
BETTER POLICIES FOR BETTER LIVES

UNITED NATIONS
ECLAC

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# *Foreword*

*Economic growth is just one facet of development. Policy makers are focused on ensuring that their country's development path is sustainable and that the lives of citizens improve, which calls for the need to reconcile economic, social and environmental objectives.*

OECD Development Pathways *is a new series that looks at multiple development objectives beyond an exclusive focus on growth. It recognises that well-being is part of development and aims to help developing countries identify binding constraints to more equitable and sustainable growth by undertaking a multi-dimensional country review (MDCR). Governments trying to achieve economic, social and environmental objectives need to understand the constraints they face and to develop comprehensive and well-sequenced strategies for reform. MDCRs take a cross-cutting, rather than a sectoral perspective, which allows for the discussion of policy interactions.*

*Uruguay is the second country to undertake a multi-dimensional review, and the first one in Latin America. The report is timely, as Uruguay comes from a recent period of economic prosperity and faces today new challenges, many of them similar to those of OECD countries. While the recommendations in this report are intended primarily to support public policy action by Uruguay's national authorities, the findings aim at being useful for academics, the private sector and civil society. The initial assessment of development outcomes and drivers serves to identify the binding constraints to development in several dimensions. By taking stock of Uruguay's well-being outcomes, the diagnosis aims at identifying areas for improvement in several dimensions of the country's economic and social development.*

*The MDCRs are composed of three distinct phases: diagnosis, in-depth analysis of the binding constraints, and implementation. This phased approach allows for a progressive learning process about the country's specific challenges and opportunities that culminates in a final synthesis report. The present diagnostic report is the outcome of the first phase of the MDCR of Uruguay. Two missions were devoted to the identification of issues and discussion with authorities, private sector representatives and academia. Analytical work is based on available statistics on Uruguay, including macroeconomic and structural data, household and labour market surveys, and other domestic and international sources.*

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## Acronyms and abbreviations

| | |
|---|---|
| **AFAM** | Asignaciones Familiares (Family Allowance Programme) |
| **ANII** | Agencia Nacional de Investigación e Innovación (National Research and Innovation Agency) |
| **BCU** | Banco Central del Uruguay (Uruguay Central Bank) |
| **BIT** | Bilateral Investment Treaty |
| **CAF** | Development Bank of Latin America |
| **CEQ** | Commitment to Equity Project |
| **CGSs** | Credit Guarantee Schemes |
| **CIT** | Corporate Income Tax |
| **COFIS** | Contribución para el Financiamiento de la Seguridad Social (Contribution to the Financing of Social Security) |
| **COMAP** | Comisión de Aplicación de la Ley de Inversiones (Commission for the Implementation of the Investment Law) |
| **CUTI** | Cámara Uruguaya de Tecnologías de da Información (Chamber of Uruguayan Information Technologies) |
| **DINACIA** | Dirección Nacional de Aviación Civil e Infraestructura Aeronáutica (National Civil Aviation and Aviation Infrastructure Directorate) |
| **ECLAC** | Economic Commission for Latin America and the Caribbean |
| **EIS** | Engineering Intensive Sectors |
| **EIU** | Economic Intelligence Unit |
| **FDI** | Foreign Direct Investment |
| **FEE** | Fondo de Estabilización Energética |
| **FOB** | Free on Board |
| **FONASA** | Fondo Nacional de Salud (National Health Fund) |
| **FONDES** | Fondo de Desarrollo (National Development Fund) |
| **FTA** | Free Trade Agreement |
| **FTZ** | Free Trade Zone |
| **GATT** | General Agreement on Tariffs and Trade |
| **GDP** | Gross Domestic Product |
| **GHG** | Greenhouse Gas |
| **GVC** | Global Value Chains |
| **ICTs** | Information and Communication Technologies |
| **IDB** | Inter-American Development Bank |
| **ILO** | International Labour Organization |
| **IMESSA** | Impuesto Específico a los Servicios de Salud (Specific Tax for Health Services) |
| **IMF** | International Monetary Fund |
| **INE** | Instituto Nacional de Estadística (National Institute of Statistics) |

| | |
|---|---|
| **INEFOP** | Instituto Nacional de Empleo y Formación Profesional (Institute for Labour and Professional Training) |
| **IPR** | Investment Policy Reviews |
| **IRA** | Impuesto Sobre las Rentas Agropecuarias (Agriculture Income Tax) |
| **IRAE** | Impuesto Sobre la Renta de Actividades Económicas (Corporate Income Tax) |
| **IRIC** | Impuesto Sobre la Renta de Industria y Comercio (Income Tax on Industry and Commerce) |
| **IRPF** | Impuesto Sobre la Renta de Personas Físicas (Personal Income Tax) |
| **LAC** | Latin America and The Caribbean |
| **LPI** | Logistics Performance Index |
| **MEF** | Ministerio de Economía y Finanzas de Uruguay |
| **NTB** | Non-Tariff Barriers to Trade |
| **OECD** | Organisation for Economic Co-Operation and Development |
| **OPP** | Oficina de Planeamiento y Presupuesto (Presidential Office for Planning and Budget) |
| **PANES** | Plan Nacional de Emergencias (National Emergency Plan) |
| **PFI** | Policy Framework for Investment |
| **PFIs** | Public Financial Institutions |
| **PIAAC** | Programme for the International Assessment of Adult Competencies |
| **PISA** | Programme for International Student Assessment |
| **PPP** | Public Private Partnerships |
| **PTA** | Preferential Trade Agreements |
| **R&D** | Research and Development |
| **RCA** | Revealed Comparative Advantage |
| **SAFI** | Sociedades Financieras de Inversión (Financial Investment Enterprises) |
| **SIGA** | Sistema Nacional de Garantías (National System of Guarantees Enterprises) |
| **SMEs** | Small and Medium-Sized Enterprises |
| **SNS** | Seguro Nacional de Salud (National Health Insurance) |
| **TFC** | Total Final Consumption |
| **TFP** | Total Factor Productivity |
| **TIFA** | Trade and Investment Framework Agreement |
| **TPES** | Total Primary Energy Supply |
| **TUS** | Tarjeta Uruguay Social (Uruguay Social Cash Transfer Programme) |
| **UDELAR** | Universidad de la Republic (University of The Republic) |
| **UI** | Unemployment Insurance |
| **UNIDO** | United Nations Industrial Development Organization |
| **USTPO** | United States Patent and Trade Office |
| **UTEC** | Universidad Tecnológica del Uruguay (Technological University of Uruguay) |
| **UTU** | Universidad del Trabajo Uruguay (University of Work of Uruguay) |
| **VAT** | Value-Added Tax |
| **WCO** | World Customs Organization |
| **WEF** | World Economic Forum |

# *Editorial*

Improvements in living standards and outcomes that matter for people's quality of life are essential for economic and social development. Since the economic crisis of 2002 Uruguay has made significant progress in this direction, while also increasing its integration in the global economy. This has translated into higher growth rates and a reduction in inequalities. Uruguay has chosen its own path in terms of policies for development, compared to other Latin American countries and the OECD. The country's particular mix of policies shows that there is no single "model" of development. For example, reforms to increase the progressivity of the tax and transfer system, as well as efforts to increase formal jobs, were key to improving living standards.

However, the country must address several challenges to maintain momentum and ensure a sustainable path of economic growth in a changing global economy. The current period of economic prosperity also provides an opportunity to introduce policies that will ensure stronger and more inclusive growth in the years to come. This initial assessment of Uruguay highlights several relevant areas where policy action is needed. Education remains the single most important challenge for the country, as the demand for skilled labour continues to increase in line with the sophistication of Uruguayan firms and their products and services. More action is also required to ensure progress to support and protect the most vulnerable populations, including through more efficient and better targeted social programmes.

Over the past few years, the OECD and ECLAC have analysed in depth the challenges of development to establish how these organisations can best meet the needs of policy makers, and ultimately the citizens they serve. This analysis formed part of an OECD strategy on development, which called upon the Organisation to adapt its analytical framework, policy tools and instruments, so as to enhance its contribution to global development.

The OECD Development Pathways are one response to this demand. These reviews – to which this *Multi-dimensional Review of Uruguay* belongs – embody a different approach to development relying on a careful diagnosis of national conditions to make policy recommendations that are tailored to the unique characteristics of each country. They also build on the wealth of policy experience from OECD and ECLAC countries, many of which themselves have undergone political and economic transition and, in the case of this review, benefit from the growing body of our institutions' work on Latin America.

| Mario Pezzini | Martine Durand | Rintaro Tamaki | Alicia Bárcena |
|---|---|---|---|
| Director<br>OECD Development Centre | Chief Statistician and Director OECD Statistics Directorate | Deputy Secretary-General and Chief Economist of the OECD | Executive Secretary<br>ECLAC |

# FACTS AND FIGURES OF URUGUAY

(Numbers in parentheses refer to the OECD average)

### The land, people and electoral cycle

| | | | |
|---|---|---|---|
| Population (1 000 000)[e] | 3.4 | Official language | Spanish |
| Under 15 (%)[e] | 23 (18.1) | Total land borders (km) | 1 648 |
| Over 65 (%)[e] | 13 (15.3) | Total coast line (km) | 660 |
| Population density (per km$^2$)[c] | 18.8 (34.3) | Form of government | Constitutional republic |
| Life expectancy (years)[c] | 77 (80) | Last general election | October 2009 |
| Land area (km$^2$) | 176 065 | Next general election | October 2014 |

### The economy

| | | | |
|---|---|---|---|
| GDP, current prices (billion USD)[e] | 56.6 | In % of GDP | |
| Latest 5-year average real growth[e] | 5.2 (0.6) | Exports of goods and services[e] | 24.2 (53.8) |
| GDP per capita, PPP (thousand USD)[e] | 16.7 (37.1) | Imports of goods and services[e] | 26.6 (50.4) |
| Inflation rate[e] | 8.6 (1.6) | Main exports | |
| Expenditure (% of GDP)[e] | 35.2 (42.8) | (% of total merchandise exports) | |
| Revenue (% of GDP)[e] | 32.9 (36.4) | Soya beans | 21 |
| Gross debt (% of GDP)[e] | 58.9 (110.6) | Bovine meat (frozen) | 10 |
| Foreign reserves (USD billions)[e] | 16 3 | GDP shares (%)[e] | |
| Current account balance[e] | -5.6 (-0.5) | Primary | 10 (2.5) |
| | | Manufacturing | 12 (27.4) |
| | | Services | 78 (70.0) |

### The labour market, skills and innovation

| | | | |
|---|---|---|---|
| Labour force participation[e] | 63.6 | Unemployment rate (%)[e] | 6.5 (7.9) |
| Employment rate (%)[e] | 59.5 (65.0) | Youth (ages 15-24%)[d] | 18.5 (16.2) |
| Males[e] | 70.2 (73.1) | Informal economy[c] | |
| Females[e] | 51.0 (57.0) | (as % of non-agricultural employment) | 35.4 |
| R&D expenditure (% of GDP)[b] | 0.4 (2.4) | | |

### The environment

| | | | |
|---|---|---|---|
| $CO_2$ emissions[b] | | Renewables[a] | 37 |
| (kg per 2005 PPP USD of GDP) | 0.3 | (% of total primary (i.e) energy supply) | |
| | | Forest area (% of land area)[c] | 10 |

### Social inclusion

| | | | |
|---|---|---|---|
| Income inequality (Gini coefficient)[b] | 45.3 (30.4) | Net enrolment rates | |
| Poverty headcount ratio[c] | | Primary | 99.5 |
| (at national poverty line, % of population) | 13.7 | Secondary | 72 |
| Health expenditure, total[c] (% of GDP) | 8.9 | Tertiary (% gross) | 63.1 |
| | | Education outcomes (PISA score, 2012) | |
| Public spending on education[c] (% of GDP) | 4.5 | Reading | 411 (497) |
| | | Mathematics | 409 (494) |
| Average years of schooling[b] | 9.8 | Science | 410 (501) |

### Well-being

| | | | |
|---|---|---|---|
| (% of population who have or perceive) | | | |
| Life satisfaction[1] | 39 (56) | Perceived corruption | 6.6 (6.7) |
| Housing | 79 (87) | Perceived air quality | 40 (51) |
| Health satisfaction | 91 (83) | Perceived water quality | 84 (80) |
| Trust in others | 53 (69) | Perceived safety | 27 (33) |

## Administrative regions/states Uruguay

Map created with C & D - © Articque

*a)* Data for 2009.
*b)* Data for 2010.
*c)* Data for 2011.
*d)* Data for 2012.
*e)* Data for 2013.

*Source:* INE (2012), *Uruguay en Cifras 2012 (Uruguay in Figures 2012)*, INE, Montevideo, *www.ine.gub.uy/biblioteca/uruguayencifras2012/Uruguay%20en%20cifras%202012.pdf*; MEF (2014), *Economic indicators*, Ministerio de Economía y Finanzas, *www.mef.gub.uy/indicadores.php*; BCU (2014), *Uruguay Central Bank Statistics*, Banco Central de Uruguay, *www.bcu.gub.uy/Estadisticas-e-Indicadores*; IMF (2014), *World Economic Outlook Database*, International Monetary Fund, April 2014 Edition, Washington DC; World Bank (2013), *World Development Indicators* (database), Washington, DC. *http://data.worldbank.org*; CEPAL (2014) *CEPALSTAT* (database), Economic Commission for Latin America and the Caribbean, *http://estadisticas.cepal.org/cepalstat/WEB_CEPALSTAT/Portada.asp?idioma=i* and ILO (2013), *ILOSTAT* (database), Geneva, *www.ilo.org/ilostat/faces/home/statisticaldata?_adf.ctrl-state=19ogkwb9t9_4&clean=true&_afrLoop=596941889745721*.

1. The Cantril Ladder refers to the question: "Please imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel?"

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# Executive summary

Uruguay has made remarkable progress over the past decade. The recovery from the deep financial crisis of 2002 has turned into the longest period of economic growth in decades. Stable macroeconomic policies and a favourable external environment have permitted brisk growth and the financing of social policies that have reversed devastating effects on the fabric of society. Substantial improvements in several dimensions of human well-being have occurred during this period, alongside considerable reductions in external risks. The conditions ahead, however, may present challenges to maintaining performance. Growth is slowing in part because of cyclical and external factors, while constraints on human capital, infrastructure and financing will lower growth potential over the medium and long term. Several bottlenecks require determined policy action if growth and social progress are to continue at a similar pace.

Uruguay has solid foundations upon which to build public and political institutions to widen policy-making horizons beyond short-term goals. The country's institutional capital is high compared not only with Latin America, but also to OECD economies. The population has considerable trust in the government and the perception of corruption is low. In principle, Uruguay's institutions are therefore sufficiently strong to advance a reform agenda comprising of more ambitious targets and sophisticated arrangements. The strong economic context also provides a key opportunity for implementing these reforms.

Uruguay's performance in terms of well-being is largely favourable and has shown significant improvement in some areas. Outcomes are better than expected given income levels, particularly in areas such as life satisfaction, environmental quality, health, trust, perception of the quality of government and access to improved sanitation. Poverty and unemployment have declined drastically since the crisis and material living standards are high for the region. While the picture is generally positive, improvements could be made.

A number of challenges remain for education which is a key means of reducing inequalities and sustaining economic growth. Inequality in access to quality of education remains the single most important challenge for the Uruguayan authorities, especially in relation to secondary schooling. High dropout and repetition rates, strong dependence of student performance on socio-economic background, regional inequalities in access, and low performance by international standards all underline the need for significant reforms in this sector. Another challenge is the improvement of the coverage and quality of vocational training.

One of the main obstacles to economic growth is the insufficient and inadequate provision of human capital and skills. Uruguay needs to address labour shortages to avoid constraints on future growth, especially as exports become more skills-intensive. In the short term, policies should aim to increase the supply of relevant skills by making use of

existing tools to train unemployed workers and those outside the workforce, and to promote on-the-job acquisition of skills.

In addition, to maintain and increase the value-added content and competitiveness of new economic activities better access to financing for entrepreneurship and start-ups is also needed. This is essential to benefit from opportunities in sectors such as biotechnology and services. Existing productive development policies will have to be adapted and enhanced to meet and anticipate new economic requirements, while the growing fragmentation of programmes and funding will have to be addressed. An option for increasing policy coherence and effectiveness is to centralise funding within a single institution characterised by greater technical capability and transparency.

Despite improvements, ex-ante income inequality remains high compared to countries outside Latin America. Vulnerabilities along several dimensions are significantly higher for women, ethnic minorities (especially afro-descendants) and children, among others. It is important to orient social policies and expenditures towards these groups. Likewise, regional variations, especially between Montevideo and other departments, remain an important factor for understanding disparities in income and access to education and health services. Policies to tackle this gap are essential if Uruguay wants to capitalise on its positive economic momentum. Inequalities in access to the labour market have declined recently, but still need further attention. The situation of young workers not in education, employment or training (NEET) is particularly delicate, with increasing incidence among women, in part due to deficiencies in childcare services.

Tackling these social and education challenges will require a more effective tax system. Uruguay has succeeded in creating the fiscal space necessary to finance social programmes that helped recovery from the crisis and reduced social vulnerabilities. Although a global recovery is expected, the external environment remains fragile, and a slowdown towards potential in Uruguay is underway. Higher future expenditures can be financed through more tax revenues, but fiscal reforms have to balance equity and efficiency considerations, as well as environmental concerns.

While tax revenues are relatively high in Uruguay, there remains room for further increase. The elimination of certain regressive VAT exemptions could provide a potential source of additional income, and would in many cases promote efficiency and address environmental considerations. Another option would be to normalise the tax regime of the primary sector by eliminating certain exemptions to property taxes and VAT on inputs and other deductions. Lastly, taxpayer contributions in the sector could be gradually moved from the simplified presumptive tax regime to the general income tax regime.

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*Chapter 1*

# How's life in Uruguay? Historical performance and an assessment of well-being outcomes

*This chapter uses the OECD framework for measuring well-being to diagnose strengths and weaknesses of different dimensions of well-being in Uruguay. It starts with a review of Uruguay's historical performance focusing on the effects of the 2002 financial crisis and subsequent expansion in the following decade. It then presents the well-being outcomes found in the "OECD How's Life?" framework. From an international perspective, well-being outcomes in the country are better than could be expected for many areas, including life satisfaction, environmental quality, health, trust, social network support, literacy and access to improved sanitation. However, some areas remain a challenge, such as child poverty, educational attainment, youth employment and personal security. While material conditions are generally high and income inequalities are comparatively low for the region, inequality remains a problem, with children and young people in particular at risk of social exclusion.*

## Introduction

Development involves more than improvements to income or other material conditions. In its broadest terms, development can be defined as a sustainable improvement in the well-being of a population. Using this definition, a multi-dimensional diagnosis assesses the well-being of individuals and households, before assessing aggregate economic conditions.

The objective of this chapter is twofold. First, it aims to present a historical review of Uruguay's economic performance over the past century, providing an account that attempts to explain the current context today. Second, it renders an assessment of Uruguay's well-being outcomes based upon the main dimensions of "OECD's How's Life? framework". This framework was originally designed with member countries in mind, but has been gradually adapted and implemented in non-OECD countries. As a high-income country Uruguay is well suited to this approach. The framework covers different dimensions of material conditions and quality of life, and provides a comprehensive understanding of well-being and its effect on development.

The introduction of the well-being framework is an important innovation, establishing this assessment tool as the starting point for identifying the country's development challenges. In this sense, a shortfall in some of the dimensions of the well-being framework represents a binding constraint for a sustainable development model in Uruguay. The use of the well-being framework can also serve to enhance statistical capacity building, as carried out by the OECD with National Statistical Institutes, providing a roadmap and specific guidelines in areas such as subjective well-being and income distribution.

### *Historical background: Early development and subsequent decline*

During a large part of the past century, Uruguay went through different periods of economic prosperity, followed by intense economic crises and subsequent recoveries. In the late nineteenth century relatively high living standards were already apparent in Uruguay. During 1870-75, GDP per capita was significantly higher than in Chile (70%), Spain (63%) and Italy (53%), and just 10% below the United States. This early prosperity was the result of a series of factors. Favourable terms of trade and good access to international markets for Uruguay's main exports (beef and wool) enabled significant expansion of production in these sectors where the economy traditionally had a comparative advantage. Improvements in cooling technologies and efficiency gains in international shipping transport also permitted increases in Uruguay's supply during this period of rising external demand. Furthermore, the surplus created by these dynamic primary exports was used to finance the development of manufacturing and services (Bertola, 2000). Despite significant volatility, associated primarily with the impact of the two world wars on international trade and commodity prices, Uruguay's GDP per capita by the early 1950s was more than 30% above that of Chile, twice that of Spain and 36% higher than Italy, although it had fallen to just half the GDP per capita of the United States.

Uruguay also implemented a series of social reforms in the early twentieth century that created a relatively comprehensive social protection system. For example, after the creation of pension schemes for part of the military and public servants during the nineteenth century, coverage expanded gradually reaching almost universal coverage for pensions, disability insurance and survivor benefits by the mid-1950s. Furthermore, comprehensive compulsory unemployment insurance for the private sector was introduced in 1958, as well as a contributory health insurance scheme. Therefore, by the early 1960s Uruguay had already established a welfare state similar to those of many OECD economies.

The second-half of the twentieth century, however, was characterised by low and volatile economic growth that resulted in a sustained decline relative to most benchmarks. From 1961 to 2011, Uruguay's GDP per capita grew just at an annual average rate of 1.8%, significantly below the growth rate of 2.5% per annum for OECD economies with similar level of GDP per capita in 1960 (Table 1.1). Furthermore, Uruguay lagged behind richer OECD economies such as Australia and the United States. In regional terms, Uruguay's growth performance was comparable to that of Argentina, reflecting similar economic structures as well as important economic linkages with its neighbour (Bertola and Porcile, 2012). However, long-term growth has remained almost 1 percentage point below that of Brazil or Chile. This relative decline is persistent if one considers other criteria to select benchmarks, such as geography or institutions (Oddone, 2010).

Table 1.1. **Comparative GDP per capita growth performance (1961-2011)**

| | Average GDP per capita growth rate<br>% | Standard deviation annual GDP per capita growth rate<br>% |
|---|---|---|
| **Selected OECD economies** | | |
| Australia | 2.0 | 1.8 |
| Finland | 2.8 | 2.3 |
| Ireland | 3.3 | 2.0 |
| Italy | 2.6 | 3.0 |
| Mexico | 0.9 | 3.0 |
| New Zealand | 1.3 | 2.7 |
| Spain | 2.9 | 2.9 |
| United States | 2.1 | 2.2 |
| **Selected LAC economies** | | |
| Argentina | 1.6 | 5.3 |
| Brazil | 2.7 | 3.9 |
| Chile | 2.6 | 5.0 |
| Venezuela | 0.4 | 5.2 |
| Uruguay | 1.8 | 4.2 |

*Source:* Elaborated based on Penn World Tables 8.0 in Feenstra, R.C., R. Inklaar and M.P. Timmer (2013), "The Next Generation of the Penn World Table", *www.ggdc.net/pwt*.

### *Lack of convergence is mainly due to recurrent crises*

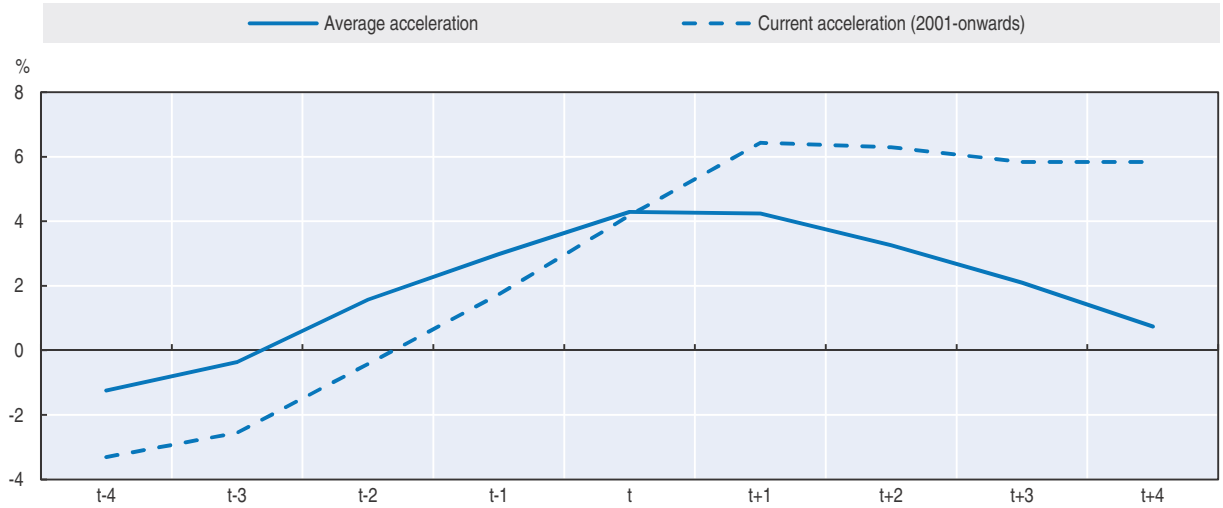
Uruguay's lack of economic convergence over the last 50 years is a reflection of a failure to sustain economic growth rather than an inability to ignite it. The relatively high volatility of economic growth in the country compared to OECD countries is a clear indication. For example, the coefficient of variation – the ratio between the standard deviation and the mean of GDP per capita growth – of Uruguay is around twice that of OECD countries (Table 1.1). During the last 140 years, Uruguay has experienced several episodes of growth acceleration, as well as collapses, associated with severe financial and economic

crises (Box 1.1). These crises have historically been associated with changes in Uruguay's terms of trade and conditions for accessing international capital markets. Nevertheless, domestic weaknesses in the macroeconomic policy framework, the resulting inconsistencies, imbalances and financial fragility, have on many occasions been amplified by external shocks.

For the purposes of this report, growth acceleration episodes are defined as periods in which: annual GDP per capita growth in real terms is above 3.5% during a period of at least seven years, growth accelerates by at least 2 percentage points compared to the previous seven years and GDP per capita after the growth acceleration is above the pre-episode peak (Hausmann, Pritchett and Rodrik, 2005). Similarly, growth collapses can be defined as episodes where: growth is negative during seven years, growth decelerates by at least 2 percentage points and GDP per capita remains below the pre-episode peak (Imam and Salinas, 2008). Using the longest available series of real GDP per capita, the above definitions allow identification of a total of six acceleration episodes (1879, 1906, 1933, 1942, 1973 and 2001) and eight collapses (1884, 1894, 1909, 1926, 1937, 1953, 1978 and 1996) in GDP per capita since 1870.

Almost all episodes of acceleration were followed by a collapse four to five years later, with the exception of the acceleration around the end of the Second World War and the current acceleration following the financial crises at the beginning of the 2000s (Figure 1.1). Historically, changes in external factors, such as alterations to terms-of-trade and financing conditions, have acted as important triggers of these boom-bust cycles. External shocks combined with internal weaknesses, in particular a pro-cyclical bias in fiscal policy and excessive leverage and risk taking by financial institutions, have frequently amplified their effect and created significant and persistent economic downturns. This goes in line with the empirical evidence on credit booms in emerging economies (Mendoza and Terrones, 2012).

Figure 1.1. **Average GDP per capita growth around growth acceleration episodes**




*Source:* Bolt, J. and J.L. van Zanden (2013), "The First Update of the Maddison Project: Re-Estimating Growth Before 1820", *Maddison Project Working Paper,* No. 4, University of Groningen and Feenstra, R.C., R. Inklaar and M.P. Timmer (2013), "The Next Generation of the Penn World Table", *www.ggdc.net/pwt*.

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### Box 1.1. **The 2002 economic and financial crisis**

The severe economic and financial crisis that erupted in 2002 followed three years of disappointingly lacklustre performance. Apart from a brief dip during 1995, the Uruguayan economy had performed well for most of the 1990s. Real per capita GDP had expanded by nearly 6% annually until 1998, driven mainly by consumption and helped by strong growth in Argentina and Brazil, and the deepening of the Mercosur trade agreement. Terms of trade, which had deteriorated until 1994, picked up considerably thereafter until 1998.

However, underlying structural weaknesses were not sufficiently addressed during this favourable period, leaving the economy vulnerable to external shocks. The overall public sector financial balance was in deficit throughout the 1990s, as was, in all likelihood, the primary balance. Public debt, almost entirely denominated in US dollars, began to rise again, relative to GDP, in 1997. Non-financial public sector spending was equivalent to 40% of nominal GDP, and public sector employment accounted for a quarter of the labour force. Much of the economy was effectively closed to foreign investors. The effective exchange rate of the peso appreciated in real terms by over 60% between 1990 and 1998, and wage rates rose strongly in dollar terms (though not in real terms), not offset by productivity gains as the investment ratio was low and unemployment remained above 10%. The public mortgage bank, the BHU, had built up a serious currency mismatch in its accounts as deposits, often short-term, were denominated in dollars, whereas loans were indexed to Uruguay wages. Considerable paper profits were made during the peso's appreciation, but the mismatch made the BHU's balance sheet vulnerable to a fall in the peso against the dollar. The rest of the banking sector, including the dominant state-owned BROU, was also vulnerable to peso depreciation.

Problems arose in 1999. Given the scale of the Uruguayan economy and its important links with Argentina and Brazil, shocks that originate in these neighbouring economies often spillover into the Uruguayan economy. In this sense, Uruguay's long-term GDP growth is in part driven (caused in an econometric sense) by economic growth in Argentina and Brazil (Lanzilotta, Llambí and Mordecki, 2003). Historically, the main channel of transmission was trade; however, the channel of particular importance in the 2002 crisis, in the case of Argentina, was finance.

The beginning of 1999 saw the devaluation of the Brazilian Real and the Euro fall against the peso. Agricultural export prices softened and energy import prices rose sharply. Argentina's economy weakened and the authorities there took measures to discourage imports. Uruguayan domestic demand contracted, real GDP per capita fell by 2% and both public sector and current account deficits widened. At first the banking sector was not seriously affected and a recovery was expected by the year 2000. However, the region's problems persisted; per capita GDP barely held steady in 2000 and fell by a further 1.5% in 2001. The weakening of the peso and the increasingly negative view of the region's prospects among foreign investors led to deposit withdrawals from the Uruguayan banking system which, as a result, experienced losses. In spite of this, the IMF (2001), noting that some reforms had been implemented, and assuming that there would be a recovery in Argentina in 2002 and 4% GDP growth in Brazil, expected a return to solid growth in 2002 for Uruguay.

In reality, 2002 was a crisis year for Argentina with GDP falling by over 10%, while Brazilian growth was sub-par. Some Uruguayan private banks were heavily exposed in Argentina, which had instituted a freeze on deposits, while the BROU's balance sheet was weakened by substantial non-performing loans of quasi-fiscal origin. The Uruguayan banking sector was unable to lend; access to foreign markets dried up and the peso floated. Domestic confidence and spending fell sharply: in real terms domestic demand collapsed by nearly 20%. Export volumes were hit hard by the Argentinian crisis, however imports fell even faster and real GDP fell by 11%.

### *A decade of strong growth brings new challenges*

The relevant questions regarding the current acceleration are whether it will differ from past patterns and which policies are needed to avoid a hard landing. This requires an assessment of the current macroeconomic policy framework and financial regulations in terms of their adequacy and resilience to shocks, so as to ensure the sustainability of economic growth in the medium and long term.

Since the deep financial crisis in 2002, Uruguay has made remarkable progress (Box 1.1). The recovery has turned into the longest period of economic growth in decades. Stable macroeconomic policies and a favourable external environment permitted brisk growth and the financing of social policies that reversed devastating effects on the fabric of society. However, a number of new challenges have emerged, while other structural issues in different areas have become more visible. This is, in part, a consequence of strong economic growth in recent years. Several bottlenecks require determined policy actions to ensure their removal if growth and social progress are to continue at a similar pace.

Recent advancements in social indicators and well-being have been underpinned by a decade of strong economic growth. At present, growth is slowing in part because of cyclical and external reasons. Risks of running into constraints in terms of human capital and skills, infrastructure and financing, even in the short term, are also far from negligible. This would arrest the decline in poverty and income inequality. Several of these issues require sustained effort and probably more resources. Alternative approaches to create fiscal space are required if Uruguay is to continue on the same path, and these approaches are discussed in more detail in Chapter 4, which deals with sustainability issues.

An additional key ingredient for a successful transition towards sustainable economic and social development is the creation of public and political institutions that allow the policy-making horizon to transcend short-term goals often motivated by electoral concerns. In this sense, Uruguay is well placed for such a process, as its institutional capital is high compared to both Latin American and OECD economies. Trust in government is also high and the perception of corruption is low (discussed further in this chapter). This does not imply that public policies in Uruguay are invulnerable to capture by interest groups, however it does mean that, in principle, Uruguay has sufficiently strong institutions to advance a reform agenda involving more ambitious targets and sophisticated arrangements.

## Assessing well-being outcomes in Uruguay

Development is often considered to be synonymous with economic growth, and yet growth is only one element of development: if aggregate increases in productivity and wealth do not produce meaningful gains in the well-being of a country's population, this signals a development failure in both human and economic terms. Growth is only a means to an end – the sustainable and equitable improvement of people's lives. To effect a comprehensive assessment of life within a country it is necessary to go beyond macroeconomic indicators, such as GDP, and monitor well-being outcomes across the many different areas that matter for people.

The aim of this section is to examine a range of indicators related to well-being outcomes in Uruguay. The precise meaning of well-being is, to a certain extent, a matter of interpretation, subject to differences in personality, cultural and social expectations, and material circumstances. However, its fundamentals are fairly universal, encompassing the capacity to meet one's basic needs, the freedom to pursue one's personal goals, and the experience of generally high levels of satisfaction with one's life. Well-being is therefore a

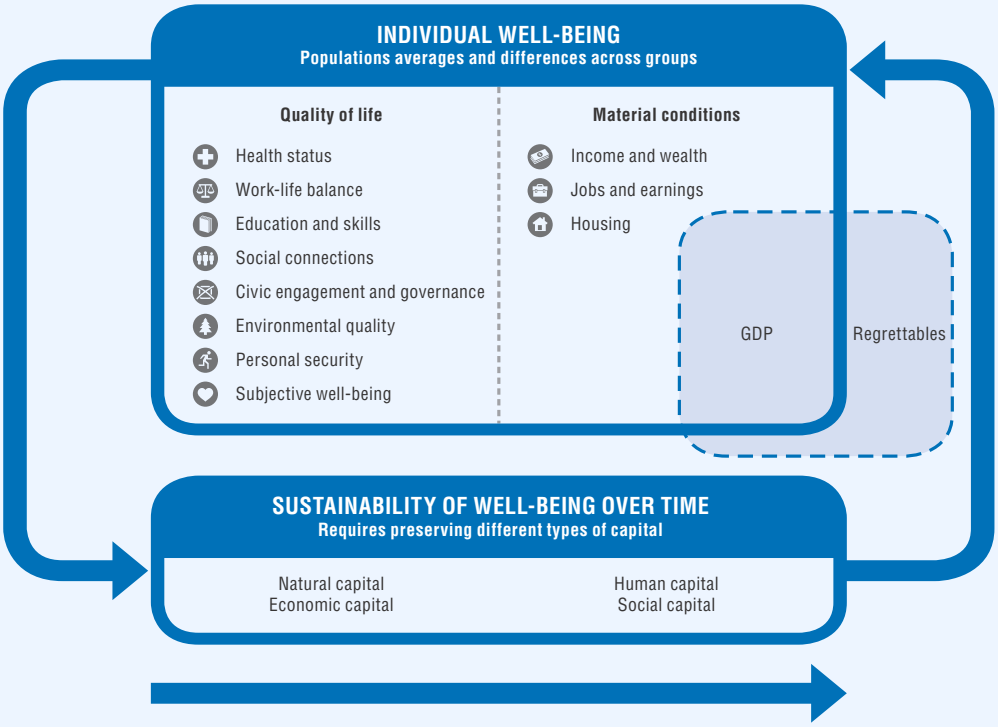
multi-dimensional concept, and this needs to be reflected in its measurement. While the relative importance of different dimensions can vary depending on context, OECD work with well-being measurement initiatives around the world in recent years has shown that the core components tend to be very similar, regardless of the level of economic development.[1]

As of 2013, Uruguay is classed as a "high-income non-OECD" country by the World Bank[2] and has a relatively high level of human development, ranking closely behind Chile and Argentina in terms of Human Development Index (HDI) scores in the Latin American region.[3] However, to obtain a comprehensive picture of life in Uruguay, it is necessary to take into account a much wider range of outcomes, and to look not only at the headline figures, but also at trends and inequalities within the different dimensions of well-being (see Box 1.2).

### Box 1.2. **The OECD "How's Life?" framework for measuring well-being**

Over the last decade, a consensus has developed in many countries around the need to go beyond GDP when measuring social and economic progress. While GDP growth is a necessary element for continued improvement in living conditions, it was never intended to serve as a summary measure of national welfare. GDP fails to take into account a number of issues, including the distribution of wealth within a population, the value of non-market services such as childcare and parenting, as well as many aspects of people's lives which are undeniably important for well-being such as health status, social connectedness and happiness. Furthermore, GDP gives no information about the sustainability of the various capital stocks that underpin well-being.

Figure 1.2. **The How's Life? framework**




*Source:* OECD (2011), *How's Life?: Measuring Well-being*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264121164-en.*

Box 1.2. **The OECD "How's Life?" framework for measuring well-being** *(cont.)*

In recognition of the need for better measurement of well-being, the OECD developed the "How's Life?" framework (OECD, 2011). This framework is the outcome of many years of collaboration and discussion with representatives from national governments, international organisations, and other bodies from both OECD member countries and non-member countries. It was developed with OECD countries in mind; however, the 11 dimensions of the framework represent universally relevant elements of individual well-being. They fall under two headings. The first, material conditions, comprises income and wealth, jobs and earnings, and housing. The second, quality of life, comprises health status, work-life balance, education and skills, social connections, civic engagement and governance, environmental quality, personal security and subjective well-being. Each dimension is open to interpretation and the most appropriate selection of associated indicators is likely to differ between countries. For example, work-life balance may seem to be a concern affecting principally rich countries, but it can also be interpreted in the broader sense of time use and time poverty, this is, the lack of time for rest and leisure after working and domestic activities.

In addition to assessing current individual well-being through the 11 dimensions, the framework emphasises the importance of well-being sustainability, based on the preservation of natural, human, economic and social capital stocks that are essential for ensuring the well-being of future generations.

Aside from the content of the framework in terms of dimensions and capital stocks, the "How's Life?" approach is informed by a number of analytical principles. First, it is concerned with the well-being of individuals and households rather than with aggregate economic conditions. Second, it focuses on well-being outcomes rather than inputs, recognising that outcomes may be imperfectly correlated with the resources devoted to achieving them (i.e. an input indicator of government expenditure on the health system does not describe the outcome of people's actual health status). Third, it places a high importance on measuring the distribution of well-being outcomes to identify inequalities, as headline figures can mask significant differences in well-being outcomes. This is particularly significant where certain population groups experience inequalities and deprivation across multiple outcomes. Finally, it takes into account both objective and subjective indicators, as people's own evaluations and feelings about their lives matter as well as the objective conditions in which they live.

*Source:* OECD (2011), *How's Life?: Measuring Well-being*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264121164-en*.

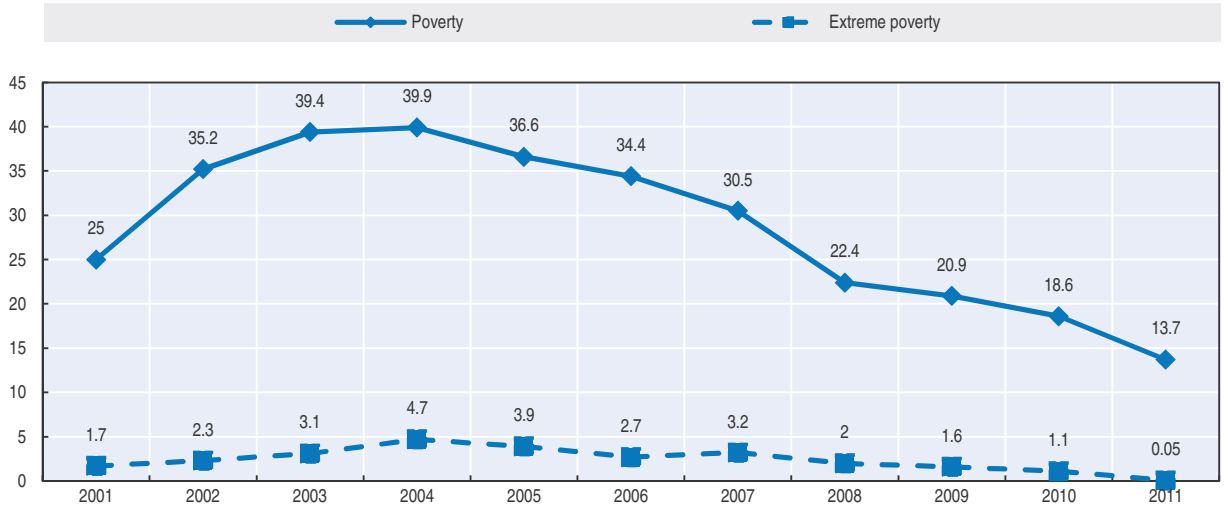
The remainder of this section is structured in two main parts. Taking the OECD framework (OECD, 2011) as a starting point, the first part assesses well-being in each of the dimensions (with the exception of work-life balance, due to lack of data), showing Uruguay's position in relation to other benchmark countries from the region, as well as over time, where possible. The selected indicators are representative of as broad a range of dimensions as possible, while allowing for international comparison. The second part looks in more detail at the distribution of well-being outcomes within Uruguay, examining inequalities by gender, socio-economic status, region, ethnicity and age.

### *Well-being in Uruguay: After a decade of recovery*

The Uruguayan financial crisis of 2002 led to one of the country's worst economic and social crises in recent history, which had a significant negative impact on living standards. Poverty rates increased sharply in the years that followed, and by 2004, four out of 10 Uruguayans were living below the poverty line, with almost one in 20 living in extreme poverty. This trend has now reversed with both the poverty rate and extreme poverty rates below pre-crisis levels (see Figure 1.3).

Figure 1.3. **Poverty and extreme poverty rates**

% of total population



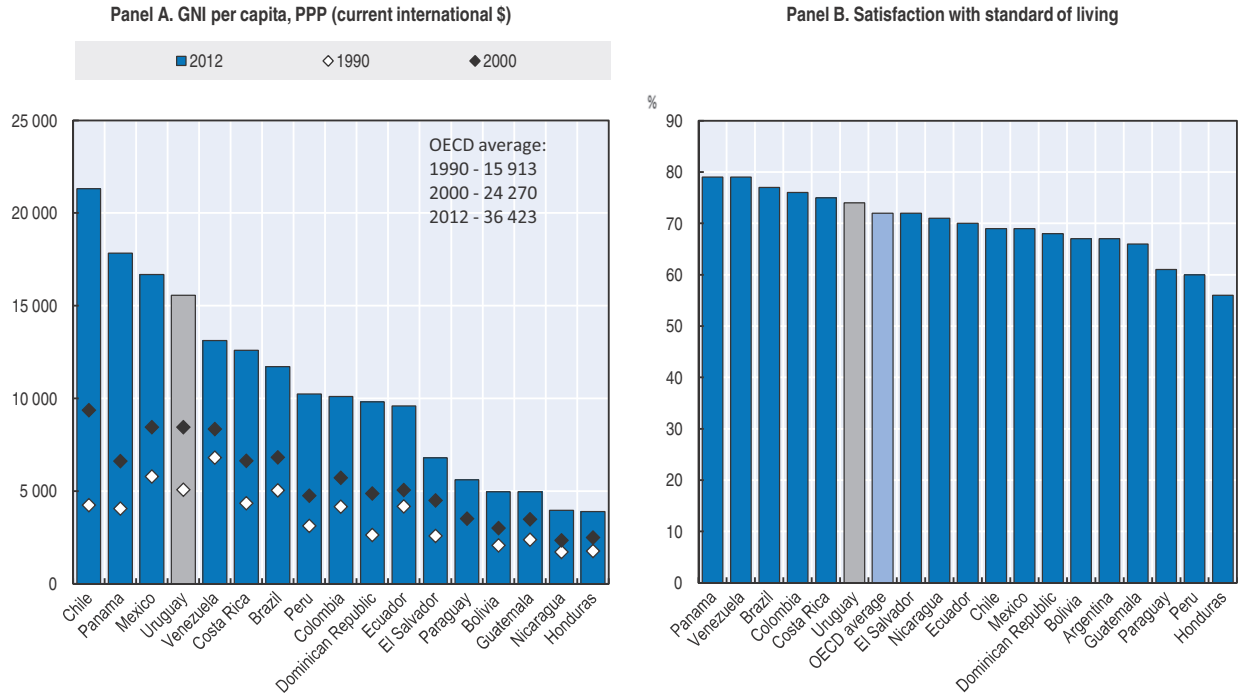

*Note:* Poverty rates have been calculated according to the 2006 Poverty Line and 2006 Extreme Poverty Line methodology developed by the Uruguayan National Statistical Institute (INE), based on the Basic Food Basket and Basic non-Food Basket price indices defined in the National Survey of Household Expenditure 2005-06.

*Source:* INE (National Institute of Statistics) (2013), *Estimación de la Pobreza por el Método del Ingreso – Año 2012* [Estimation of Poverty by Income Method – 2012], INE, Montevideo, *www.ine.gub.uy/biblioteca/pobreza/Pobreza%202012/Estimaci%C3%B3n%20de%20la%20pobreza%20por%20el%20M%C3%A9todo%20del%20Ingreso%202012.pdf* and INE (2008), *Líneas de Pobreza e Indigencia 2006 – Metodología y Resultados* [Homelessness and Poverty Lines 2006 – Methodology and Results], INE, Montevideo, *www.ine.gub.uy/biblioteca/pobreza/INFORME%20LINEA%20DE%20POBREZA%202006%20FINAL.pdf*.

StatLink http://dx.doi.org/10.1787/888933077255

Overall, material conditions in Uruguay are relatively good today. The OECD framework measures material conditions under three broad headings: i) income and wealth; ii) jobs and earnings; and iii) housing. In the absence of internationally comparable data on household wealth for Latin American countries, GNI per capita is the best available proxy of economic resources at the individual or household level. According to this measure (which captures the gross flow of income to individuals from earnings, self-employment and capital income), income levels in Uruguay are among the highest in the region (Figure 1.4). As measured in PPP terms (current international dollars), in the past two decades GNI per capita has tripled in Uruguay, from the equivalent of USD 5 080 in 1990, to USD 15 570 in 2012. Income levels are now among the highest in the region with only Chile, Panama and Mexico reporting higher GNI per capita levels.[4] These improvements in individual income levels are matched by relatively positive subjective evaluations of living standards: three out of four Uruguayans say that they are satisfied with their standard of living and with their ability to buy or do the things they want. The evolution of poverty measures is discussed further in Chapter 3.

Figure 1.4. **Income levels and satisfaction with standard of living**




*Note:* PPP GNI is gross national income (GNI) converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GNI as a US dollar has in the United States. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in current international dollars. GNI per capital data are not available for Argentina beyond 2006, and so Argentina has not been included in this graph. 1990 data for Paraguay were unavailable. The satisfaction with standard of living measure shows the percentage of the sampled population who reply positively to the question: "Are you satisfied or dissatisfied with your standard of living and with all the things you can buy and do?" Data are for 2012, except for Argentina, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Paraguay and Venezuela, which are for 2011.
*Source:* World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*; Gallup Organization (2013), *Gallup World Monitor* (database).

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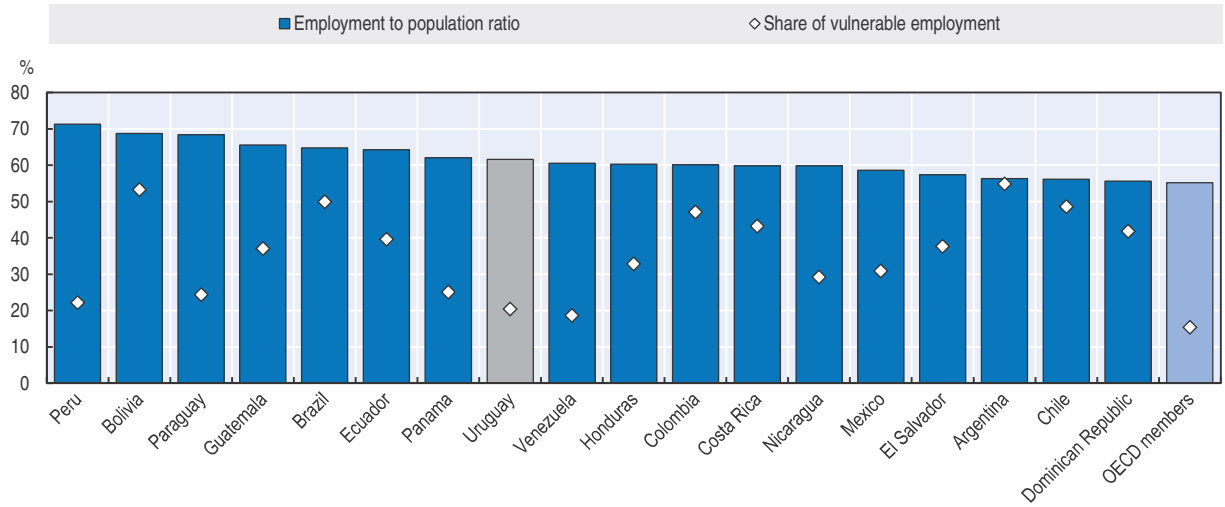
Access to decent work and the ability to earn a living are essential components for well-being, not only in terms of material conditions, but also in relation to people's physical and mental health (Wilson and Walker, 1993) and subjective well-being (Clark and Oswald, 1994). Unemployment is fairly low in Uruguay having declined to 6% in recent years after reaching a post-crisis high of 17% in 2002 and 2003. However, unemployment figures do not capture those who are not actively seeking employment because they have become discouraged, and provide no information about the quality of work available.

As measured by the employment-to-population ratio indicator, labour force participation is around average for the region at 62%, and around 10 percentage points behind the relatively poorer Bolivia and Peru (Figure 1.5). This may be due to a relatively large share of the sample comprising older people who have retired from the workforce. Uruguay has a rapidly ageing population with shares similar to European and North American countries. Fertility rates have dropped in the last two decades and according to the latest census data from the Uruguayan National Institute of Statistics, the share of the population aged over 65 years old has almost doubled in the last 50 years, from 7.6% in 1963 to 14.1% in 2011 (INE, 2012a).

While Uruguay is relatively middling in terms of its employment-to-population ratio, the fact that "vulnerable employment" makes up a very low proportion of total employment signals that the quality of jobs available is relatively high. The vulnerable employment rate shows the number of own-account workers and unpaid family workers as a share of total employment.[5] Vulnerable employment is often characterised by inadequate earnings, low productivity and difficult conditions of work that undermine workers' fundamental rights (ILO, 2010). In 2010, only 22% of total employment in Uruguay fell into this category – much lower than in most countries in the region, and only moderately higher than the average rate of vulnerable employment among OECD member countries (15%). While vulnerable employment rates in 2010 are broadly similar to those in 1998, the share of vulnerable employment rose in the early 2000s, peaking at 27.5% in 2002, and then steadily decreasing again after the crisis. The patterns of unemployment and labour force participation also show large discrepancies by sex and age. This is discussed in further detail later in the chapter.

Figure 1.5. **Employment ratio and share of vulnerable employment**




*Note:* The employment-to-population ratio is the proportion of a country's population that is employed. Ages 15 and older are generally considered the working-age population. Data are for 2011. Vulnerable employment rate data are for 2010 for Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay and Uruguay; 2009 for Bolivia and Brazil; 2008 for Chile, Mexico and Peru; and 2004 for Guatemala. Vulnerable employment is defined as own-account workers and unpaid family workers as a percentage of total employment. Own-account workers are people who operate their own economic enterprise or engage independently in a profession or trade and hire no employees. Unpaid family workers are people who work without pay in an economic enterprise operated by a related person living in the same household. See: *http://laborsta.ilo.org/applv8/data/icsee.html*.
*Source:* UIS (UNESCO Institute for Statistics) (2013), *UIS Data Centre* (database), *http://data.uis.unesco.org/* (accessed 10 February 2014); IADB (InterAmerican Development Bank), *Sociómetrico BID* (database), *www.iadb.org/research/sociometrobid/tables.cfm?indicator=2* and OECD Education at a Glance OECD (2013), *Education at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eag-2013-en*.
*StatLink* *http://dx.doi.org/10.1787/888933077293*

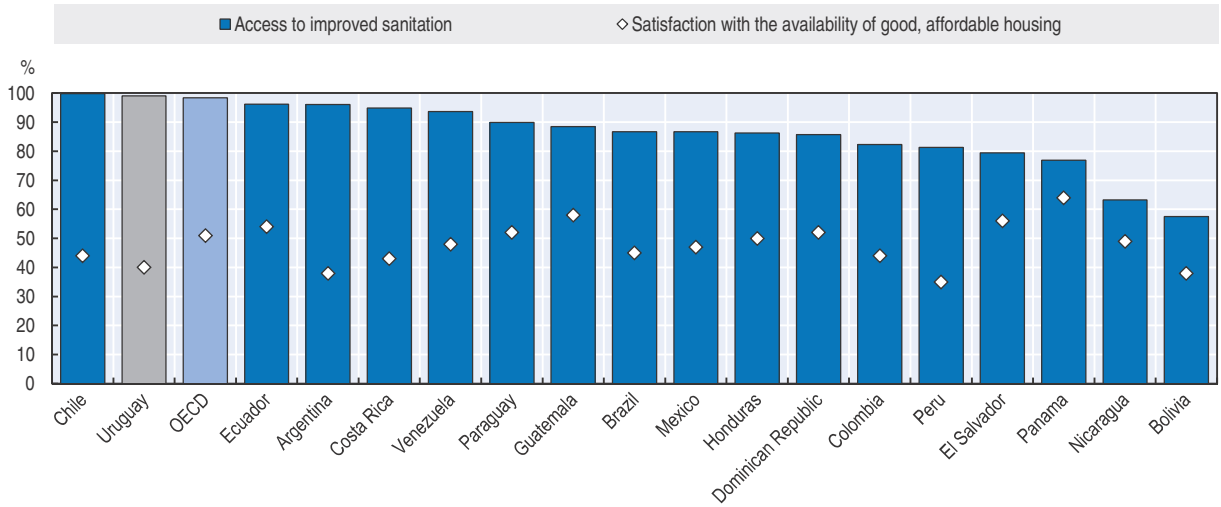
Alongside the ability to obtain adequate income and earnings, access to decent housing is a key dimension of material conditions. Uruguay has achieved almost universal access to improved sanitation, with 99% of households having access to adequate sanitation facilities such as flushing toilets or covered latrines. This places Uruguay second only to Chile in the region, and is even higher than the OECD average of 98% (Figure 1.6). Such hygiene facilities are fundamental for ensuring people's health, and the fact that Uruguay performs so strongly with regard to this indicator signals that decent housing is widely available. Data from the Inter-American Development Bank Sociómetro database show that Uruguay also performs well in other indicators of decent housing compared to other Latin American countries for which data are available. Uruguay has one of the lowest

shares of households with dirt floors (0.52% of households, higher only than Chile and Costa Rica), and among the highest share of households with access to piped water (92% of households, lower than only Chile, Costa Rica and Venezuela,) and electricity (98.5%, lower than only Brazil, Chile, Costa Rica and Venezuela).

However, the picture for Uruguay is mixed. Despite showing a generally strong performance on decent housing indicators (such as access to improved sanitation), it also has one of the lowest results in terms of satisfaction with the availability of good, affordable housing, with only 40% of people being satisfied (Figure 1.6). Only Argentina, Bolivia and Peru score lower in this respect.

Figure 1.6. **Access to improved sanitation and satisfaction with the availability of housing**

2012 or latest available year




*Note:* Data for access to improved sanitation facilities refers to the urban population only and is for 2011 for all countries except El Salvador (2010) and Bolivia (2007). Access to improved sanitation facilities refers to the percentage of the population with at least adequate access to excreta disposal facilities that can effectively prevent human, animal and insect contact with excreta. Improved facilities range from simple but protected pit latrines to flush toilets with a sewerage connection. Data for satisfaction with the availability of good, affordable housing show the proportion of respondents stating that they are satisfied with the availability of good, affordable housing in the city or area where they live.

*Source:* World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org* and Gallup Organization (2013), *Gallup World Monitor* (database).

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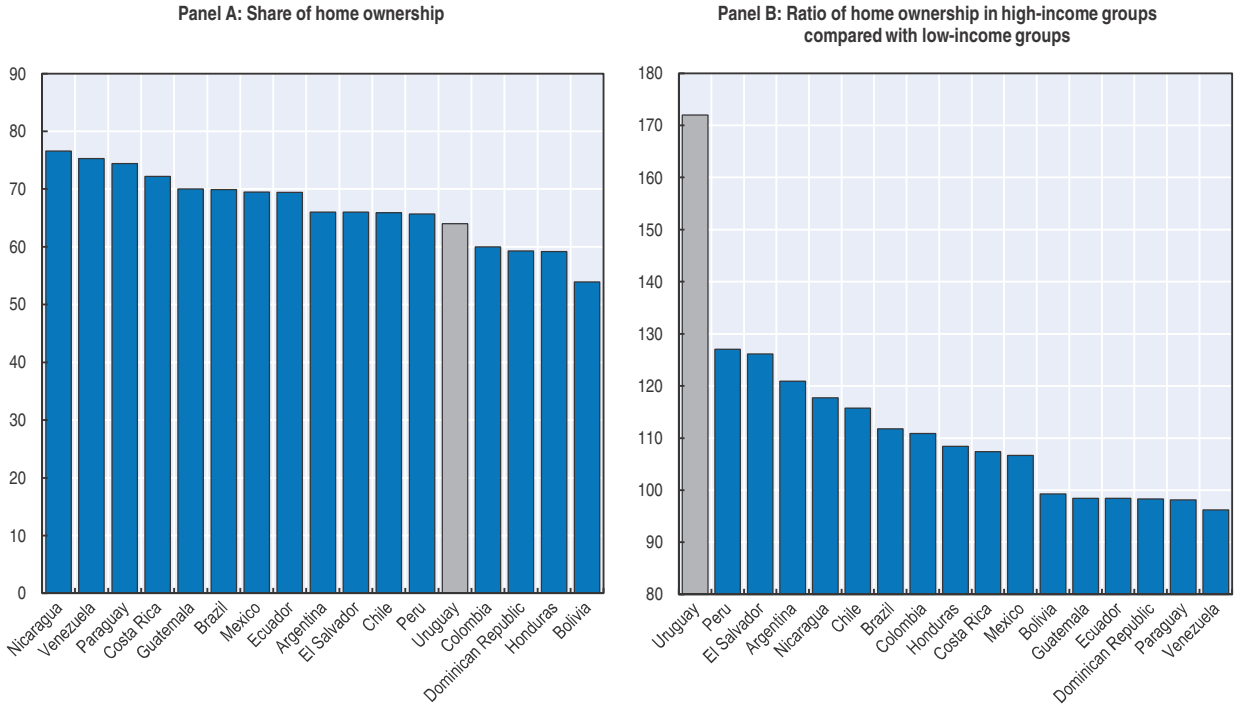
The affordability of housing may partially explain Uruguay's low satisfaction levels. Despite improvements in housing affordability in recent years, the cost of housing remains a heavy burden for many. Home ownership figures suggest that it is more difficult for people, outside of the most privileged groups, to buy their own homes in Uruguay than in other countries in Latin America. Uruguay has one of the lowest average home ownership rates in Latin America with the fifth-lowest rate in the region, after Bolivia, Colombia, the Dominican Republic and Honduras (Figure 1.7). This could be explained by a cultural preference for renting over buying in Uruguay, rather than affordability issues. However, the ratio figures suggest a different story. The largest inequalities by far in home ownership are seen in Uruguay, with the home-ownership rate in the top two income quintiles representing 172% of the home ownership rate in the bottom two income quintiles. Indeed, the home-ownership rate in the high-income group in Uruguay is among the highest in the region, and it would seem that Uruguay's overall low home-ownership figures are driven by extremely low figures in the lower-income quintiles.

The proportion of household income devoted to rent or mortgage payments has increased among young households. The younger generations (from 20 to 39 years) considerably increased the share of income spent on mortgage payments, by more than 18% between 1990 and 2006. The increase in rental expenditure has also been important, from 2.8% to 19.5%, over the same period (Amarante, 2008). Differences between Montevideo renters and Interior renters are also significant, with a higher share of Montevideo renters (18% in 2006) facing difficulties in housing affordability, compared to 12% in the Interior (Amarante, 2008).

Figure 1.7. **Average home ownership rates and inequalities in home ownership**




*Note:* Data are from 2008. The average home-ownership rate presents the percentage of households owning their own home. "high income" corresponds to the highest two quintiles and "low income" corresponds to the lowest two quintiles.
*Source:* Data presented in Lora, E. (2010), "Latin American Cities: Their Origins, Achievements and Problems", in E. Lora et al. (eds.) *The Quality of Life in Latin American Cities: Markets and Perception, Inter-American Development Bank* (IDB)/World Bank, Washington DC taken from Cristini, M. and R. Moya (2008), "Ciudades y Calidad de Vida en América Latina y el Caribe: Evolución Histórica y Comparación Internacional" [Cities and Quality of life in Latin America and the Caribbean: Historical Evolution and International Comparison], unpublished manuscript, IADB, Washington, DC, *www.iadb.org/research/sociometrobid/tables.cfm?indicator=2*.

*StatLink* http://dx.doi.org/10.1787/888933077331

Some efforts have been made to tackle the low affordability of housing in Uruguay, especially among middle-income households. Since 2011, the implementation of social housing (*Viviendas de Interés Social*) programmes has expanded, offering tax benefits and tax exemptions to homeowners and helping to decrease the deficit in new housing by almost one-third (ANV, 2013). Together with fiscal incentives, the Mortgage Credit Guarantee Fund (*Fondo de Garantía de Créditos Hipotecarios*) provides credit instruments for home acquisition. Around 72% of these projects are concentrated in the Montevideo area (ANV, 2013).

The prevalence of inadequate housing in Uruguay is wider than the headline indicators would suggest. The 2011 census collected detailed information about housing-related deprivation in the country (Table 1.2). According to this data, the most frequent

Table 1.2. **Percentage of households and individuals experiencing housing-related deprivation in one or more dimensions, 2011**

| | Households | Individuals |
|---|---|---|
| Adequate construction material | 0.6 | 0.7 |
| Adequate living space (no overcrowding) | 5.7 | 5.8 |
| Cooking space | 6.2 | 6.4 |
| **Combined Decent Housing Index** | **10.6** | **10.9** |
| Access to sanitation facilities | 3.9 | 4.1 |
| Potable water | 5.7 | 5.7 |
| Sanitation facilities | 0.9 | 0.9 |
| Electricity | 4.8 | 4.9 |
| Heating | 13.3 | 13.3 |
| Food conservation | 6.7 | 6.8 |
| Bathroom water heater | 12 | 6.8 |
| **Combined Basic Comfort Index** | **23.3** | **23.5** |

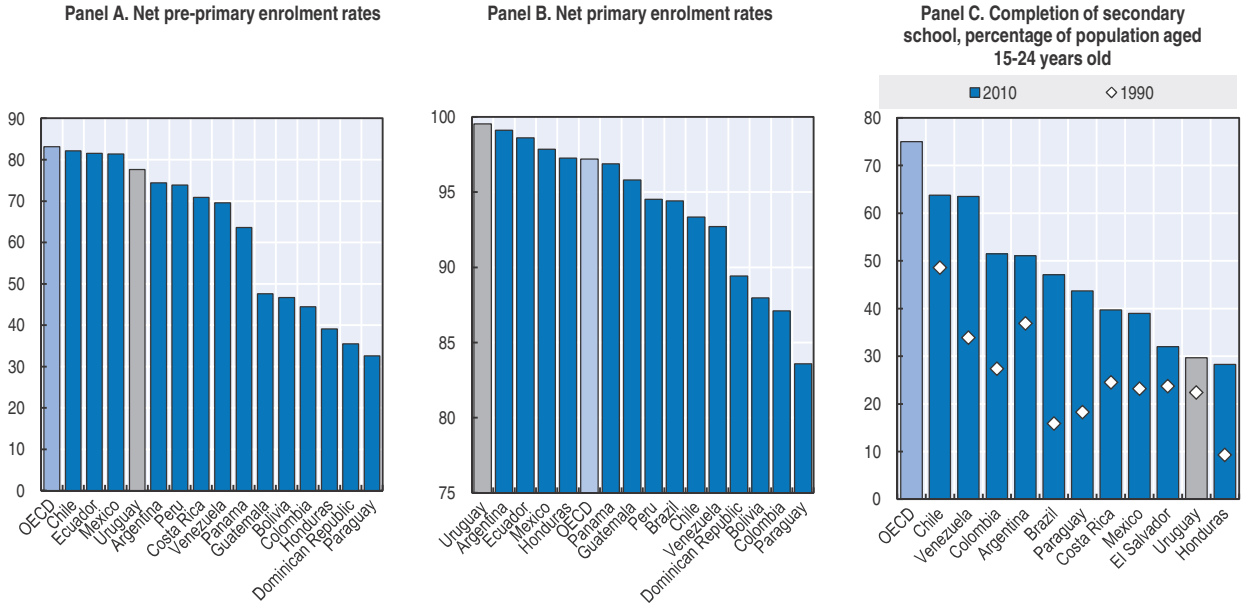
*Note:* The Combined Decent Housing Index combines the measures related to construction material, overcrowding and the availability of a dedicated cooking space. The Combined Basic Comfort Index combines the measures related to sanitation, drinking water, electricity, heating, food conservation and bathroom water heating, as well as a measure of basic educational attainment not listed here. According to that measure 4.8% of households and 4.9% of individuals were deprived in the area of education.
*Source:* INE (National Institute of Statistics) (2013), *Estimación de la Pobreza por el Método del Ingreso – Año 2012* [Estimation of Poverty by Income Method – 2012], INE, Montevideo, *www.ine.gub.uy/biblioteca/pobreza/Pobreza%202012/Estimaci%C3%B3n%20de%20la%20pobreza%20por%20el%20M%C3%A9todo%20del%20Ingreso%202012.pdf*, based on 2011 census data.

type of deprivation is lack of heating, followed by lack of bathroom water heating. Aside from the results for individual dimensions, the table includes two combined indicators: the Combined Decent Housing Index and the Combined Basic Comfort Index. Over one in ten households are experiencing at least one form of deprivation according to the Combined Decent Housing Index and almost one-quarter of households are deprived according to the Combined Basic Comfort Index.[6] While comparable data are not widely available to place these figures in an international context, they suggest that inadequate housing is an issue for a sizeable share of the population.

### *Basic education provision in Uruguay is good, but secondary educational attainment is low*

The importance of education and skills for well-being cannot be overstated. Aside from its intrinsic value, education has a strong positive impact on people's material conditions, mental and physical health, as well as on raising their civic awareness and ability to fully participate in society (OECD, 2011). Uruguay is very advanced in terms of basic education. Adult literacy is almost universal at 98.1%, and Uruguay's achievements in this domain are second only to Chile for the region. Uruguay is also advanced in terms of access to pre-primary and primary education. Pre-primary education has been shown to have a high impact on the future performance of children, and is key to the formation of important cognitive and behavioural skills (Berlinski, Galiani and Gertler, 2009). Uruguay has one of the highest rates of pre-primary school enrolment in Latin America at 78% (behind only Chile, Ecuador and Mexico) and is only slightly below the OECD average of 83% (Figure 1.8). Uruguay also managed to raise primary school enrolment for children aged 4-5 from around 90% in 2005, to practically universal enrolment in recent years (Figure 1.8). With 99.5% of primary-school age children enrolled in primary school, Uruguay has the highest rate of net primary enrolment in Latin America – even higher than that of OECD member countries (with an average net enrolment rate of 96.8%).

Figure 1.8. **Enrolment rates for pre-primary, primary and secondary educational attainment**




*Note:* The net primary enrolment rates refers to the ratio of children who are enrolled in pre-primary or primary school as a share of the total population of official pre-primary and primary school age children. Data for pre-primary school enrolment are for 2012 with the exception of Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala and Peru (2011); and Argentina, Mexico, Paraguay and Uruguay (2010). Data for primary school enrolment are for 2011 apart from Bolivia, Guatemala, Nicaragua, Paraguay and Uruguay (2010); Ecuador (2009); and Argentina and Brazil (2005). The more recent wave of data for secondary school completion are for 2010 except for Argentina, Colombia, Paraguay and Uruguay (2011); and Brazil and Chile (2009). The earlier wave of data are for 1990 except for Venezuela (1991); Argentina, Mexico and Uruguay (1992); and El Salvador and Paraguay (1995).

*Source:* UIS (UNESCO Institute for Statistics) (2013), *UIS Data Centre* (database), *http://data.uis.unesco.org/* (accessed 10 February 2014); IADB, (2008), *Sociómetrico BID*, *www.iadb.org/research/sociometrobid/tables.cfm?indicator=2*; OECD (2013), *Education at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eag-2013-en*.

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However, while the country's performance in the provision of basic education and literacy skills is strong, attainment and achievement at more advanced levels of education are weaker when compared with other countries in the region. Secondary education is fundamental in providing young people with the skills necessary for a successful entry into the labour market in an information economy. Uruguay's secondary school graduation rate has changed little in the last two decades. On the other hand, many countries in the region that had similar or lower secondary school graduation rates in 1990 (e.g. Brazil, Colombia, Costa Rica, El Salvador, Mexico and Paraguay) have progressed at a much more rapid pace, leaving Uruguay with one of the lowest rates in the region. In 2010, 23% of youth aged 15-17 did not participate in formal education at all, a figure that is second lowest among Mercosur countries, behind only Paraguay (INE, 2012b). Repetition is also widespread with 11% of students repeating at least one year in 2010 (INE 2012b).

Uruguay participates in the Programme for International Student Assessment (PISA) alongside Argentina, Brazil, Chile, Colombia, Mexico, Panama and Peru. PISA measures the cognitive skills of 15 year-olds worldwide in the areas of reading, maths and science. It aims to assess the actual competencies of students reaching the end of compulsory education, so as to more accurately evaluate the quality of education in different countries. Uruguay performs relatively well in PISA rankings among the Latin American countries tested, with students achieving a mean score on the maths test of 409 in the 2012 round,

third only to Mexico with 413 points and Chile with 450 (OECD, 2014a). However, drop-out rates are high in Uruguay: one in five young people aged between 13 and 18 years leaves lower secondary education before graduation (MIDES/OPP, 2011). The fact that PISA tests only assess those in school means that scores are likely to overestimate the actual skills level of the school-age population. Furthermore, while Uruguay's position is still relatively high for the region (although low compared to OECD countries with an OECD mean score of 494), the country's performance in PISA has seen a decline in recent years. For example, maths performance has declined by the equivalent of more than one point per calendar year since 2003 (OECD, 2014a).

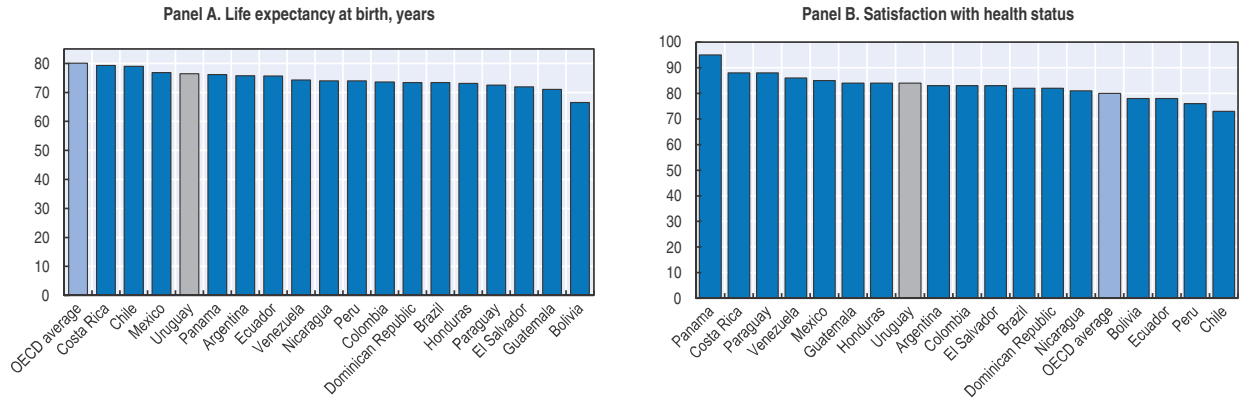
### *Expenditure on education in Uruguay has increased in recent years, but is still comparatively low*

Public spending on education in Uruguay has increased in the last two administrations, particularly in primary education, where it rose from 0.8% in 2000 to over 1.3% in 2010 (UIS, 2013). This allowed for improvements in the management of primary schools, where the average number of students per teacher fell from 20.7 in 2000 to 15.6 by the end of the decade (UIS, 2013). Moreover, public expenditure as a share of GDP was 4.4% in Uruguay in 2011, lower than the OECD average of 6.3% in 2010 (UIS, 2013). The gap is particularly notable at the secondary level. In Uruguay, spending per student in secondary schooling is around 10% of GDP per capita, whereas the average OECD economy spends 24%. The share of private spending also seems to be expanding, given the increase in private enrolment and services in all education levels over the last decade (Llambí, Castro and Mosteiro, 2013).

### *Health outcomes are generally good*

Health outcomes in Uruguay are generally good (Figure 1.9). The country has a life expectancy at birth of 76 years, which is one of the highest in the region not far below the OECD average of 79.5 years. The majority of Uruguayans are satisfied with their health status, although a satisfaction rate of 84% places the country only around the middle of regional rankings. Uruguay performs much better than the regional average in a number of

Figure 1.9. **Life expectancy and satisfaction with health status**




*Note:* Satisfaction with health status shows the proportion of respondents who replied "satisfied" to the question: "Are you satisfied or dissatisfied with your personal health?"

*Source:* World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org* and Gallup Organization (2013), *Gallup World Monitor* (database).

StatLink http://dx.doi.org/10.1787/888933077369

headline indicators provided by the World Health Organization (WHO) related to health, including the under-5 mortality rate; the adult mortality rate (i.e. the probability of dying between 15 and 60 years); the maternal mortality rate; the prevalence of tuberculosis and incidence of obesity.[7] The number of life years lost due to communicable disease and injury is also much lower than the regional average, meaning that 74% of life years lost is due to non-communicable factors.

Lifestyle behaviours are therefore likely to play an important part in determining people's longevity and quality of health. A 2006 survey (MSP, 2006) assessed a number of risk factors for chronic, non-communicable illness among the Uruguayan population, including regular alcohol consumption, sedentary lifestyle, being overweight or obese, daily smoking habits, increased cholesterol, and inadequate consumption of fruit and vegetables. The survey found that, overall, 90% of the population exhibited at least one of these risk factors. While comparable data for all of these factors are not widely available, WHO data show that tobacco use in Uruguay is more widespread than the regional average, and that raised blood pressure is also more prevalent (for both men and women) in Uruguay than the Latin American average, suggesting that improvements could be made to promote healthier lifestyles in the country.[8] It is worth noting that government regulation brought into effect in 2005 to restrict tobacco consumption in Uruguay (e.g. banning smoking in public places) seems to have had a significant impact on consumption. From 2005 to 2011, tobacco use in Uruguay decreased annually by an estimated 3.3%, compared with an annual decrease in neighbouring Argentina (which did not implement restrictions) of 1.7% (Abascal, 2012).

Drug use is also on the rise. Uruguay is one of only a handful of countries in the world where the prevalence of cocaine use is over 1% of the population, according to recent United Nations Office on Drugs and Crime (UNODC) estimates (UNODC, 2012). Abuse of prescription drugs is also high. Per capita consumption of benzodiazepines (currently the main substance of concern in the prescription drug category) in Uruguay is the second highest in the world, after Belgium. The Uruguayan government legalised marijuana at the end of 2013, mainly as a strategy to undermine drug cartel activity in the region. The decision was controversial and has been criticised by the International Narcotics Control Board (INCB) among others.[9] It will be interesting to see whether the move towards decriminalisation will change levels of marijuana use significantly in the coming years.

Finally, while the prevalence of HIV is low compared to world averages, it is relatively high for the region, with 357 cases per 100 000 people in Uruguay and only 319 per 100 000 on average in the region according to WHO data. The number of people notified of their HIV-positive status increased steadily from 1983 to 2010, reaching about 25 new cases per year in 2010 (MSP, 2012).

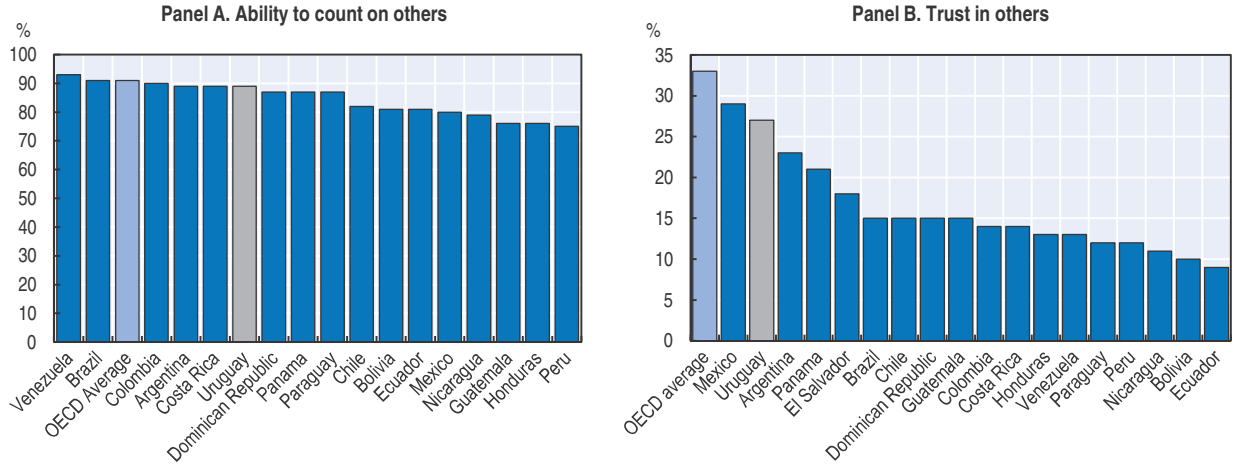
Recent reforms in the health sector have increased options for users, which may contribute to improved health outcomes. In 2008, Uruguay unified its public and private health systems into the National Integrated Health System (SNIS). One major improvement is that insured citizens now have the ability to select from either a private insurance company or the public sector system. Previously, private workers were not able to opt for the public health sub-system. In addition, the reforms extended coverage to public employees, sole proprietorship companies, unions, pensioners, retirees and workers' dependants. Full coverage of the targeted population is predicted for 2016 with the inclusion of all pensioners and retirees.

### *Social connections are relatively strong*

Aside from the intrinsic pleasure that social connections bring, people with extensive and supportive networks have better health, tend to live longer and are more likely to be employed (OECD, 2011). At a society-wide level, social connections can generate shared values, such as trust in others, which in turn influence a range of outcomes such as democratic participation, crime levels, and even economic growth by reducing transaction costs within the economy (OECD, 2011).

Social networks are relatively strong in Uruguay. The ability to count on others in times of need is a good proxy measure of the strength of people's close, personal networks, comprising of friends and family. Just under nine in every ten Uruguayans say that they have at least one friend or relative that they can turn to for help in a time of need, which is above average for the region, although the results for Argentina, Brazil, Colombia, Costa Rica and Venezuela are slightly higher (Figure 1.10). Uruguay's performance on this result is not too far below the OECD average. The second indicator is a measure of "social trust", which is the percentage of people saying that, generally speaking, most people can be trusted (Figure 1.10). This is intended to capture people's trust in people they don't know, as well as those they do, and is considered to be a strong proxy measure for a country's stock of "social capital" (Halpern, 2005). Overall, levels of social trust tend to be low in Latin America, particularly when compared to OECD countries. However, for the region, Uruguay comes second only to Mexico, with 27% of Uruguayans expressing trust in others. Trust is a complex feature of social relations, and there is no consensus around its main determinants. However, there is some evidence to suggest that social trust is eroded by economic inequality, as well as perceptions of crime and corruption (Uslaner and Brown, 2005; Wilke and Holzwart, 2008), all of which are low in Uruguay when compared to other Latin American countries. This may help to explain its high ranking for the region. The following sections of this chapter examine perceptions of crime and quality of government.

Figure 1.10. **Social network support**




*Note:* Data for the "Social network support" graph are from 2011 and show the percentage of people responding positively to the question: "If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?" Data for the "Trust in other people" graph are from 2010 and show the number of people responding "most people can be trusted" to the question: "Generally speaking, would you say that most people can be trusted or that you have to be careful in dealing with people?"
*Source:* Gallup Organization (2013), *Gallup World Monitor* (database).

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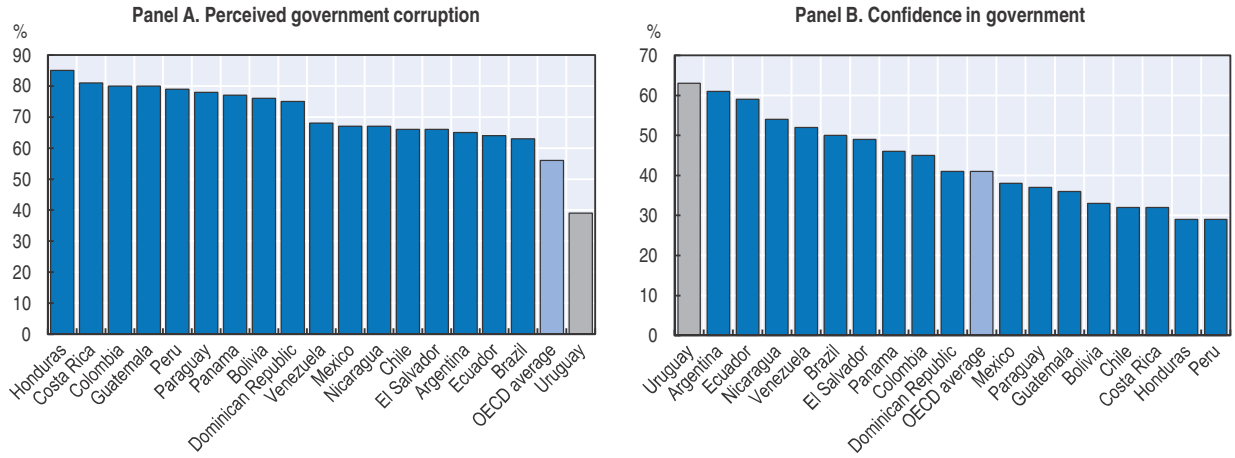
### *Perceived quality of government is relatively high*

Governments strongly condition people's quality of life by setting regulations, defining and implementing public policies, and establishing the rule of law. People's perceptions about government integrity and efficacy give a strong indication of the actual functioning of state institutions. Perceptions also matter in determining the success of governmental reform, as public support for new policies is likely to be higher where citizens have more faith in government actions. Figure 1.11 shows two subjective measures of government performance: perceived governmental corruption and confidence (or trust) in government.

Figure 1.11. **Perceived corruption and confidence in government**




*Note:* Data for the "Perceived government corruption" graph are for 2011 and show the percentage of respondents replying "yes" to the question: "Is corruption widespread throughout the government in this country, or not?" Data for the "Confidence in government" graph are for 2011 and show the percentage of people replying "yes" to the question: "In this country, do you have confidence in each of the following, or not? How about national government?"
*Source:* Gallup Organization (2013), *Gallup World Monitor* (database).

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The perception of corruption in Uruguay is exceptionally low, with fewer than 40% of people saying that they believe corruption is widespread in government. This is by far the lowest score in the region, and over 20 percentage points lower than in the second-lowest scoring country, Brazil. It is significantly lower than the OECD average (56%). Uruguay also has the highest levels of confidence in government for the region, with almost two-thirds of people saying that they trust national government (compared to 41% of people in OECD member countries).

Trust in government is one of the most important foundations upon which the legitimacy and sustainability of political systems are built (OECD, 2013b). It is an issue that has taken on increased importance for OECD governments in recent years, as levels of trust have declined considerably in many countries since the 2008-09 economic and financial crisis: it seems that trust "matters the most when it is gone" (OECD, 2013b). The high level of government trust in Uruguay should therefore be recognised for the significant resource that it is, providing favourable conditions for more effective policy implementation across the range of well-being dimensions.

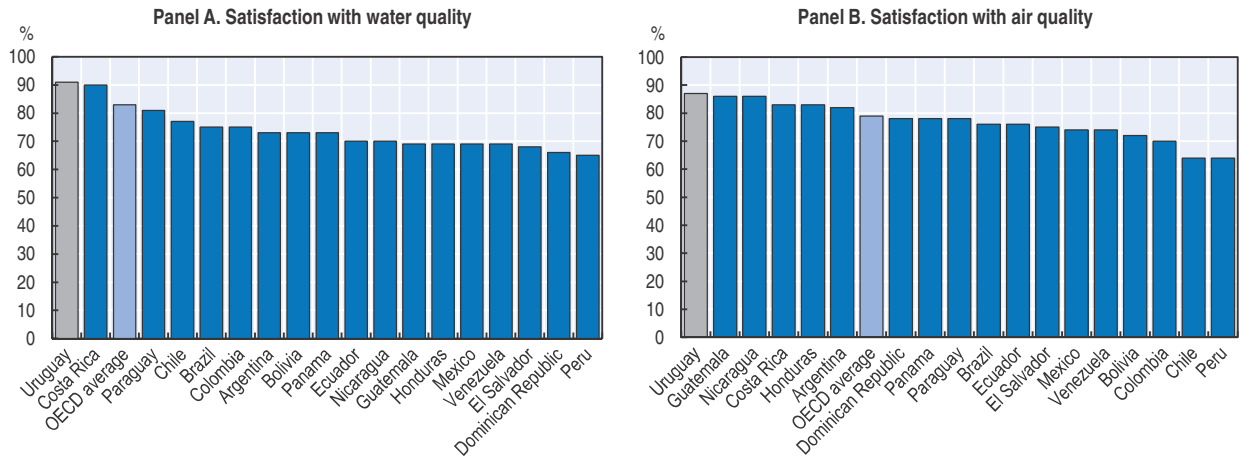
### *Environmental quality is also very high*

Environmental quality is intrinsically important, as people value the beauty and space of their natural surroundings. However, environmental quality is also a determinant of health, and environmental and natural resources are a core pillar of ensuring the

sustainability of well-being across all dimensions. While subjective assessments of environmental quality give different information than objective indicators, recent OECD research shows that subjective well-being unambiguously decreases as environmental conditions worsen (Silva and Brown, 2013), indicating that subjective measures track objective measures quite closely.

On both counts, Uruguay shows exceptionally good results with the highest levels of satisfaction with water and air quality in the region, higher than the average in OECD member countries (Figure 1.12).

Figure 1.12. **Satisfaction with water and air quality**




*Note:* Data for the "Satisfaction with air quality" graph are from 2011 and show the percentage of people responding "satisfied" to the question: "In the city or area where you live, are you satisfied or dissatisfied with the quality of air?" Data for the "Satisfaction with water quality" graph are from 2011 and show the percentage of people responding "satisfied" to the question: "In the city or area where you live, are you satisfied or dissatisfied with the quality of water?"
*Source:* Gallup Organization (2013), *Gallup World Monitor* (database).

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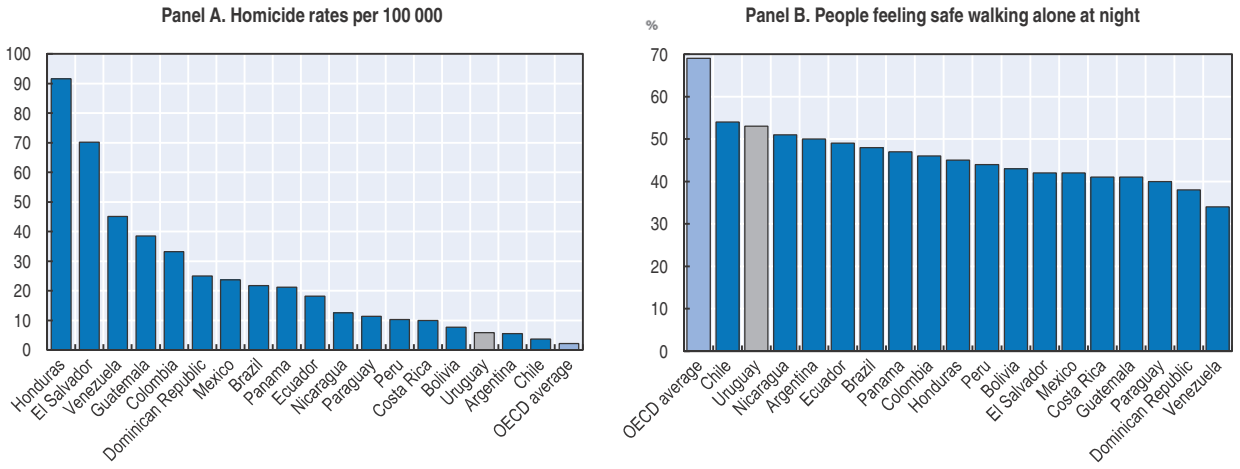
### *Personal security is relatively high, but fear of crime is widespread and increasing*

Personal security is a broad concept as people face numerous threats to their security, including war and other violent conflicts, terrorism, natural hazards and occupational injuries. Here, the focus is on crime, as it constitutes one of the most common threats to people's safety. Furthermore, fear of crime is itself detrimental to people's subjective well-being. Uruguay has the third-lowest homicide rate in the region, with only six reported homicides per 100 000 people in 2009, the latest year with available data (Figure 1.13). In terms of subjective feelings of safety, Uruguay also scores highly for the region with 53% of people saying they feel safe walking alone in the city or area where they live. Latin America is a region characterised by high levels of violence, relative to OECD countries, and so while Uruguay is one of the safest countries in the region (as measured by these indicators), it performs less well than the OECD average.

In some respects, these results are surprising, as in recent years the issues of insecurity and crime have become the most pressing social problem for Uruguayans, according to opinion polls, replacing fear of unemployment as the predominant concern (Figure 1.14).

Figure 1.13. **Homicide rates and levels of perceived safety**




*Note:* Homicide rate data are for 2011, except for Bolivia, Brazil, Chile and Honduras (2010) and Uruguay (2009). Data for the "People feeling safe walking home alone" graph is for 2011 and refers to the number of people responding "yes" to the question: "Do you feel safe walking alone at night in the city or area where you live?"

*Source:* UNODC, *United Nations Office for Drugs and Crime* (database), *www.unodc.org/unodc/en/data-and-analysis/homicide.html* and Gallup Organization (2013), *Gallup World Monitor* (database).

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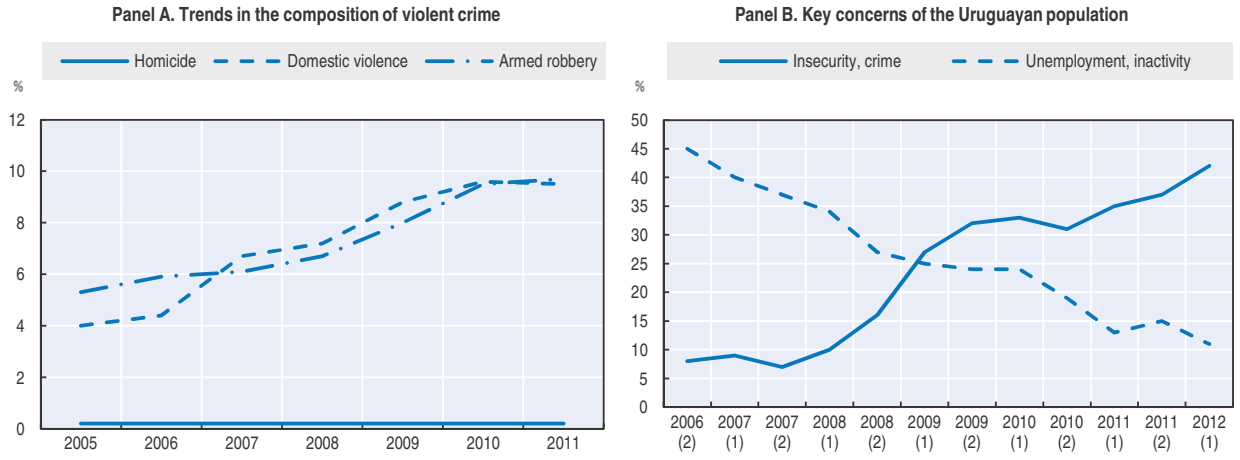
While the number of cases of reported crime fell between 2005 and 2011, according to official Ministry of the Interior figures – from 171 129 incidents in 2005 to 167 774 incidents in 2011 (UNDP, 2012) – the *composition* of crime changed significantly during this period. Reported cases of homicide, rape, bodily harm, vandalism and unarmed robbery fell between 2005 and 2011, but two categories of crime saw a significant increase: domestic violence and armed robbery (UNDP, 2012).

The measurement of domestic violence is a complex issue, and the huge increase in reported figures (from 6 853 cases, representing 4% of crime figures in 2005, to 15 868 cases in 2011, representing 9.5% of reported crime in 2011) may be due more to increased public

Figure 1.14. **Composition of crime and key concerns of the population**




*Note:* Data for homicide rates and armed robbery include attempted as well as completed incidents. Panel B (1) refers to first semester, (2) refers to second semester.

*Source:* Uruguayan Ministry of the Interior and MORI data, presented in UNDP (2012), *Seguridad Humana en Uruguay: un Enfoque que Abre Alternativas* [Human Security in Uruguay: An Approach to Open Alternatives], United Nations Development Programme, Montevideo.

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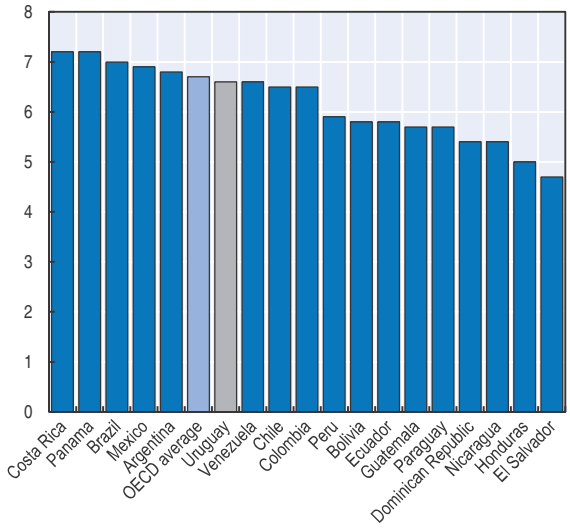
awareness and improvements in reporting procedures than to increased incidence. However, as a result, domestic violence has become a much more visible policy issue in recent years, which may have contributed to increased concern about insecurity. Armed robberies are highly visible crimes: they are likely to be widely reported in the media and widely discussed in the areas they occur, as well as potentially affecting a large number of victims per incident in a psychologically (as well as physically) traumatic manner. The increased incidence of armed robbery (from 9 142 cases, representing 5.3% of reported crime in 2005 to 16 322 cases, representing 9.7% of crime in 2011) likely contributed to the increased profile of this issue. Finally, other visible social problems such as increased drug use and high rates of youth unemployment are likely to contribute to a generalised fear of social breakdown and crime.[10]

### *Subjective well-being in Uruguay is above average*

The way people experience and evaluate their own life outcomes provides essential information that cannot be obtained by objective measures alone. Subjective well-being reflects the notion that how people experience a set of circumstances is as important as the circumstances themselves, and that people are the best judges of how their own lives are going (OECD, 2011). Until recently, there was little consensus on whether meaningful measurement of subjective well-being was actually achievable. However, in the last ten years an increasing body of evidence has supported the idea that it is possible to gather valid measures of subjective well-being based on surveys (OECD, 2013c).

The best available measure for overall life satisfaction is the Cantril Ladder, which asks respondents to rate their life as a whole on a scale of one to ten. Life satisfaction is above average for the region in Uruguay with a mean score on the Cantril Ladder of 6.6, which is close to the mean value for OECD countries (Figure 1.15).

Figure 1.15. **Index of Life satisfaction**




*Note:* The Cantril Ladder relates to the question: "Please imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel?"
*Source:* Gallup Organization (2013), *Gallup World Monitor* (database).

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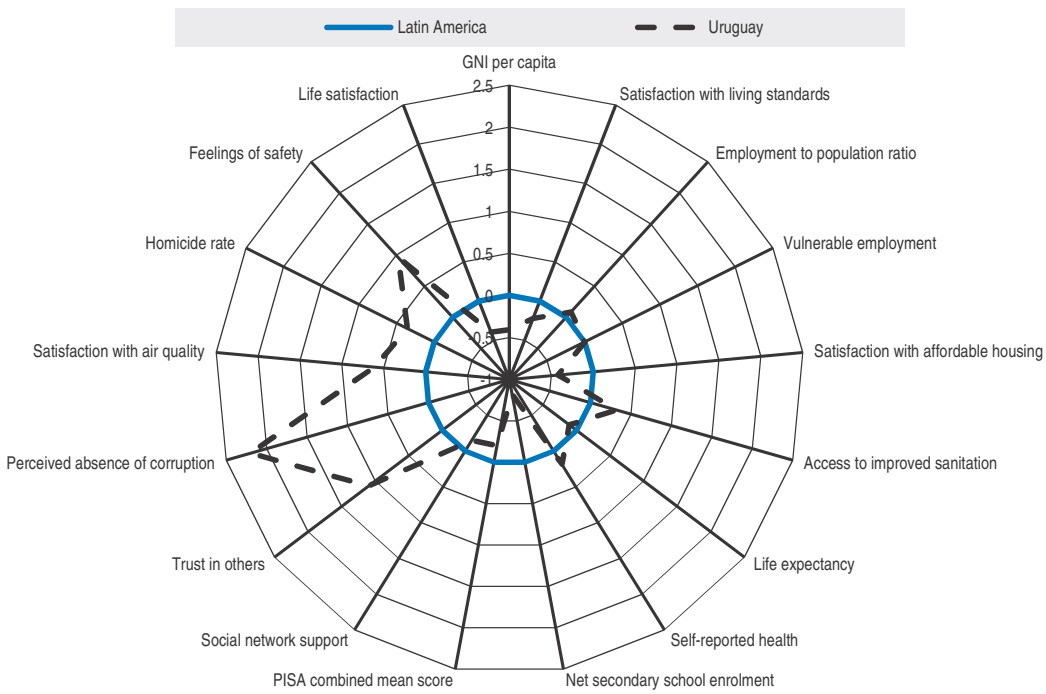
### *Overall, Uruguay has a relatively high level of well-being*

Every country has its own unique set of circumstances, therefore, to accurately assess strengths and weaknesses from a policy point of view, it is necessary to go beyond describing average outcomes and take a more analytical approach. Figures 1.16 and 1.17 show benchmark outcomes for Uruguay relative to the selected Latin American countries (Figure 1.16) and relative to the world (Figure 1.17). To develop a set of benchmark outcomes for Uruguay, a series of regressions was run with GDP per capita as the independent variable and the well-being indicators as the dependent variable. The estimated relationships between GDP per capita and the well-being indicators were used to calculate benchmark outcomes for the well-being indicators for a country with a per capita GDP similar to that of Uruguay, all other things being equal. To measure Uruguay's situation relative to the benchmark, the difference between Uruguay's actual outcomes and the benchmark is reported in terms of standard deviations of the outcome measure in question and normalised so that an improvement in the score always indicates a better outcome (e.g. an improvement in the score shows a decrease in perceived corruption but an increase in life expectancy).

Figure 1.16. **Outcomes for Uruguay relative to benchmark: Selected Latin American countries**



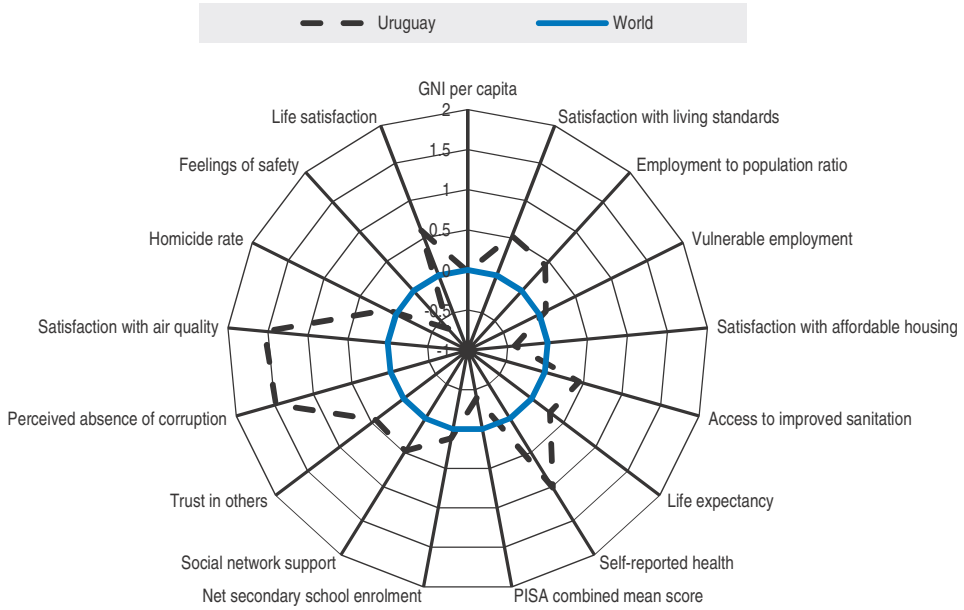

*Note:* Bivariate regressions are run with the relevant well-being measures as the dependent variable, and GDP per capita as the independent variable, to estimate a coefficient for the relationship between GDP and the outcome in question. The coefficient is then applied to Uruguay's actual GDP per capita to produce an expected value for the outcome. Uruguay's actual well-being outcome is expressed as a ratio of the expected outcome measured in standard deviations. The benchmark countries are: Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and Venezuela (Bolivarian Republic of).

*Source:* OECD calculations based on Gallup Organization (2013), *Gallup World Monitor* (database); UNDP (United Nations Development Programme) (2013), *International Human Development Indicators* (database), United Nations Development Programme, *http://hdr.undp.org/en/data*; UIS (UNESCO Institute for Statistics) (2013), *UIS Data Centre* (database), *http://data.uis.unesco.org/* (accessed 10 February 2014); United Nations Educational, Scientific and Cultural Organization; World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*; PISA 2009 data.

*StatLink* http://dx.doi.org/10.1787/888933077502

When considering the country in a Latin American context (Figure 1.17), Uruguay performs either close to what would be expected given its level of income, or much better, for most dimensions. Indicators of employment, civic participation and health are close to the benchmark, while indicators of trust, satisfaction with air quality, homicide rate and feelings of safety show significantly higher results for Uruguay than the benchmark measure. On the other hand, GNI per capita is slightly below the benchmark (possibly reflecting the fact the Uruguay's economy is very open by Latin American standards, with a relatively larger share of GDP owned by foreigners), as are subjective indicators related to life satisfaction, satisfaction with material living standards and satisfaction with the availability of good, affordable housing. In general, Latin American countries tend to report higher levels of subjective well-being than might be expected based only on their GDP per capita (OECD, 2013c), although whether this can be explained by a positive cultural response style, or on other factors such as the existence of strong social network support in Latin American countries, is not clear. The area where Uruguay's performance is the weakest, when controlling for GDP, is net enrolment in secondary school education, which is almost one standard deviation lower than could be expected in relation to its income level.

Figure 1.17. **Outcomes for Uruguay relative to benchmark: World**




*Note:* Bivariate regressions are run with the relevant well-being measures as the dependent variable and GDP per capita as the independent variable to estimate a coefficient for the relationship between GDP and the outcome in question. The coefficient is then applied to Uruguay's actual GDP per capita to produce an expected value for the outcome. Uruguay's actual well-being outcome is expressed as a ratio of the expected outcome measured in standard deviations. This sample contains 130 countries with a population over a million. PISA mean scores show the mean performance in reading, mathematics and science in PISA 2012.

*Source:* OECD calculations based on Gallup Organization (2013), *Gallup World Monitor* (database); UNDP (United Nations Development Programme) (2013), *International Human Development Indicators* (database), United Nations Development Programme, *http://hdr.undp.org/en/data* UIS (UNESCO Institute for Statistics) (2013), *UIS Data Centre* (database), *http://data.uis.unesco.org/* (accessed 10 February 2014); United Nations Educational, Scientific and Cultural Organization, United Nations Educational, Scientific and Cultural Organization; World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*; PISA 2009 data.

*StatLink* *http://dx.doi.org/10.1787/888933077521*

When the dataset used to calculate the benchmark scores is increased to cover all countries in the world with a population of 1 million or more (Figure 1.17), the general picture looks even more positive for Uruguay. GNI per capita is exactly in line with what would be expected for a country of similar GDP, and life satisfaction and satisfaction with living standards are higher than the international benchmark. However, satisfaction with housing remains below the benchmark, suggesting that the availability of good, affordable housing is an important issue for Uruguay. While net secondary school enrolment is more in line with the benchmark, when considered in an international context, PISA performance still lies slightly below the benchmark, underlining that quality of education is a key area for improvement. Finally, in the area of personal safety, Uruguay's performance is slightly worse when seen in an international context: while the homicide rate is around what would be expected in a country of similar GDP, perceived safety is half a standard deviation lower.

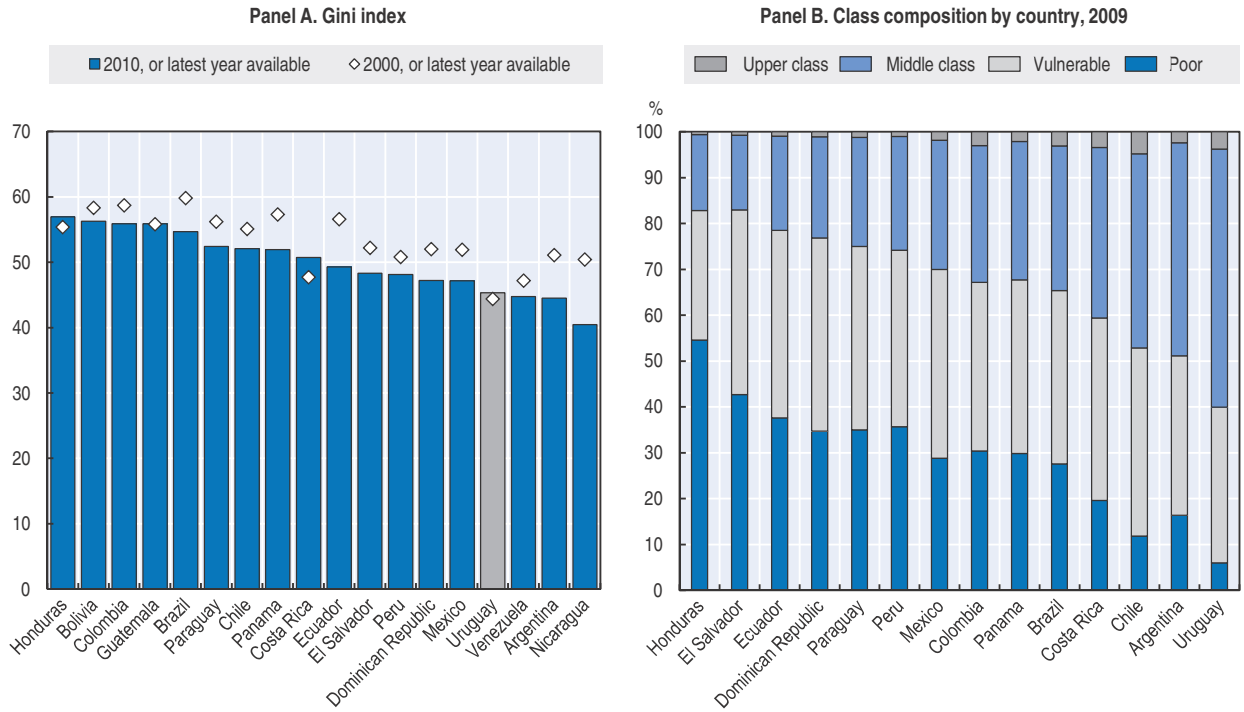
## Distribution of well-being outcomes

The remainder of this chapter examines inequalities in key well-being outcomes. This includes the overall distribution of outcomes in Uruguay and disparities by socio-economic status, age, gender, region and ethnicity. Some of these issues are further developed in Chapter 3. Latin American countries have historically been characterised by high levels of inequality with widespread poverty, wealthy elites and a small middle-class. However, Uruguay has one of the lowest levels of income inequality in the region (Figure 1.18), with only Argentina, Nicaragua and Venezuela having lower Gini scores.

Uruguay is one of only four countries in the sample where income inequality increased, albeit only slightly, rather than decreased over the approximate period of time from 2000 to 2010 (Figure 1.18). Whereas Uruguay had the lowest Gini score in the region in 2000, it has now been overtaken by Argentina, Nicaragua and Venezuela. It is difficult to say whether this indicates a significant trend or not, as income inequality levels have fluctuated in the last three decades in Uruguay: between 1986 and 1994, inequality levels stayed about the same, then rose between 1994 and 2007, and then began to descend again between 2007 and 2010 (Alves et al., 2012).

A different approach to examining inequality is to look at the size of the middle class. In recent years, Latin America has witnessed a trend towards falling poverty rates, decreasing inequality and steady growth of the middle class in most countries of the region (Ferreira and et al, 2012). Uruguay has an exceptionally large middle class for the region, with over half of the population falling into this category in 2009, according to World Bank calculations (Figure 1.19). However, in contrast to other Latin American countries, the overall proportion of the middle class shrank in Uruguay over the last two decades. Figure 1.19 shows rates of middle-class growth for selected countries, breaking down the share of growth due to redistribution (i.e. an overall decrease in inequality) and the share due to higher incomes across the board from economic growth. Uruguay is the only country in the selected group to have seen an overall decrease in the share of the population being categorised as middle class, with the majority of the 7 percentage-point decrease being accounted for by increased inequality. Costa Rica saw a reduction in its middle class due to redistribution of incomes, but this was more than compensated for by middle-class growth from increased mean incomes. World Bank calculations show that those leaving the middle class during the years 1995-2010 followed a downward rather than an upward trajectory, with the decrease in the middle class being accounted for by corresponding increases in the poor and vulnerable[11] shares of the population (Acevedo and Sanfelice, 2012).

Figure 1.18. **Inequality and class composition across Latin America**




*Note:* The Gini Index chart compares data for each country over a decade, for 2000 and 2010, with the exception of the following countries: Bolivia is for 2008 and 1997; Brazil is for 2009 and 1999; Chile is for 2009 and 1999; Costa Rica is for 2009 and 1999; El Salvador is for 2009 and 1999; Guatemala is for 2006 and 1998; Honduras is for 2009 and 1999; Nicaragua is for 2005 and 1993; Panama is for 2010 and 2001; Paraguay is for 2010 and 2001; and Venezuela is for 2006 and 1995. The Gini Index score is calculated by using a Lorenz curve to plot the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini Index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Class composition in Bolivia is for 2008 and in Mexico for 2010. "Poor" = individuals with a per capita daily income lower than USD 4. "Vulnerable" = individuals with a per capita daily income of USD 4–10. "Middle class" = individuals with a per capita daily income of USD 10–50. "Upper class" = individuals with a per capita daily income exceeding USD 50. Poverty lines and incomes are expressed in 2005 USD PPP per day. PPP = purchasing power parity.

*Source:* World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*; CEDLAS and World Bank (2014) *Socio-Economic Database for Latin America and the Caribbean (SEDLAC)* (database), *http://sedlac.econo.unlp.edu.ar/eng/index.php* from Ferreira, F.H. et al. (2012), *Economic Mobility and the Rise of the Latin American Middle Class*, World Bank, Washington, DC.

*StatLink* http://dx.doi.org/10.1787/888933077540

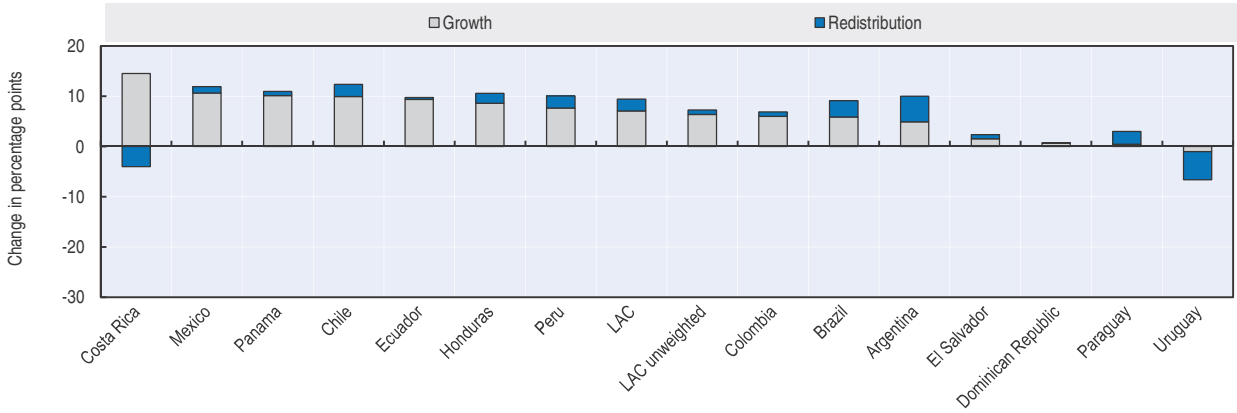
### *Educational achievement is strongly associated with socio-economic status*

The impact of socio-economic status on PISA performance tends to be very high in Latin American countries (Figure 1.20). Uruguay is no exception with 22.8% of variance in mathematics test scores explained by the PISA index of economic, social and cultural status. In fact, in terms of the impact of socio-economic background on PISA performance, Uruguay is one of the worst performers, ranking fifth-worst in the world and third-worst in Latin America (only Chile, Hungary, Peru and the Slovak Republic demonstrate a stronger relationship between socio-economic status and performance) (OECD, 2013d).

The impact of socio-economic status is reflected in qualifications attained as well as reading levels. Young people from socio-economically disadvantaged backgrounds in Uruguay are highly unlikely to complete upper secondary education, which is generally acknowledged to be the minimum level of educational attainment necessary for school leavers to be competitive in the labour market. In 2010, only 25% of 15-17 year olds in the lowest-income quintile completed lower secondary education (compared to 85% of those in

Figure 1.19. **Middle class in Latin America**

USD 10 to USD 50 a day




*Note:* PPP = Purchasing Power Parity. Middle-class per capita income is expressed in 2005 USD PPP per day.
*Source:* Acevedo, J. and V. Sanfelice (2012), "The Rise of the Middle Class in Latin America", (draft), World Bank, Washington, DC, based on CEDLAS and World Bank (2014) *Socio-Economic Database for Latin America and the Caribbean (SEDLAC)* (database), *http://sedlac.econo.unlp.edu.ar/eng/index.php*.

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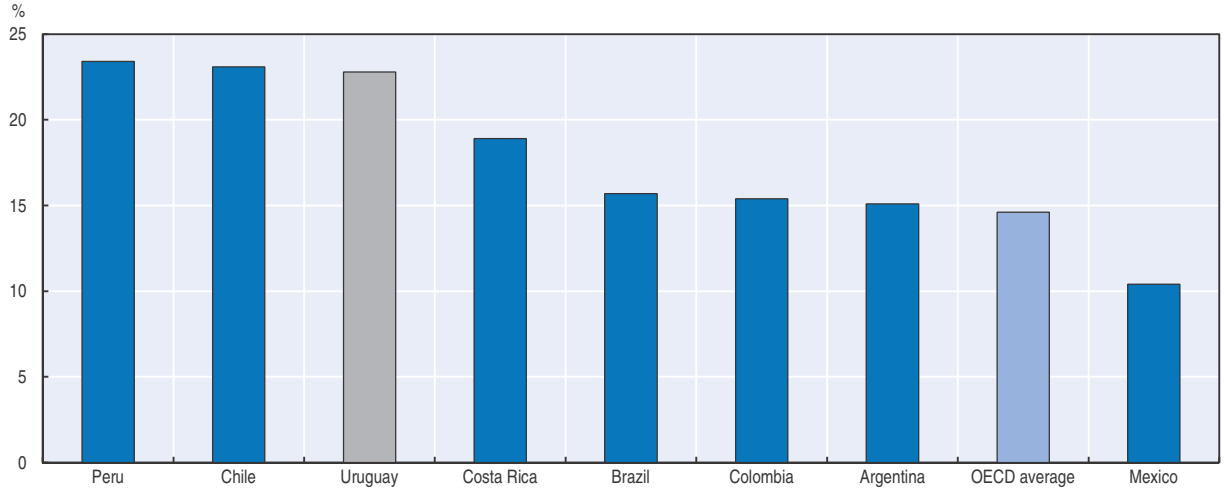
Figure 1.20. **Impact of socio-economic background on performance in PISA mathematics test**



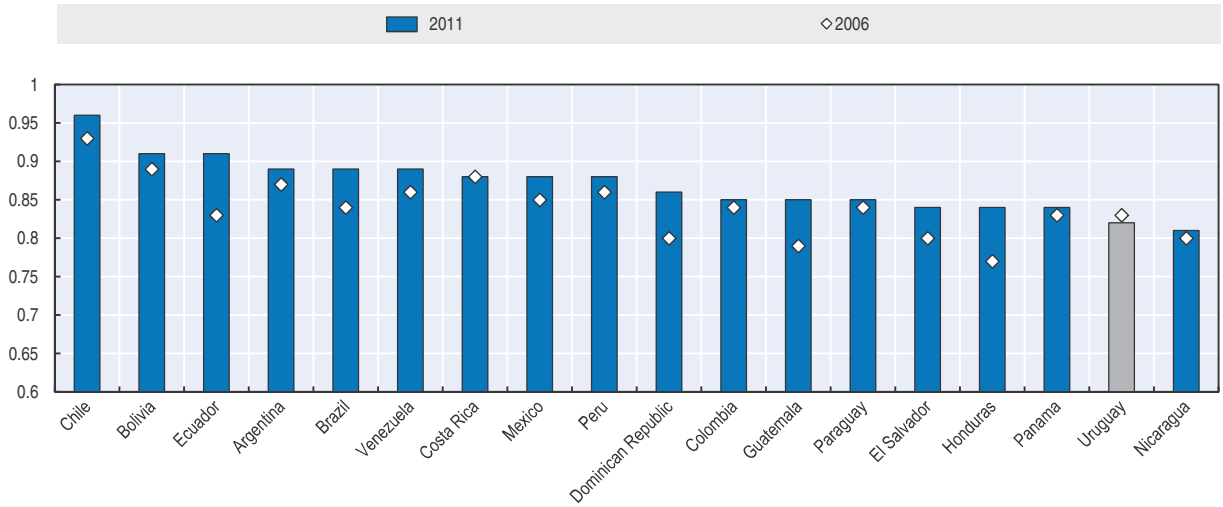

*Note:* The percentage of variance in mathematics test scores explained by the PISA index of economic, social and cultural status.
*Source:* OECD (2012) "Table II.2.1", *PISA 2012* (database), http://dx.doi.org/10.1787/9789264201132-en.

StatLink http://dx.doi.org/10.1787/888933077578

the top-income quintile) and a mere 7% of 18-20 year olds in the lowest-income quintile completed upper secondary education (compared to 57% of those in the top quintile) (MIDES/OPP, 2011). Furthermore, there is evidence to suggest that this trend is worsening in Uruguay. Figure 1.21 shows results for an Educational Mobility Index where the higher the score, the less important the impact of socio-economic background on educational attainment and the greater the potential for educational mobility. Not only does Uruguay have one of the lowest index scores for the region, after having one of the highest in 2001 (Anderson, 2001), but it is the only country where educational mobility has decreased slightly in the last five years, according to the index, and one of the few where it has decreased since the 1990s (Daude, 2013).

Figure 1.21. **Index of educational mobility**

13-19 year olds




*Note:* Earlier year data for Bolivia (Est. Plur. de) and Paraguay are for 2005 instead of 2006, and later year data are 2009 for Paraguay and 2010 for Guatemala and Peru rather than 2011.

*Source:* CEDLAS and World Bank (2014) *Socio-Economic Database for Latin America and the Caribbean (SEDLAC)* (database), *http://sedlac.econo.unlp.edu.ar/eng/index.php*.

StatLink http://dx.doi.org/10.1787/888933077597

In Latin America, educational "sorting" (i.e. the process whereby children from more advantaged backgrounds concentrate in the same schools, from which those from less-privileged families are excluded) is a more important factor in intergenerational immobility than elsewhere (Ferreira et al., 2012). In Uruguay, there is a large difference in achievement between the schools in the most privileged areas, and those in the most disadvantaged. For example, the PISA study categorises each school by level of advantage depending on various socio-cultural resources available to the student population (e.g. availability of books or computers at home, level of parental education, etc.). According to these results, only 1.8% of students in the least-advantaged quintile of schools attain a high level of achievement in PISA mathematics tests (i.e. level 3 and above), compared to 61.5% of students in the most-advantaged quintile of schools (ANEP, 2013). Issues of inequality in education are dealt with in more detail in Chapter 3.

### *Children and young people are at particular risk of social exclusion*

In 2007, the latest year for which comparable data are available, Uruguay had one of the lowest rates of child poverty in Latin America, behind only Argentina, Chile and Costa Rica (urban areas) (UNECLAC/UNICEF, 2010). However, children face a higher risk of material deprivation and poverty than the adult population. According to 2011 census data, 44% of children aged 14 or under experience deprivation in at least one basic need category,[12] compared to 34% for the population as a whole (INE-PP, 2013). In the same year around 25% of children aged 12 or under were living in poverty, compared to only 11% of people aged 18-64, and 4% of those aged 65 and over (UNICEF, 2012a). While this represents an improvement from 2008, when almost 40% of children aged 12 and under were living in poverty, it is still high compared to OECD countries.[13]

Deprivation among the young poses a threat to health and other facets of children's development. While the child mortality rate is very low, both for the region and the world

(UNICEF, 2012b), malnutrition is a problem for many Uruguayan children. In 2004, 14% of children under age 6 in Uruguay experienced chronic malnutrition. While this was low in comparison with many countries in the region, it was approximately double that of neighbouring countries Argentina (8.2% in 2005) and Brazil (7.1% in 2007), and seven times the rate in Chile (2.1% in 2007) (UNECLAC/UNICEF, 2010). More recent data suggest that malnutrition continues to be a problem in Uruguay. In a 2011 survey, 11% of children under age 2 in the sample experienced delayed growth, while an additional 10% were obese. This means that one in five children under age 2 was receiving inadequate nutrition of one form or another (MSP/MIDES/RUANDI/UNICEF, 2011). Anaemia is also prevalent among Uruguayan children. Over the period 1998-2006, 36.1% of children under age 5 in Uruguay suffered from anaemia, above the average for Latin American and the Caribbean (34.3%), and close to rates seen in much poorer countries (e.g. the rate in Guatemala was 39.7% for the same period, contrasted with only 1.5% in Chile) (UNECLAC/UNICEF, 2010). Again, more recent data confirm that anaemia continues to be a problem, with 31.5% of children under age 2 affected in 2011, rising to 38% for children in the bottom two income quintiles (MSP/MIDES/RUANDI/UNICEF, 2011).

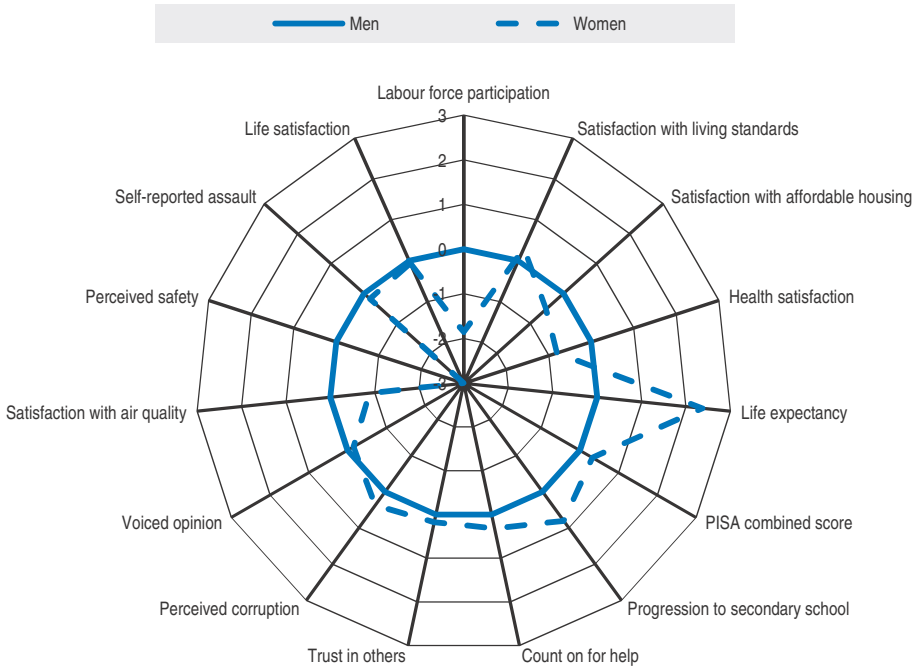
Unemployment is much more prevalent among young people: 17.4% of those aged 14-24 were unemployed in 2011, compared to only 3.8% of those aged over 25. This reflects a difficult transition from education to the labour market (INE, 2012b). Lack of opportunities can contribute to harmful behaviour from the young and uneducated, both for themselves and for society. The incarceration rate in Uruguay has risen steadily since 1989 and is now one of the highest in Latin America.[14] The incarceration rate for minors is particularly high in Uruguay, with 1 in every 1 963 of the adolescent population in prison. While recent, comparable data for Latin America are not easily available, a 2004 study shows much lower adolescent incarceration rates for European countries, with rates of 1 in 4 000 in Northern Ireland, 1 in 12 500 in France, 1 in 20 000 in Holland and Italy, 1 in 50 000 in Spain and 1 in every 100 000 in Finland and Norway (Graham and Moore, 2006). In 2010, the vast majority of adolescents (93.6%) arrested had failed to complete upper secondary education, and a full two-thirds of adolescents in the penal system were in neither employment nor education at the time of their arrest (Fundación Justicia y Derecho, 2010).

### *Gender inequalities are comparatively low, but persistent*

Gender equality in Uruguay is comparatively good for the region. According to the UNDP Gender Inequality Index, Uruguay is one of the top performers in Latin America, behind only Chile and Costa Rica.[15] Figure 1.22 shows a comparison of a selection of well-being outcomes for men and women in Uruguay. Overall, the results are fairly close although there are four main areas where gender differences appear to be more significant. In two of those areas, education (PISA scores and progression to secondary school) and life expectancy, women outperform men. However, the reverse is true for the other two areas, labour force participation and perceived safety.

The tendency for women to outperform men in education, at least prior to tertiary education, is now visible in most Latin American countries. Uruguay was one of the first countries where women overtook men in educational achievement and the gap is now significant: in 2004, it was double the Latin American average (Ñopo, 2012). Women also tend to outlive men in most countries, and life expectancy for women in Uruguay is 80 years compared to 73 years for men. However, in common with many other countries, Uruguayan women report lower subjective health status than men. Indeed, women report

Figure 1.22. **Well-being outcomes in Uruguay, by gender**




*Note:* Well-being outcomes for women are expressed as a ratio of well-being outcomes for men, measured in standard deviations of Latin American country performance. PISA mean scores show the mean performance in reading, mathematics and science in PISA 2012.

*Source:* OECD calculations based on Gallup Organization (2013), *Gallup World Monitor* (database); UNDP (United Nations Development Programme) (2013), *International Human Development Indicators* (database), United Nations Development Programme, *http://hdr.undp.org/en/data*; UIS (UNESCO Institute for Statistics) (2013), *UIS Data Centre* (database), *http://data.uis.unesco.org/* (accessed 10 February 2014); World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*; OECD (2012) *PISA 2012* (database), *http://dx.doi.org/10.1787/9789264201132-en*; data on life satisfaction from Gandelman, N., G. Piani and Z. Ferre (2012), "Neighbourhood Determinants of Quality of Life", *Journal of Happiness Studies*, Vol. 13, pp. 547-563.

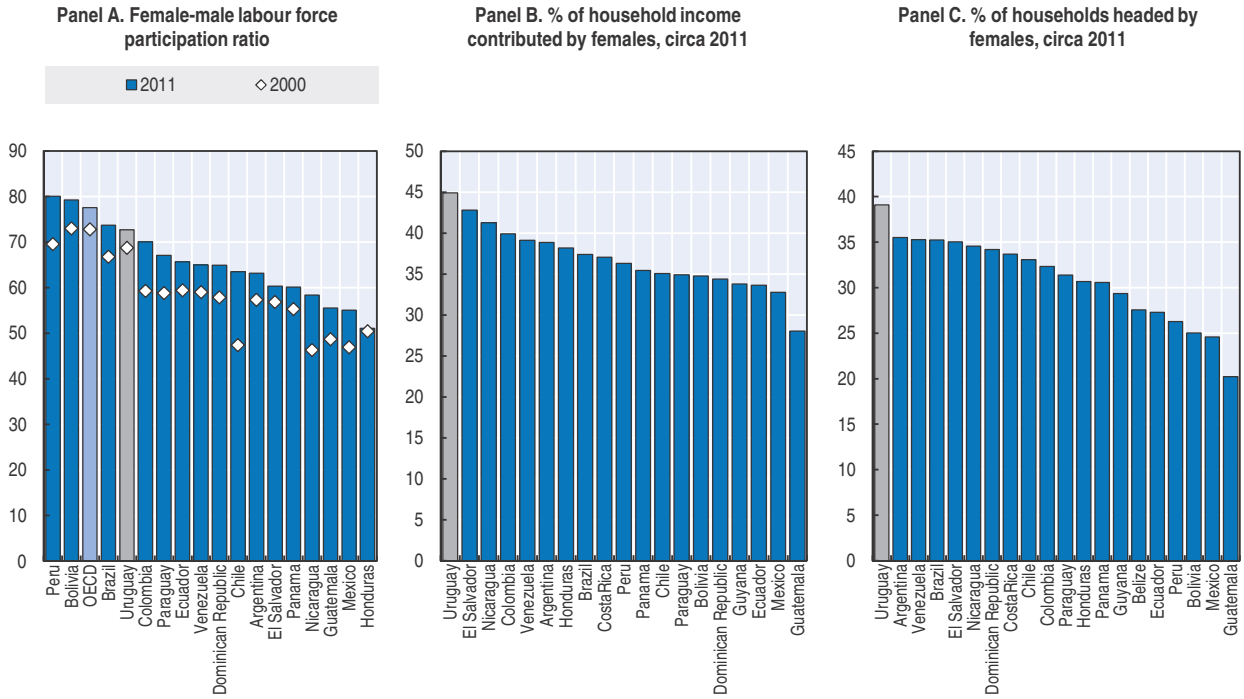
*StatLink* *http://dx.doi.org/10.1787/888933077616*

lower evaluations across a number of subjective measures: satisfaction with affordable housing, perceived corruption, satisfaction with air quality and perceived safety, the last of which shows a particularly large gap. Only reported trust in others and perceived ability to count on others for help are marginally better for women than men, and there is little difference between overall life satisfaction evaluations by gender.

Despite the labour force participation gap, Uruguay is, comparatively speaking, one of the top-performers in gender equity in this area, with the fourth highest female-male labour force participation ratio in the region, not far below the OECD average (Figure 1.23). Furthermore, Uruguay leads Latin American countries in the sample in terms of the percentage of household income contributed by females and the percentage of households headed by females.

However, in terms of labour markets outcomes, hourly wages for women are significantly lower than for men, even after controlling for experience and schooling. For example, recent estimates show that, on average, women in Uruguay earn almost 60% less than men per hour, which is high by comparative standards in the region (Carrillo, Gandelman and Robano, 2014). When controlling for observable characteristics, this penalty decreases to around 12% of the median level, around the average for Latin American economies. This penalty is mainly driven by differences at the top of the

Figure 1.23. **Female labour force participation and proportion of household income contributed or headed by females**




*Note:* "Households headed by females" refers to the percentage of households in which a female has the highest total individual earnings.

*Source:* OECD calculations based on World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*; IADB (InterAmerican Development Bank), *Sociómetrico BID*, *www.iadb.org/research/sociometrobid/tables.cfm?indicator=2*.

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distribution, rather than the lower end. This evidence is consistent with the presence of glass ceilings for women in more developed economies and sticky floors – larger penalties in pay for women versus men – for less developed countries (Carrillo, Gandelman and Robano, 2014).

The proportion of young people not in employment, education or training (NEET) is high in Uruguay, and significantly higher among young women than young men. In Uruguay, 61% of young women aged 15-24 are neither employed nor studying, compared to 39% among men (MEC, 2012). NEET rates in OECD countries are much lower with a smaller gender gap at 17.8% for women and 13.7% for men (OECD/IADB, USA forthcoming).

One dimension of well-being where significant gender inequalities are visible is work-life balance. In Uruguay, women devote 44.4 hours per week to unpaid work activities such as cooking, cleaning and childcare, compared to 16.7 hours for men. When paid work and unpaid work are considered together, women are responsible for carrying out 52.3% of the "global workload" in Uruguay (Aguirre, 2009).

Uruguay could also do more to address the gender gap that exists in the field of politics. In the last decade, female participation in the public sector has decreased. This is in contrast to most Latin American countries where social, cultural and political transformation processes have resulted in an increase in the participation of women in politics. Currently, Latin America has a total of five countries with female presidents, more than any other region in the world. Nevertheless, women continue to be under represented

as ministers or in parliament: on average only 20% of the heads of ministries were women in 2012 and Uruguay is one of the countries with the lowest proportion of female ministers in the region. The number of female ministers in the region increased, on average, by 2.1 percentage points between 2005 and 2012, although, Brazil, Ecuador and Panama experienced the bigger increase, of more than 15 percentage points over the same period. By contrast, in OECD countries an average of 25% of ministers are female; reaching up to 50% in countries such as Finland, Norway and Sweden. In Latin America, in 2013, on average only 20% of parliamentary positions were held by women (OECD 2014b). This is low when compared to OECD countries, but an increase when compared to the regional proportion of 14% in 2012. The countries with the highest proportion of female ministers included Argentina, Costa Rica, Ecuador and Mexico (more than 20%); in contrast with Brazil and Panama, the lowest in the ranking (only 10%).

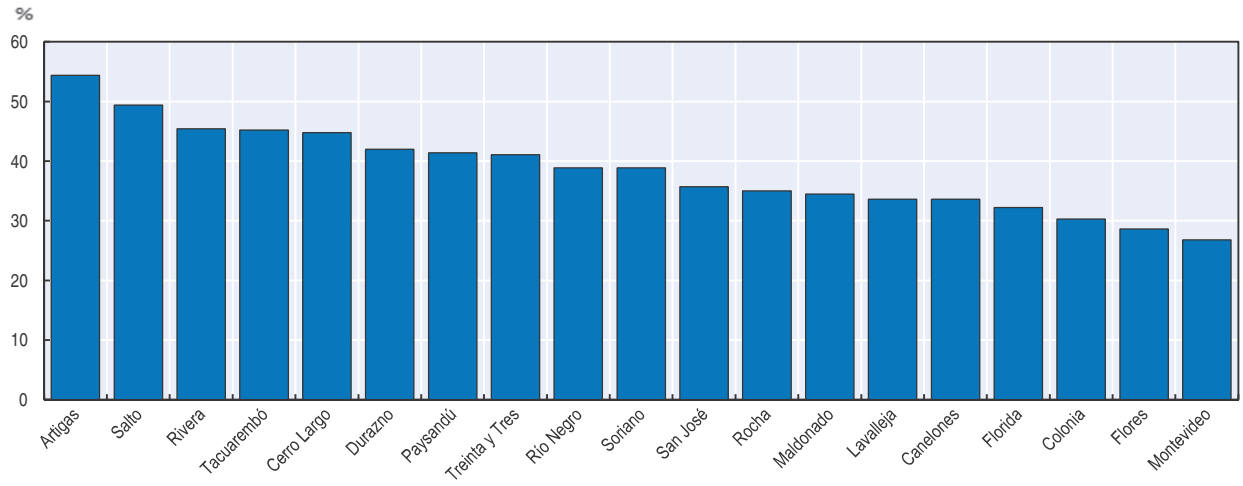
It is worth highlighting two issues of increasing importance in Uruguay, and which are closely linked to gender inequalities in well-being outcomes: domestic violence and suicide. Domestic violence against women is one of the most extreme expressions of gender inequality and there has been increased awareness of this problem in recent years. Between 2005 and 2011, there was a 230% increase in reported incidents of domestic violence, and by 2011 this category accounted for 60% of crimes against the person (UNDP, 2012). It is difficult to distinguish the degree to which the rise in reported domestic violence reflects lower tolerance of domestic violence and an increased willingness to report incidents, as opposed to a genuine increase in prevalence. However, according to a recent survey conducted by the Ministry of Public Health, at least one in four Uruguayan women has experienced domestic violence in their lifetime. Finally, suicide rates have also risen in Uruguay over the last few years; Uruguay now holds joint place with Cuba for the highest suicide rate in Latin America according to WHO data. However, whereas victims of domestic violence are predominantly women, the vast majority of suicides are men, accounting for 78% of cases between 2004 and 2009 (El Observador, 2012). According to one study, suicide is more prevalent among the poor and those aged over 35, although suicide among the very young is on the rise: the highest rate of increase between the years 1983-87 and 2005-07 was seen in the 15-24 age group (Gonzalez, 2010).

### *Important regional and ethnic disparities also exist in key well-being outcomes*

Significant regional differences exist in well-being outcomes within Uruguay, and particularly between Montevideo and the rest of the country. For example, for the period 2006-10, income levels were over 50% higher in Montevideo than in the rest of the country (MIDES/OPP, 2011).[16] The poverty rate is also much higher outside the capital. While the national poverty rate in 2010 was 18%, it reached over 20% in seven regional departments, including a high of 37% in the northern department of Artigas (MIDES/OPP, 2011).

While regional data are not available for all the well-being dimensions explored in this chapter, the 2011 census does allow regional analysis for material living standards. One official study uses census data to build indices to measure the satisfaction of various basic needs by department (INE-PP, 2013). The study identifies six "basic need" categories: i) comfort (i.e. access to heating, food conservation facilities and hot water); ii) decent housing (i.e. durable construction material, adequate living space and a separate cooking area); iii) education (i.e. attendance in formal, compulsory schooling); iv) sanitation; v) clean drinking water; and vi) electricity. Figure 1.24 shows the percentage of people in each department who are deprived in at least one of these basic need categories. The

Figure 1.24. **Share of the population deprived in one "basic need" category, by regional department**




*Source:* INE (National Institute of Statistics) (2013), *Estimación de la Pobreza por el Método del Ingreso - Año 2012* [Estimation of Poverty by Income Method – 2012], INE, Montevideo, *www.ine.gub.uy/biblioteca/pobreza/Pobreza%202012/Estimaci%C3%B3n%20de%20la%20pobreza%20por%20el%20M%C3%A9todo%20del%20Ingreso%202012.pdf*.

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highest degree of deprivation tends to be seen in departments in the north: Artigas, Cerro Largo, Rivera, Salto and Tacuarembó. In Artigas, 54.4% of the population experiences deprivation in at least one basic need category; this is almost double the rate in Montevideo, where the rate is 26.8%. Even within Montevideo there is a very high degree of disparity between different neighbourhoods. In the district of Casavalle, 60% of the population has at least one basic need unsatisfied, contrasted with only 3.7% of people living in the privileged neighbourhood of Carrasco (INE-PP, 2013).

Well-being inequalities along ethnic lines are also present. Uruguay is a relatively ethnically homogenous society, with 90% of the population self-reporting as being of Caucasian descent in the last census. However, 8.1% of respondents report having African ancestry and 5% state that they have indigenous roots.[17] Table 1.3 provides a population breakdown according to a degree of "basic need" satisfaction or deprivation and by ethnic descent. Basic need deprivation is more prevalent among African, Asian and indigenous ethnic minorities than the white majority. The most disadvantaged group is, by far, the ethnically African share of the population, where one in four respondents report inadequacies in two or more basic need categories – double the rate of the white population. It is no coincidence that the ethnically African population is concentrated overwhelmingly in the poorer, northern states of Uruguay such as Artigas, Rivera and Salto (INE-PP, 2013). Table 1.4 provides a breakdown of deprivation by basic need category, comparing the populations of African and non-African descent. Over one-third of the ethnically African group lack basic comfort facilities such as heating, and one-quarter do not have access to decent housing. While the rates for other categories are somewhat lower, the gaps between the two groups are stark: the deprivation rate for people of African descent in terms of decent housing, education, sanitation, water and electricity are close to double that of the non-ethnically African population.

Table 1.3. **Percentage of the population by number of basic needs satisfied/deprived and ethnic-racial descent, 2011**

| Number of "basic needs" deprived | African descent | Asian | White | Indigenous | Other | Total |
|---|---|---|---|---|---|---|
| All basic needs satisfied | 48.7 | 64.4 | 68.1 | 63.8 | 70.2 | 66.3 |
| One type of deprivation | 25.8 | 20.6 | 19.3 | 21.2 | 17.7 | 19.9 |
| Two types of deprivation | 13.7 | 8.6 | 7.4 | 8.6 | 7.2 | 8 |
| Three or more types of deprivation | 11.8 | 6.4 | 5.2 | 6.4 | 4.9 | 5.8 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

*Source:* INE (National Institute of Statistics) (2013), *Estimación de la Pobreza por el Método del Ingreso – Año 2012* [Estimation of Poverty by Income Method – 2012], INE, Montevideo, *www.ine.gub.uy/biblioteca/pobreza/Pobreza%202012/Estimaci%C3%B3n%20de%20la%20pobreza%20por%20el%20M%C3%A9todo%20del%20Ingreso%202012.pdf*.

Table 1.4. **Percentage of the population of African and non-African descent experiencing basic need deprivation by category of basic need, 2011**

| "Basic need" category | African descent | Non-African descent | Total |
|---|---|---|---|
| Comfort | 37.1 | 22.2 | 23.4 |
| Decent housing | 25.8 | 13.5 | 14.5 |
| Education | 14.5 | 8.0 | 8.6 |
| Sanitation | 9.1 | 4.7 | 5.1 |
| Water | 6.5 | 3.6 | 3.8 |
| Electricity | 1.2 | 0.6 | 0.7 |
| Total | 51.3 | 32.3 | 33.8 |

*Source:* INE (National Institute of Statistics) (2013), *Estimación de la Pobreza por el Método del Ingreso – Año 2012* [Estimation of Poverty by Income Method – 2012], INE, Montevideo, *www.ine.gub.uy/biblioteca/pobreza/Pobreza%202012/Estimaci%C3%B3n%20de%20la%20pobreza%20por%20el%20M%C3%A9todo%20del%20Ingreso%202012.pdfhfigure*.

## Conclusions

Uruguay's economic and social trajectory during the past century has had multiple phases, from periods of relative affluence and high income distribution, to episodes of economic decline and recovery. In the last decade, Uruguay has moved from crisis to recovery to prosperity. Poverty and unemployment rates have reduced drastically since the crisis years of 2003-04 and material living standards are high for the region. In an international context, well-being outcomes in the country are better than could be expected given the income level in many areas, including life satisfaction, environmental quality, health, trust, social network support, literacy and access to improved sanitation. Uruguay performs well in terms of the quality of government (as measured by low perceived corruption), health status of the population, social trust and employment. Gender equity is also comparatively good.

While this is a generally positive picture, there are a number of areas where improvement is needed. Child poverty is high and socio-economically disadvantaged young people face important barriers to social mobility, including low educational attainment, higher rates of adolescent pregnancy (thereby perpetuating the cycle of disadvantage) and high youth unemployment. Educational attainment, particularly at the secondary level, has stagnated in recent years and significant socio-economic inequalities exist in terms of both attainment and achievement. Maintaining and enhancing current human capital will be a key challenge, and will be central to ensuring the long-term sustainability of well-being in the country. Improving equity, access and achievement within the educational system should be a priority.

Personal security has also become an important issue for Uruguayans in recent years. The increased visibility of social issues such as domestic violence, drug use, youth unemployment and suicide, and the changing nature of crime (with a rise in armed robbery) may be contributing to a feeling of social unease and weak perceived safety. Many of these issues are intrinsically related to economic growth and social development (e.g. drug use tends to rise when disposable incomes rise, domestic violence figures increase initially when reporting procedures improve). The increased profile of security issues in Uruguay may therefore reflect broader social and economic processes associated with growth and development. If Uruguay continues on its current development path, a key challenge as it moves from a middle-income to a high-income country will be to manage these issues effectively.

While material conditions are generally high and income inequalities are comparatively low for the region, trends in inequality will need to be closely monitored to ensure that income disparities do not increase as the economy grows. Those in the lower socio-economic groups tend to experience deprivation across a range of areas, and people in certain geographic regions (the northern states) and those belonging to minority ethnic groups (particularly Uruguayans of African descent) are especially vulnerable. Improving access to affordable, decent housing for less-privileged groups appears to be an important issue in the country.

As Uruguay moves from middle-income to high-income status, the presence of an independent national statistical office and the availability of good data means that the country is relatively well positioned to monitor the well-being of its citizens. However, greater efforts should be made in conjunction with other Latin American nations to strengthen comparability of data between countries, particularly for non-economic outcomes that constitute an important part of both well-being and the capital stocks that drive economic and social development. In addition, there is a need for regular information collection at the individual/household level on the joint distribution of well-being outcomes across the full range of dimensions (i.e. linking income and employment to health, social connections, safety and subjective assessments of well-being).

The well-being assessment presented in this chapter provides a guideline for identifying some of the main questions studied in the review. As observed, a number of well-being outcomes in Uruguay rate highly in multiple areas, and yet, they denote significant differences among population groups. This highlights the importance of dealing further with inequality issues, not solely based on differences in income or wealth, but extending the analysis to other forms of disparity, for example, access to education and labour markets, and regional and gender inequalities. At the same time, material living standards studied in the well-being framework, such as income and jobs, highlight the advantageous position of the country compared to others in the region. To sustain the current momentum, Uruguay needs to look into the structural issues limiting its performance. It is important to consider the current productivity gaps, the changes in the economic structure, and the policies that have been implemented to improve the country's structural capacity. The following chapters of this review aim to explore these issues. Chapter 2 concentrates on Uruguay's long-term economic performance, whereas Chapter 3 looks more deeply at the issue of inequality. Finally, Chapter 4 focuses on the sustainability of policies and the fiscal framework necessary to support them.

## *Notes*

1. A recent social indicators report produced under the responsibility of the Uruguayan President's Office by the Ministry of Social Development and the Office of Budget and Planning used a framework with many of the same dimensions as in the OECD framework (MIDES/OPP, 2011).
2. For further information see World Bank website *http://data.worldbank.org/country/uruguay*.
3. For further information see Human Development Report website *http://hdr.undp.org/en/statistics//*.
4. It is likely that GNI per capita levels in Argentina are also higher, but data for GNI per capita in PPP terms measured in current international USD are not available past 2006 for Argentina.
5. The International Labour Organization developed this measure as an indicator of low job quality, as people in this category are less likely to have formal work arrangements, and are therefore more likely to lack decent working conditions, adequate social security and "voice" through effective representation by trade unions and similar organisations.
6. This latter figure may be slightly inflated as it includes the education measure, which was not listed in the table. However, even assuming no overlap between those experiencing deprivation in education and the other areas, which is unlikely, the figure remains close to 20% of households when the education-deprived households are discounted.
7. For further information see: *www.who.int/countries/ury/en/*.
8. Ibid.
9. "Uruguay marijuana move illegal – UN watchdog", BBC News (online), 11 December 2013, *www.bbc.co.uk/news/world-latin-america-25340324*.
10. Public opinion and media coverage has tended to focus on the issue of adolescent crime as one of prime concerns in recent years in Uruguay. While the total number of adolescents arrested by the police declined from 13 998 in 2005 to 10 728 in 2011, the number of adolescents arrested for crimes against the person (as opposed to crimes against property) rose during this time, from 2 069 in 2005 to 2 257 in 2011 (UNDP, 2012: 57-58).
11. "Vulnerable" here has a precise definition as the share of the population earning between USD 4-10 per day. While people earning this amount are technically above the poverty line, they nonetheless have a high chance of falling back into poverty (Acevedo and Sanfelice, 2012).
12. The six basic need categories are: decent housing, drinking water, sanitary facilities, electricity, basic comfort goods (e.g. heating and food conservation) and education.
13. In 2008, the latest year where comparable data are available, the OECD average child poverty rate (for all children under 18) was 12.6%, compared to around 37% in Uruguay (OECD Family Database, *www.oecd.org/social/family/database*; *Observatorio Social des Ministerio de Desarollo Social*, *http://observatoriosocial.mides.gub.uy/mides/portalMides/portalMides/portal.php*).
14. In 2011, the prison population rate (per 100 000 of national population) for selected Latin American countries was: French Guyana, 297; Chile, 294; Guyana, 281; Uruguay, 279; Brazil, 260; Surinam, 191; Peru, 184; Colombia, 181; Venezuela, 149; Argentina, 145; Bolivia, 112; Paraguay, 97; and Ecuador, 86 (International Centre for Prison Studies: World Prison Brief, *www.prisonstudies.org/info/worldbrief/*).
15. The UNDP Gender Inequality Index combines measures of maternal mortality, adolescent fertility, educational attainment, the share of men and women in parliamentary seats, and labour force participation rates (*http://hdr.undp.org/en/media/HDR%202013%20technical%20notes%20EN.pdf*.). A result of 0 equates to perfect equality and 1 equates to perfect inequality, so the lower the score, the lower the level of inequality in the country. In 2012, the results were as follows: Guatemala, 0.54; Dominican Republic, 0.51; Panama, 0.50; Honduras, 0.48; Bolivia, 0.47; Paraguay, 0.47; Venezuela, 0.47; Nicaragua, 0.46; Colombia, 0.46; Brazil, 0.45; El Salvador, 0.44; Peru, 0.39; Mexico, 0.38; Argentina, 0.38; Uruguay, 0.37; Chile, 0.36; and Costa Rica, 0.35.
16. Average incomes were BRL 10 565 in Montevideo, BRL 6 882 in towns bigger than 5 000 inhabitants outside Montevideo, BRL 5 372 in towns smaller than 5 000 inhabitants and BRL 6 779 in rural areas.
17. Respondents can choose multiple types of ethnic descent in the Uruguayan census. For the purposes of this analysis, respondents were categorised as being of African descent if they self-identified as being "African or black" regardless of whether they also checked other boxes (INE et al., 2013).

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*Chapter 2*

# Structural trends and economic performance in Uruguay

*The period of expansion that started after the economic and financial crisis of 2001-02 was the first significant acceleration in GDP growth since the early 1970s, and the strongest expansion in GDP per capita since the last century. This chapter reviews long-term trends in economic growth from an aggregate and sectorial perspective. It explores the proximate causes behind income and labour productivity gaps, as well as some of the framework conditions and policies that might constitute a challenge to sustaining growth momentum. It places special emphasis on changes in the economic structure, in particular exports, given the small size of the Uruguayan economy and the importance of trade for economic performance. Lack of human capital and skills appear to restrict growth prospects, and policies are focusing on expanding infrastructure investment to overcome constraints in this area. Important changes within and across economic activities are taking place, including technological progress in several primary activities and the expansion of some high value-added services. These changes have been stimulated by external demand and investments, encouraged by recent generous government incentives. However, they also place greater pressure on human resources and require a rethinking of existing support policies to maximise their development impact.*

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

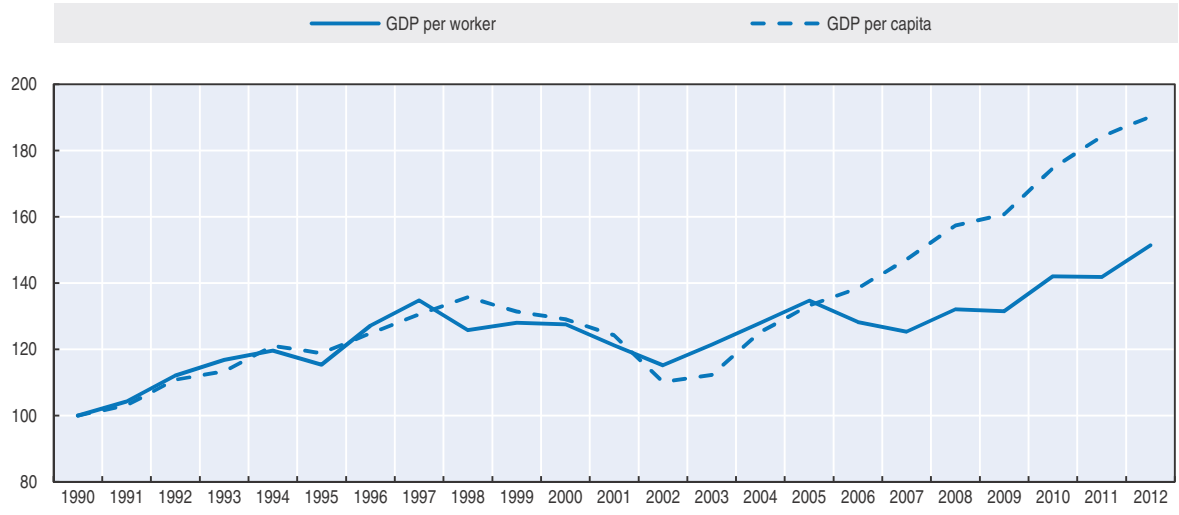
## An anatomy of the current expansion

Since the end of the 2001-02 economic and financial crisis, Uruguay's GDP has grown at a vigorous pace, increasing by around 5.1% per annum in per capita terms. This growth is in marked contrast to the 1990s, when the Uruguayan economy expanded by 2.8% per annum in per capita terms (see Chapter 1). While part of this acceleration in economic growth can be linked to economic recovery following the profound collapse in GDP during the crisis, GDP per capita reached its pre-crisis peak level by early 2006 and continued to expand briskly at 4.6% per annum. This expansion occurred in parallel with an increase in labour productivity (Figure 2.1).

This chapter reviews long-term trends in economic growth from both aggregate and sector perspectives. After discussing the drivers of the current economic expansion, it examines the relevance of labour productivity and labour reallocation to Uruguay's economic growth. In particular, it analyses the economic dependence of the Uruguayan economy in the primary sector, with special consideration given to the Free Trade Zones (FTZs) scheme and the diversification of export baskets. Furthermore, it reviews framework conditions and bottlenecks that constrain economic growth, taking into consideration factors such as skills availability, investment in research and development (R&D), low financial market development, infrastructure rigidities, environmental considerations and further access to international markets.

Figure 2.1. **GDP per capita and labour productivity**

1990-2012 (1990 = 100)




*Source:* Based on The Conference Board (2014), *Total Economy Database*, *www.conference-board.org/data/economydatabase* (accessed January 2014) and INE (2014), *Statistical information*, Instituto Nacional de Estadística, *www.ine.gub.uy/*.

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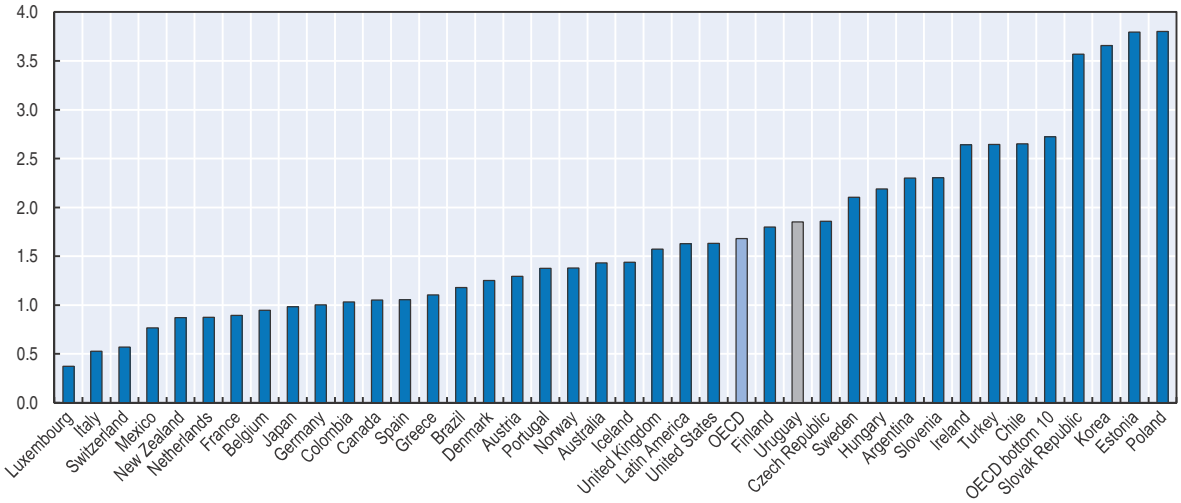
### *Labour productivity has gained momentum, but gaps remain*

After a period of stagnation, labour productivity growth returned recently to pre-crisis levels. It grew at an average rate of 4.4% per annum between 1990 and 1997, compared to a 3.9% growth in GDP per capita. From 1998 onwards, it stagnated and subsequently took eight years to return to pre-crisis levels. During this recovery period, labour productivity declined by 7% between 2005 and 2007, while the economy and GDP per capita expanded above 10% over the same period. This was due mainly to a rapid increase in employment. Finally, from 2007 to 2012 labour productivity grew at 3.8% per annum, slightly below the average growth rate of GDP per capita of 5.3%, but close to that of the 1990s (Figure 2.1).

Over the past two decades, labour productivity has increased at around 1.9% per annum, slightly above the OECD average of 1.7%, as well as that of several Latin American countries, such as Brazil, Colombia or Mexico (Figure 2.2). However, it remains relatively low compared to other benchmarks, such as Argentina (2.3%), Chile (2.7%) or the bottom 10 OECD countries in terms of GDP per capita (2.7%). This average performance, however, masks important differences in labour productivity growth for certain sub-periods. This highlights the importance of output volatility in explaining Uruguay's underperforming growth pattern (as discussed in Chapter 1).

Figure 2.2. **Annualised labour productivity growth rate**

1990-2012




*Source:* The Conference Board (2014), *Total Economy Database*, *www.conference-board.org/data/economydatabase* (accessed January 2014).

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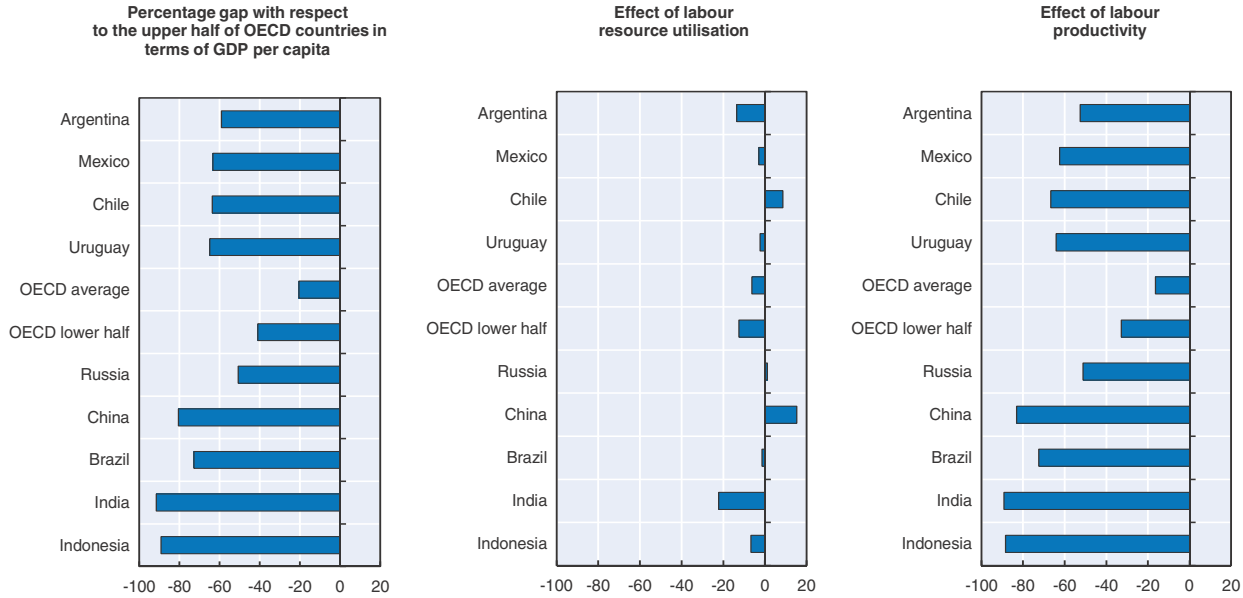
However, low levels of labour productivity explain the differences in GDP per capita found among OECD economies. This is a pattern shared with other Latin American countries (Figure 2.3). The income per capita gap with respect to the upper half of OECD economies is around 65% (i.e. on average these OECD countries are almost 2.9 times richer than Uruguay in per capita terms). More than 98% of this gap is explained by the gap in labour productivity and less than 2% by lower labour utilisation in terms of person employed. Although there are no reliable economy-wide data on hours worked for Uruguay, the evidence from other Latin American countries and data from the manufacturing sector suggests that differences in labour intensity are small and do not significantly alter this conclusion (Daude, 2013).

Figure 2.3. **Sources of income per capita differences, 2011**




*Source:* OECD (2010), *Economic Policy Reforms 2010: Going for Growth*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/growth-2010-en*; IMF (2014), *World Economic Outlook Database*, International Monetary Fund, April 2014 Edition, Washington, DC. and World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*.

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The analysis of sectorial composition of growth and its dynamics in terms of labour reallocation can shed light on the sustainability of the current growth process and identify possible constraints for the future. For example, the type and mix of public policy needed to support further development depends on whether growth is led by skill-intensive or infrastructure-intensive activities. Additionally, an often-debated aspect of the current expansion in Uruguay is whether a process of dependence of the primary sector in regard to exports and productive structure is taking place. This could adversely affect the sustainability of growth through loss of competitiveness in other tradeables, excessive concentration in goods with volatile prices, or lack of spillover effects to the rest of the economy.

### *Economic growth has been broad-based across sectors*

The current expansion has been relatively broad-based in terms of GDP growth across sectors. During the first phase (2006-08) aggregate GDP grew by 4.8% per annum, and most sectors rebounded strongly from the recession, with the exception of energy, gas and water. In particular, manufacturing, construction, retail, restaurants and lodging, as well as transport, storage and communication experienced double-digit changes in their GDP growth rates compared to their performance during the crisis and the immediate post-crisis period (Table 2.1). In terms of sectorial contributions to overall growth, manufacturing contributed around 22% of GDP growth, followed by transport, storage and communications with a contribution of almost 21%, and followed closely by retail, restaurants and lodging (19%). During the second phase of the expansion (2010-12), GDP growth accelerated to 5.9% per annum, with all sectors expanding albeit at different speeds. Transport, storage and communications continued to increase at very high rates due to the growth in telecommunications, while other non-tradeables also expanded

Table 2.1. **GDP, employment and labour productivity growth rates by sectors of activity**

(Selected periods)

| | 1997-99/2002-04 | 2002-04/2006-08 | 2006-08/2010-12 | 1997-99/2010-12 |
|---|---|---|---|---|
| | | **GDP** | | |
| Primary Activities | -0.7 | 2.8 | 1.9 | 1.1 |
| Manufacturing Industries | -2.9 | 8.3 | 2.4 | 2.1 |
| Energy, Gas and Water | -0.4 | -6.7 | 3.3 | -1.3 |
| Construction | -6.3 | 8.0 | 3.9 | 1.1 |
| Retail, Restaurant and Accommodation | -6.1 | 6.5 | 8.0 | 1.9 |
| Transp., Storing and Comm. | -1.1 | 14.0 | 16.6 | 8.7 |
| Other Services | -0.6 | 1.8 | 3.9 | 1.5 |
| **Total** | **-2.1** | **4.8** | **5.9** | **2.4** |
| | | **Employment** | | |
| Primary Activities | 1.8 | 6.2 | 0.1 | 2.6 |
| Manufacturing Industries | -3.8 | 4.9 | 0.7 | 0.2 |
| Energy, Gas and Water | -1.0 | 2.0 | 1.3 | 0.6 |
| Construction | -2.3 | 4.2 | 4.0 | 1.6 |
| Retail, Restaurant and Accommodation | 1.3 | 5.0 | 1.9 | 2.6 |
| Transp., Storing and Comm. | -1.2 | 4.1 | 2.4 | 1.5 |
| Other Services | -0.2 | 2.7 | 1.9 | 1.3 |
| **Total** | **-0.5** | **3.9** | **1.8** | **1.5** |
| | | **Labour productivity** | | |
| Primary Activities | -2.5 | -3.5 | 1.8 | -1.5 |
| Manufacturing Industries | 0.9 | 3.3 | 1.7 | 1.8 |
| Energy, Gas and Water | 0.6 | -8.7 | 2.0 | -1.9 |
| Construction | -4.0 | 3.7 | 0.0 | -0.5 |
| Retail, Restaurant and Accommodation | -7.4 | 1.5 | 6.0 | -0.7 |
| Transp., Storing and Comm. | 0.1 | 9.9 | 14.3 | 7.2 |
| Other Services | -0.4 | -1.0 | 2.0 | 0.2 |
| **Total** | **-1.5** | **0.9** | **4.1** | **0.9** |

*Source:* Bertola, L., F. Isabella and C. Saavedra (2014), "El ciclo económico de Uruguay, 1998-2012" [The Economic cycle of Uruguay, 1998-2012], background paper, mimeo, based on BCU (2014), *Uruguay Central Bank Statistics*, Banco Central de Uruguay *www.bcu.gub.uy/Estadisticas-e-Indicadores* and INE (2014), *Statistical information*, Instituto Nacional de Estadística, *www.ine.gub.uy/*.

significantly. The only non-tradeable sector that saw a decrease in the growth rate, compared to the previous phase, was construction. This was also the case for tradeables with the growth rate for primary activities and manufacturing significantly below the average rate and the rate of growth for 2006-08.

Employment growth has followed a similar pattern but with different intensities across sector. Overall, during 2006-08, employment grew by 3.9% per annum with particularly strong increases in the primary sector and manufacturing, as well as retail, restaurants and lodging. This was a consequence largely of the economic recovery following the crisis and the resulting reduction in excess labour supply. In contrast, employment growth during 2010-12 slowed to 1.8% per annum. This also implies differences in labour productivity growth.

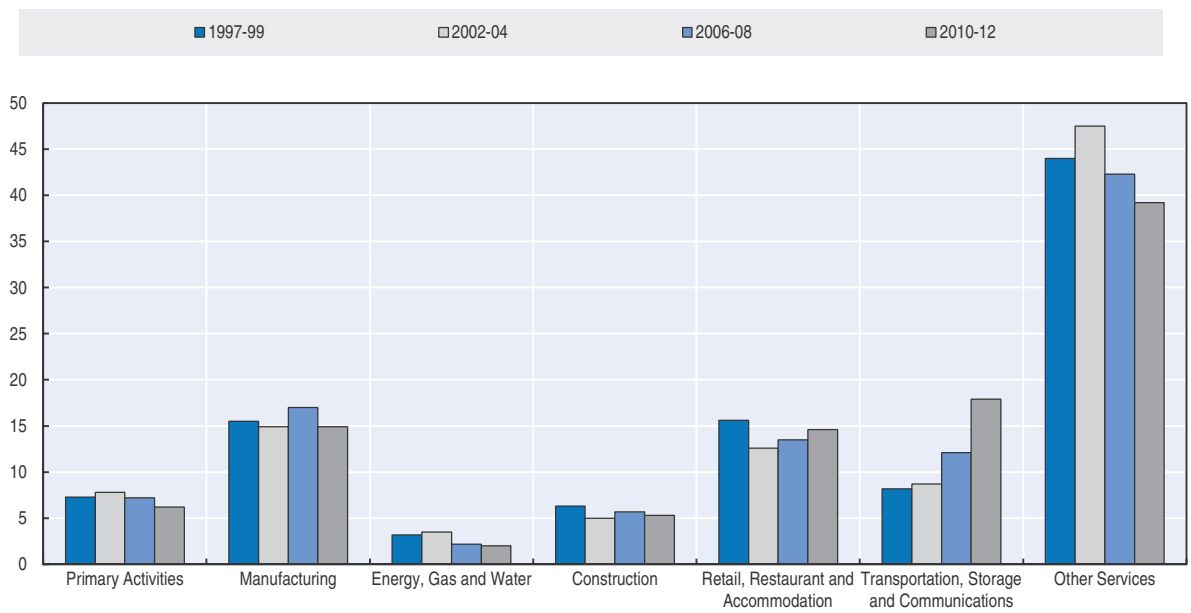
While labour productivity increased only modestly during the 2006-08 period (0.9% per annum), it picked up during the expansionary phase 2010-12 (4.1% per annum). Those sectors with a high GDP growth rate also experienced high labour productivity growth rates. These rates have varied across sectors and periods, and have accelerated in most sectors in recent years with the exception of construction and manufacturing. The

transportation, storage and communications sector, which experienced the highest GDP growth rate, has also experienced the fastest growth rates in labour productivity (14.3% on average for 2010-12). The change in productivity in this sector has remained positive since the crisis ended. Conversely, the primary activities sector experienced negative productivity growth rates for most of the 2000s, only experiencing positive productivity growth rates (1.8% per annum) at the end of the decade.

### *The contribution to productivity growth of labour reallocation across sectors is limited*

Despite strong GDP growth and high investment levels in recent years, Uruguay has experienced relatively minor changes in its production structure at the aggregate sector level. Between 2010 and 2012, the primary sector's share of GDP was 6.2% at constant prices, representing a slight decrease from the pre-crisis level of 7.3%. Other sectors (e.g. industrial manufacturing, electricity, gas and water, construction or retail, restaurant and accommodation) have followed a similar trend. Only the transportation, storage and communications sector has experienced a strong increase since 1997. While the sector accounted for around 8.7% of GDP in the early 2000s, it had increased its share in 2010-12 by more than 9 percentage points, reaching 17.9% of GDP. Meanwhile, the largest sector in the economy continues to be other services, despite a drop of more than 8 percentage points between 2002 and 2012, from 47.5% of GDP to 39.2% (Figure 2.4).

Figure 2.4. **Shares in gross value-added by sector**




*Source:* Bertola, L., F. Isabella and C. Saavedra (2014), "El ciclo económico de Uruguay, 1998-2012" [The Economic cycle of Uruguay, 1998-2012], background paper, mimeo.

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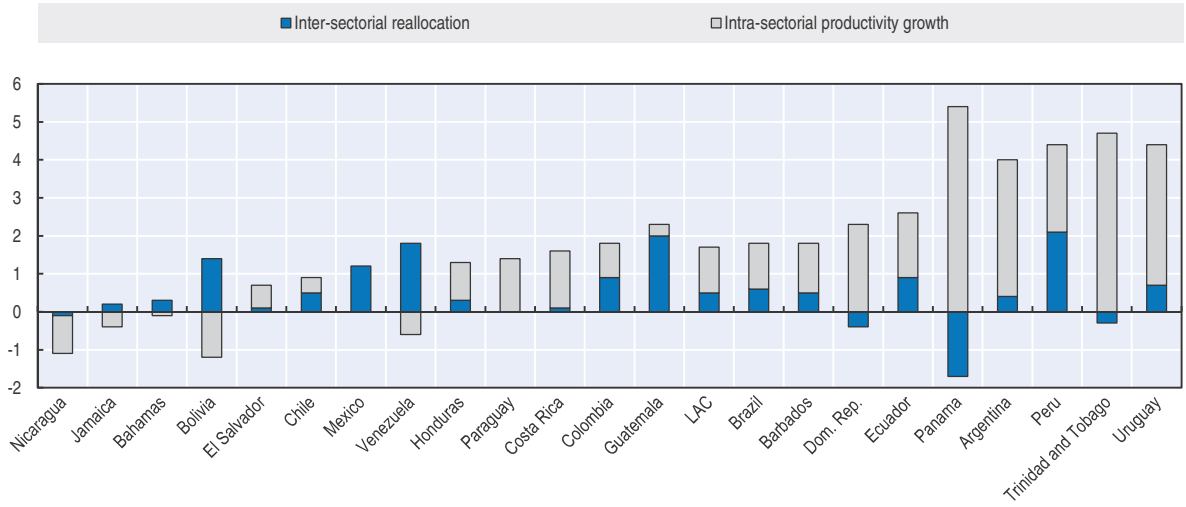
The allocation of labour across these sectors has also experienced only minor changes. Other services employ the most workers (43.8% of total workforce). As of 2010-12, the primary sector employed only 4.8% of the total workforce, representing a marginal increase from the 2002-04 levels of 4.6%. Another key sector for employment is retail, restaurant and lodging, which in 2010-12 employed more than 23% of the labour force. This represents a

small increase on the 2002-04 level of 22%. The share of employment of the transportation, storage and communications sector remained at around 6% in 2010-12 (compared to 5.9% in 1997-99), in marked contrast to its increasing share of GDP over the same period. In general, the non-tradeable sector continues to be the largest employer, accounting for more than 70% of the workforce. This figure has remained stable in recent years, despite high export growth.

With relatively small changes in the composition of employment and GDP, recent labour productivity growth is the result of improvements in labour productivity within sectors, rather than reallocation of labour from less productive towards more productive sectors. During the period 2006-11, labour productivity increased at an annual rate of 4.4% with intra-sectorial growth at around 3.7% per annum, contributing almost 85% of overall productivity growth. Labour reallocation across sectors contributed the remaining 0.7% per annum. Labour productivity in Uruguay was among the highest for the region during the 2000s (Figure 2.5). Furthermore, the average contribution of the reallocation component was smaller for Uruguay (15%) than the average for the Latin America and the Caribbean (LAC) region (almost 30%).

Figure 2.5. **Labour productivity growth decomposition**
(Average annual growth rates in % during the 2000s)




*Note:* The periods vary by country according to data availability: Argentina 2002-10, Bahamas 2003-11, Barbados 2002-10, Bolivia 2002-09, Brazil 2002-10, Chile 2002-11, Colombia 2002-11, Costa Rica 2002-11, Dominican Republic 2002-11, Ecuador 2002-10, El Salvador 2002-10, Guatemala 2002-11, Honduras 2002-11, Jamaica 2002-10, Mexico 2002-11, Nicaragua 2003-10, Panama 2002-11, Paraguay 2002-10, Peru 2002-10, Trinidad and Tobago 2002-10, Uruguay 2006-11, Venezuela 2002-11.
*Source:* Kaldewei, C. and J. Weller (2013), "*Empleo, crecimiento sostenible e igualdad*" [Employment, sustainable growth and equity], ECLAC, Santiago, Chile.

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### *However, important changes are taking place within sectors*

The small contribution of labour reallocation across sectors does not necessarily represent a weakness. First, there is no optimal level for labour productivity growth, based on changes within and between sectors. Structural change is particularly important in the early stages of development to allow movement of labour from subsistence activities towards the modern sector. However, at Uruguay's stage of development it is not clear that such reallocation should constitute the primary source of labour productivity growth. As

economies develop, improvements within sectors, and reallocation of labour across firms within the same sector, become a more relevant source of growth. Second, it is important to take into account linkages across sectors. For example, productivity gains within a certain activity might spread to the rest of the economy if this sector provides significant intermediate inputs. Similar arguments can be made for backward linkages.

These aggregate labour productivity dynamics mask important changes taking place within sectors. For example, the productivity gains in manufacturing are explained, in part, by an absolute reduction in employment, which between 1997-99 and 2010-12 declined by 7%, while GDP increased by 44%. Conversely, employment in the primary sector increased 29%, despite sluggish labour productivity growth with a decline of 8% over the same period. A possible interpretation is that significant changes in terms of labour allocation are in fact taking place within these broadly defined sectors. If the production functions across more narrowly defined sectors differ, then the aggregate evidence that labour is being allocated to sectors with declining productivity, might actually mask positive reallocation effects within sectors. There is international evidence that production functions differ significantly across narrowly defined sectors (Rodriguez and Ortega, 2006). Furthermore, there is evidence of a significant dispersion in total factor productivity (TFP) levels across firms in Uruguay within manufacturing and services, as well as important positive reallocation effects between more narrowly defined sectors (e.g. Casacuberta and Gandelman, 2009).

The divergent growth dynamics within more narrowly defined sectors provide some indicative evidence of these reallocation effects within sectors. For example, while the aggregate primary sector grew 10% between 2005 and 2012, agriculture increased its GDP by 46%, contributing by more than 100% to growth of the whole sector. At the same time, cattle and fishing decreased by 7% and 50%, respectively. Finally, forestry and mining grew significantly at 23% and 126%, respectively, contributing around 4 percentage points to the GDP growth rate of the primary sector. Similar differences took place within manufacturing. Some sub-sectors with strong links to international markets, such as food, wood products, chemical products and electronics, presented very dynamic growth rates, while other industries, such as textiles or transport equipment, declined.

Employment and productivity in the agricultural sector have been influenced by the substantial increases in land values during the period 2000-10. In this decade Uruguay experienced strong increases in average land prices, approximately 20% every year, but has experienced a considerable slowdown in the growth rate for 2012 and 2013, when prices increased by only 8.6% and 1.3%, respectively. Variations in land price are mainly explained by the value of agricultural production and exchange rate fluctuations (Lanzilotta and Lorenzo, 2009). Price increases drive land owners to maximise production in order to increase profitability. This pursuit of higher returns can increase productivity and employment in the sector. For instance, imports of goods of capital for agriculture reached a record high (over USD 200 million) in 2011. In a similar trend, employment in the sector has also increased. In the year 2000, employment in the agricultural sector accounted for 4% of total employment and by 2006 this had increased to 11%, where it has oscillated since (10.9% in 2011). As a result increases in the price of land, productivity in the sector (measured as agricultural value added per worker) increased by 2% on average in the 2000-10 period and 12% in 2012, followed by a plateau in growth and productivity in 2013.

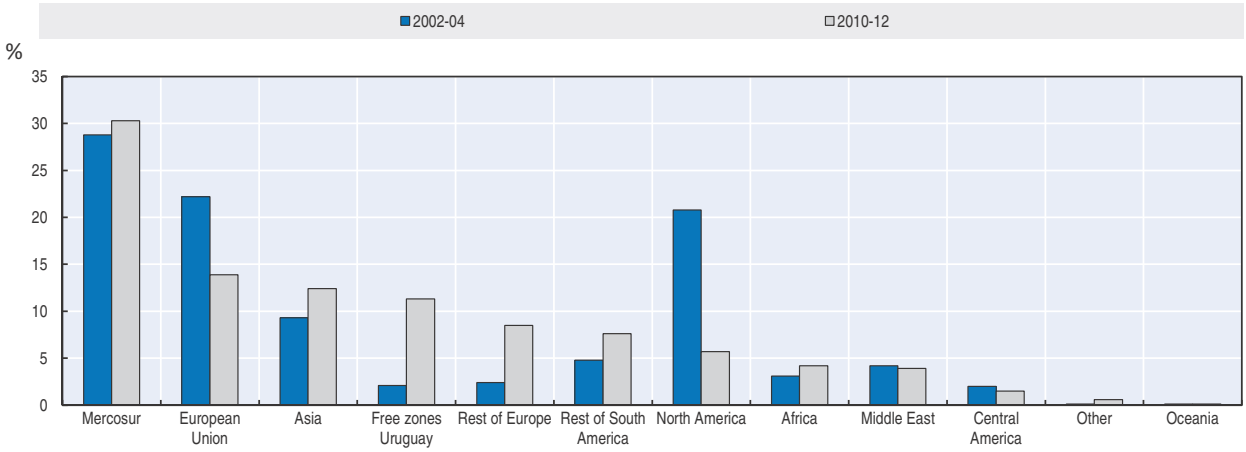
### *Exports have been a key ingredient of the current expansion*

Uruguayan exports have more than doubled over the last decade. On average, exports grew at an average annual growth rate of 16% between 2003 and 2012. Approximately one-third of this increase was due to improvements in export prices, and two-thirds related to increases in volume (Bertola, Isabella and Saavedra, 2014). This represents a significant increase on the pre-crisis period, which saw exports grow on average at 7% per annum between 1985 and 1997.

Exports as a share of GDP averaged around 20% between 1997 and 2002. They accelerated during 2003-06 towards approximately 30% of GDP and have oscillated around this level since then. Estimates show that external demand also has a bearing on employment. The labour content of exports more than doubled between 1997-98 and 2010-11. In the late 1990s, around 15% of jobs depended on external demand, through sectoral linkages. Nowadays, this figure amounts to almost 30% (Ferreira and Vaillant, 2014).

In terms of destination markets, Uruguay has experienced a slight diversification. The weight of exports to regions such as the European Union and North America has decreased as a percentage of total exports. North America represented more than 20% of Uruguay's export basket in 2002-04, but by 2010-12 this share had decreased to less than 6% (Figure 2.6). Similarly, but less pronounced, exports to the European Union decreased by more than 8 percentage points from 2002-04 to 2010-12, dropping from 22% of the total share of exports to less than 14%. In contrast, the share of total exports to Asia increased by more than 3 percentage points between 2002-04 and 2010-12, from 9.3% to 12.4%, respectively; and to the rest of Europe by more than 6%, from 2.4% to 8.5%, respectively. Furthermore, export flows towards Uruguay's free trade zones (FTZ) increased their share more than fivefold, from around 2% in 2002 to 11.3% in 2012.

Figure 2.6. **Destination of merchandise exports by region, 2002-12**




*Source:* Bertola, L., F. Isabella and C. Saavedra (2014), "El ciclo económico de Uruguay, 1998 –2012" [The Economic cycle of Uruguay, 1998-2012], background paper, mimeo.

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Mercosur, the customs union to which Uruguay belongs, represents around 30% of total merchandise exports. The marginal increase in its participation in total exports is mainly due to the admission of Venezuela in 2012. In principle, further trade liberalisation

within Mercosur could lead to important gains and more complementarities between the economic structures of member countries. However, differences in trade policy priorities between the two main partners (Argentina and Brazil) have hindered this process. Similarly, negotiations with third parties such as the European Union or the United States have also been cumbersome. This has left Uruguay, whose main priority during the 1990s was opening up to regional trade (see Box 2.1), with few options in terms of its current commitments to Mercosur. Unable to single-handedly pursue free trade agreements (FTAs), Uruguay's strategy has been to improve market access for specific goods, and to stimulate services as an alternative export activity, less restricted by current agreements with Mercosur members. In this regard, FTZs have formed part of this strategy to diversify markets and export baskets.

### Box 2.1. **Uruguay's trade policy since the 1990s**

In the 1990s, Uruguay initiated a new wave of economic structural reforms that included a new round of trade liberalisation measures. It started a process of unilateral reductions in tariffs following the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), while accelerating trade liberalisation with countries in the region. This was achieved through the creation in 1991 of the Mercosur as a free trade area. After the treaty of Ouro Preto in 1994, Mercosur evolved into a customs union.

Unilateral trade liberalisation was supported by gradual reductions in tariffs, as well as trade facilitation measures. The most recent example of Uruguay's unilateral moves towards open borders was the development of a new National Custom Code, which seeks to harmonise domestic practices with the Common Custom Code in Mercosur and with the Kyoto Protocol of the World Customs Organization (WCO). However, certain industries still receive a significant degree of trade protection in Uruguay, mainly through non-tariff barriers. These measures are often embedded in tortuous norms and regulations; however, the evidence suggests that they are most prevalent in the agricultural and agro-industrial sectors, as well as in chemicals. A complementary measure opening Uruguay to international trade is export promotion. Starting in the 1990s, main export promotion activities focused on trade finance and fiscal incentives (e.g. free trade zones). Finally, another pillar of Uruguay's trade policy has been foreign direct investment (FDI). The array of available measures to promote FDI ranges from public infrastructure concessions to tax exemptions. In sum, the strategy to incentivise exports has gradually shifted from strict export promotion to regulatory measures in investment and trade (Ferreira and Vaillant, 2014).

Uruguay has also subscribed to numerous bilateral investment treaties. In particular, in recent years the country has signed a series of investment agreements that emphasise the pre-establishment of investments and allow for possible disputes between firms and the State. The general domestic legal framework that the country adopted facilitates the subscription to new agreements in this area and allows for greater maturity in the agreements reached.

Uruguay has signed several different types of trade agreements. Seven preferential trade agreements (PTAs) were implemented in merchandise trade, two of which form part of more ambitious integration frameworks (Mercosur and the FTA with Mexico). In services there are three PTAs, one of which was implemented with few new concessions (Mercosur); the second was only partially implemented (FTA with Mexico), and the last has not yet been implemented (Chile). In terms of other complementary policies there are seven different agreements, of which only two have been implemented.

*Source:* Ferreira, N. and M. Vaillant (2014), "Uruguay's trade policy and specialisation over two decades: A gradual and permanent path to trade openness," background paper, mimeo.

Box 2.1. **Uruguay's trade policy since the 1990s** *(cont.)*

Table 2.2. **Preferential trade agreements of Uruguay**

| Category | Name | Contents | Data commitment | Date start implementation | Period from commitment |
|---|---|---|---|---|---|
| **SUB REGIONAL** | Treaty of Asunción | Goods- | March, 1991 | July, 1991 | 3 months |
| | | Services | July, 1998 | December, 2005 | At least 7 years |
| | | Investment | 1994 | Not implemented yet | At least 16 years |
| | | Government Procurement | 2003 | Not implemented yet | At least 7 years |
| | | Competition Policy | 1996/2002 | Not implemented yet | At least 8 years |
| **COMMON MERCOSUR WITH THIRD COUNTRIES** | Chile | Goods | June, 1996 | October, 1996 | 3 months |
| | | Services | May, 2009 | Not implemented yet | At least 1 year |
| | Bolivia | Goods | December, 1996 | February, 1997 | 2 months |
| | Peru | Goods | | December, 2005 | 8 years |
| | Ecuador-Colombia-Venezuela | Goods | October, 2004 | January, 2005 | 3 months |
| | Israel | Goods | 2008 | 2008 | Less than 1 year |
| **BILATERAL** | FTA with Mexico | Goods, services and disciplines | 2004 | 2004 | Less than 1 year |
| | BIT/ TIFA USA | Investment, Trade Facilitation | November, 2005/ October, 2006 | November,2006 / January, 2007 | 1 year/3 months |
| | FTA with Chile (MERCOSUR plus) | Government procurement/ Investment | 2008/2009 | 2012 | 3 years |

*Source:* Ferreira, N. and M. Vaillant (2014), "Uruguay's trade policy and specialisation over two decades: A gradual and permanent path to trade openness," background paper, mimeo.

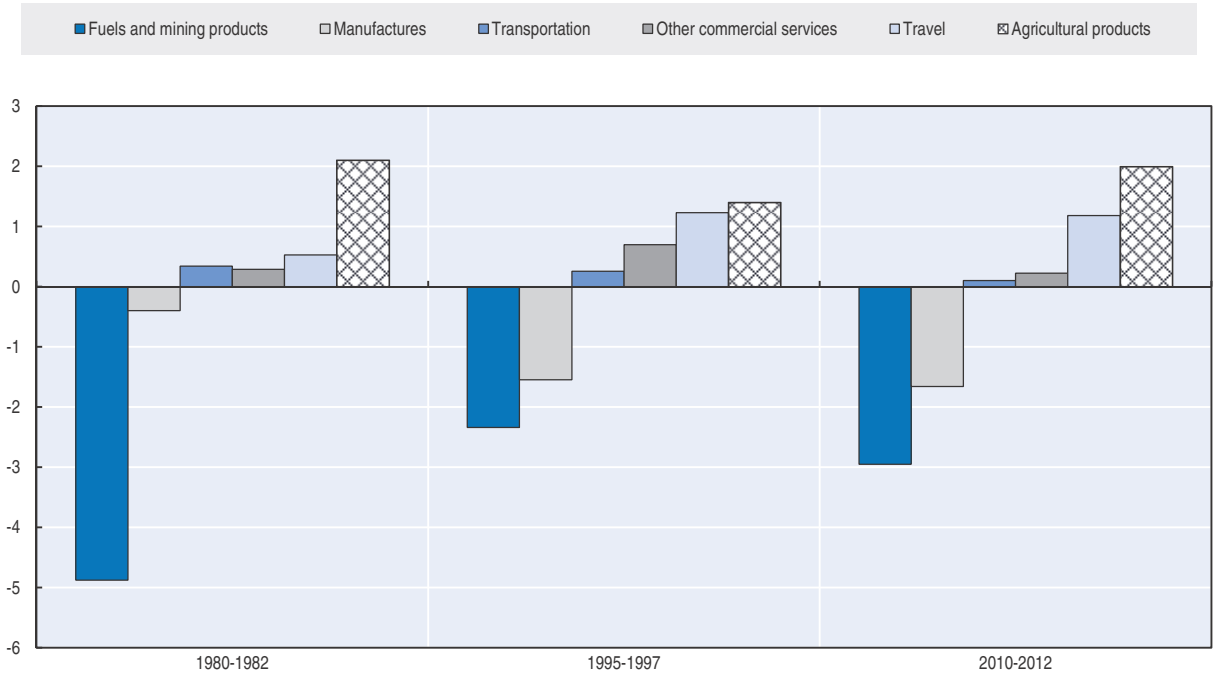
The final destination of FTZ merchandise exports reveals a more diversified and changing panorama. China, already the main market for soy, frozen beef and cellulose pulp, has grown from representing less than 5% of exports in the early 2000s to accounting for around 21% of total goods exports as of 2013 (Uruguay XXI, 2014). Brazil is the second market of destination with a share of total exports that has remained relatively stable over the past decade at around 19%. The remaining destinations of merchandise exports are of considerably lower importance. Argentina, for example, accounted for only 5% of exports as of 2013, a share similar to that of Germany, the Netherlands and Venezuela.

### *The primary sector has been the main driver of export growth*

In terms of goods, agricultural-based exports have shown very strong dynamism, while other traditional manufacturing goods have lost ground. For example, cereals represented just 3.4% of total merchandise exports in 1997-99, but now account for 26.5% (2010-12). Another dynamic category has been lumber exports, which increased from a 0.4% share of total exports in 1997-99 to 6.3% in 2010-12. During this period, the share of dairy exports also increased from around 6% to almost 9%. On the other side of the spectrum, textile exports declined from a 10.2% share at the end of the 1990s to just 3.2% in 2010-12. This was associated with a decline also in absolute terms. Auto-part exports have also struggled as their share more than halved from 5.4% over the same period.

Over the last 30 years, Uruguay has been a consistent net exporter of agricultural products and services and a net importer of energy, mining and manufactured products. This trend accentuated during the recent period (Figure 2.7). Using a measure of trade

Figure 2.7. **Evolution of relative comparative advantages by sector**




*Source:* Ferreira, N. and M. Vaillant (2014), "Uruguay's trade policy and specialisation over two decades: A gradual and permanent path to trade openness," background paper, mimeo.

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competitiveness suggested by Vollrath (1991),[1] the analysis shows that the main characteristics of Uruguay's pattern of specialisation have not changed drastically. An inter-industry specialisation trade pattern emerges: two-sector with export specialisation (agricultural products and travel) and two-sector with imports specialisation (manufactures and fuels and mining). In the case of transportation services there is a lack of clear specialisation, that is, export and import revealed comparative advantage (RCA) values are low. A more disaggregated product analysis reinforces the previous conclusions. Uruguay has no significant comparative advantage in manufacturing sectors, and over time this condition has become more acute. The opposite is true for agriculture, with comparative advantages in food production increasing markedly between the two periods. Comparative advantages in services are also high and increasing, especially in tourism and global services (Ferreira and Vaillant, 2014).

## Primary sector dependence: A look at the different elements

The above trends in the composition of merchandise exports have given rise to debate over whether the economic structure is specialising excessively in activities with low value added and linkages to the rest of the economy. Primary sector dependence could be problematic if it leads towards lower potential output growth and diminished productivity gains in the long term. Primary exports now account for almost 60% of total merchandise exports, despite their stable and modest contribution to GDP and employment. This is a significant increase compared to less than 30% in 1997-99. It is, therefore, important to explore further the sophistication and diversification of Uruguay's export structure to understand any risks and opportunities it might present to sustaining current growth momentum.

Overall, there is little evidence that such a process of dependence of the primary sector is underway. While merchandise exports have moved more to the primary sector, relatively sophisticated service exports have also gained ground. Furthermore, economic activity is moving towards free trade zones (FTZ), and once these are taken into account the share of manufacturing remains relatively stable. Finally, within the primary sector, activities that show recent growth are relatively R&D intensive and have important linkages to the rest of the economy. An indication of this is the particularly strong increase in the high and medium-skilled labour content of exports. Nevertheless, public policies could increase spillover effects and facilitate upgrading, while more value-added creation could still play an important role in making the economy more competitive and diversified.

### *Evidence from analysis of Uruguay's export basket is mixed*

High and medium-tech exports, following the classification by Lall (2000), have remained relatively stable since the 2002 crisis. The share of primary and natural resource-based products has increased, accounting for more than 75% of total exports in 2009-11 (compared to 60% in 1997-99). The increase in share occurred mostly to the detriment of low-technology exports, which accounted for more than 25% before the 2001-02 crisis, and lost more than 12 percentage points after. In 2012, they accounted for less than 12% of total exports. The share of high-technology and medium-technology exports has remained fairly stable in the last ten years (Figure 2.8).

A similar conclusion is reached when analysing value added by sector and using alternative classifications of sectors according to their propensity to innovate in Uruguay. At constant prices and for the whole economy, innovation-intensive sectors have increased their share from around 19% of GDP in 1997-99 to 25% as of 2009-11 (Figure 2.8). While this trend is not visible at current prices, this is logical as sectors with more technological change usually experience a sharper decline in their relative price (Bertola, Isabella and Saavedra, 2014).

Other indicators that measure the degree of productive sophistication, based on Uruguay's merchandise exports, have not changed significantly since the 2001-02 crisis. For example, an analysis of the sophistication of the export basket, following the method of Hausmann and Hidalgo (2011) to infer productive capabilities, finds that Uruguay's export basket ranked 57 out of 102 in 1997-99. After the crisis it fell to 59 in 2002-04, but has recently improved ranking 53 in 2009-11 (Bertola, Isabella and Saavedra, 2014). This would indicate that, although Uruguay's exports basket has not experienced substantial improvements in recent years, despite strong economic growth and high investment, some marginal upgrading might be underway.

However, although there is no clear trend in its sophistication, Uruguay's merchandise export basket continues to be rather dispersed and far from the more sophisticated nodes of the product space. This has been a consistent finding in all empirical studies using these types of methodologies (Bertola, Isabella and Saavedra, 2014; Ferreira and Vaillant, 2014). Trade liberalisation since the mid-1980s has allowed the economy to diversify its exports towards sectors intensive in natural resources, taking advantage of their relative abundance (Ferreira and Vaillant, 2009). These goods are not very connected to other more sophisticated products, which might hinder higher sophistication, as the set of capabilities developed for the current group of export activities might not be useful for these new activities. Nevertheless, Uruguay's trajectory towards grains, dairy and cellulose pulp, is not explained well by their proximity with respect to the previous export basket, nor proximity among them.

Figure 2.8. **Indicators of export and productive sophistication**

*Source:* Bertola, L., F. Isabella and C. Saavedra (2014), "El ciclo económico de Uruguay, 1998 –2012" [The Economic cycle of Uruguay, 1998-2012], background paper, mimeo.

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### *An analysis of service exports adds nuance to the issue*

Although trade in services is generally less well studied, it has been gaining importance, representing 32% of total exports in 2012. If service exports as well as exports from FTZs are taken into account, Uruguay presents a much more diversified export basket with less clear evidence of the rising importance of primary goods. For example, according to official figures, in 2012 primary goods would account for just 36% of total export share, a negligible increase from the 35% they presented in 2005. Service exports would account for 32%, while manufacturing would account for more than 30% of total exports. Services increased their share slightly, as they accounted for 28% of total exports in 2005 (MEF, 2013).

A similar product space analysis considering services reveals that Uruguay has advantages in tourism, transportation and ICT services (software). In particular, the latter is a very non-ubiquitous service, ranking in second place by degree of sophistication (Ferreira and Vaillant, 2014). This sector has been quite dynamic in terms of exports. Between 2003 and 2010, software exports in current USD increased by a factor of almost 3.8, while total exports multiplied by 2.6 during the same period (see below).

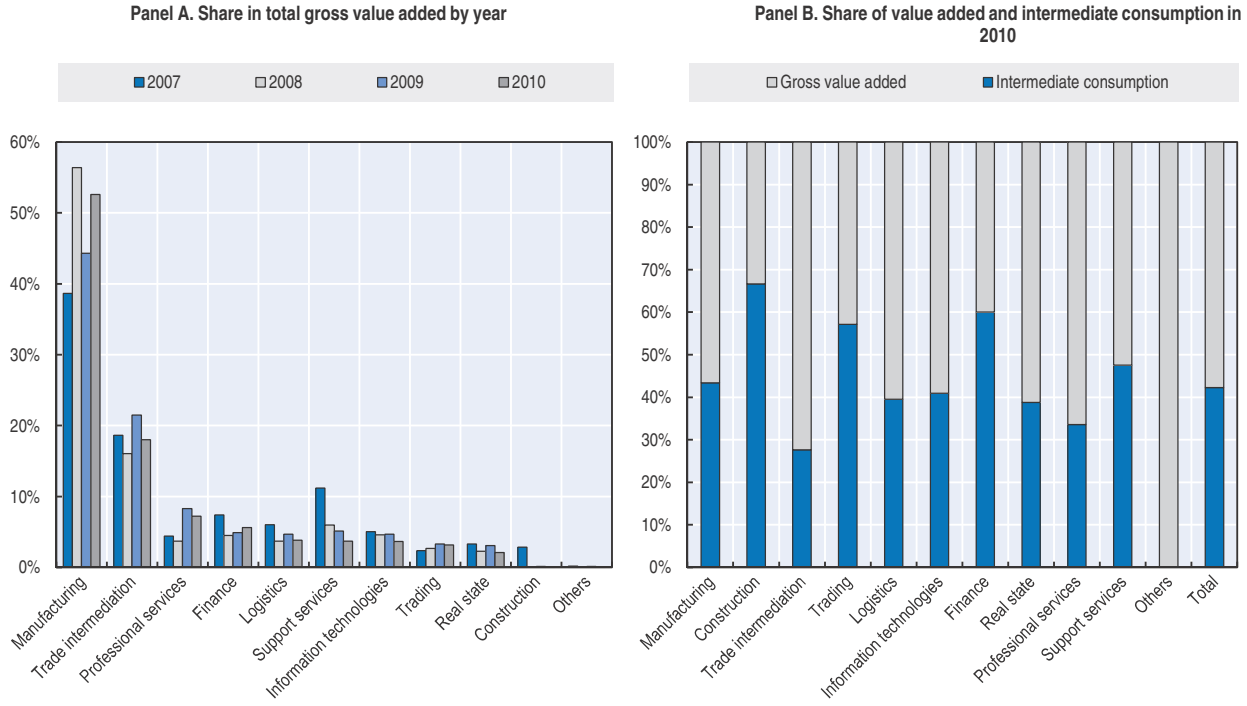
Beyond ICT services and the traditional tourism sector, other new service activities have also developed successfully. Tourism exports – using expenditure by tourists as a proxy – represent around 4.5% of GDP. While the region, Argentina (60% of total), and Brazil, Chile and Paraguay (20% of total), still represent the most important source of tourists, there has been a slight diversification in recent years with visitors from outside the region accounting for 14% of expenditures in 2012-13 versus 10% in 1996-97. However, non-traditional services have more than doubled their exports in value between 2007 and 2011 (MEF, 2013). ICT exports represent around 15% of these exports, but other sophisticated

services such as financial services (30%), consulting (15%), global services (12%), and commercial and logistic services (12%) also matter. In contrast, less sophisticated services such as call centres only represent 10% of non-traditional service exports. More than half of these exports are based in Uruguay's FTZs.

### *Uruguay's FTZs have contributed to a more diversified export basket*

The value added created by the FTZs accounts for around 4% of GDP. Although FTZs have long existed in Uruguay, their importance has expanded in recent years. Furthermore, their economic structure differs from the rest of the economy (Lalanne and Vaillant, 2014). In 2010, manufacturing accounted for more than half of the gross value added (53%) of the FTZ, which represents an increase of 14 percentage points from the levels presented in 2007 (39%). Other sectors such as finance, logistics, support services, construction and information technology reduced their share during this period. Trade intermediation, a major sector, has remained relatively stable, accounting for 18% of gross value added in 2010 (Figure 2.9). In terms of employment, FTZs employ more than 13 000 people (around 1% of the total labour force). The professional services sector employs the largest number of persons (17% of total FTZ employment), closely followed by trade intermediation (15%) and support services (15%). The construction sector has experienced the strongest decrease in labour, due to the completion of the UPM pulp processing plant. In 2007, it accounted for more than 1 080 total jobs (9.7% of total free zone employment), which quickly fell to 105 jobs (1% of total free zone employment) in 2010. On average, employees of FTZs are younger, more qualified and better paid than the rest of the economy (MEF, 2013).

Figure 2.9. **Free trade zones production indicators**




*Source:* Lalanne, A and M. Vaillant (2014), "Un caso de transformación productiva y comercial: Zonas francas en Uruguay" [Commercial and productive transformation case study: Free zones in Uruguay], background paper, mimeo.

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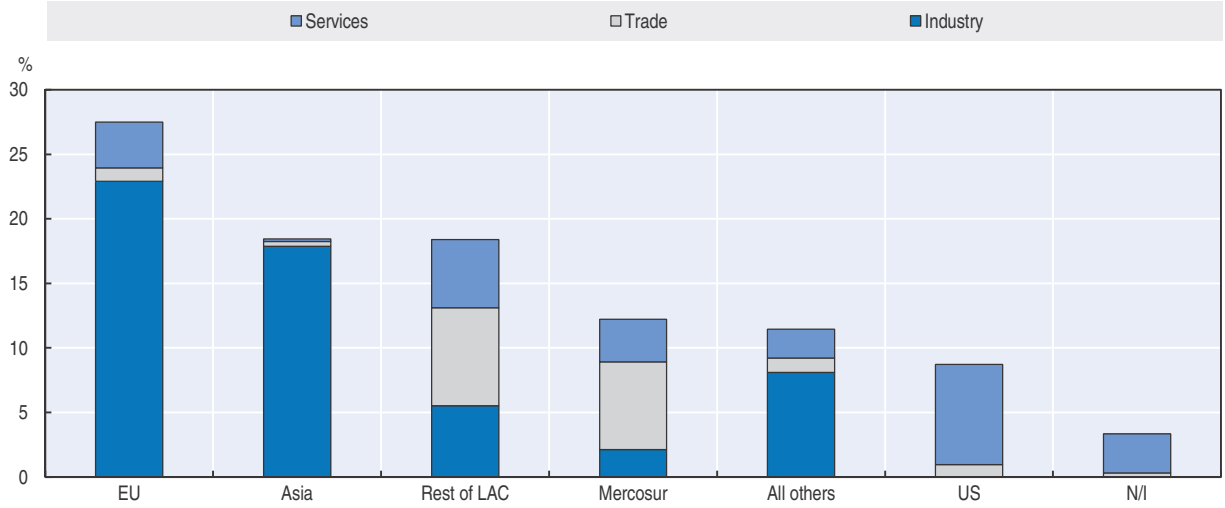
Intermediate consumption accounts on average for more than 42% of the production structure, while gross value added accounts for the remaining 58%. However, sectors such as construction, trading or finance present a larger weight (around 60%) of intermediate consumption (Figure 2.9). While this might seem large, implying that little value added is generated by these activities, it is actually below the import content of exports by industries such as auto parts or chemicals in Uruguay (MEF, 2013).

In terms of exports, those from FTZs account for more than 5% of GDP. In 2010, the manufacturing sector accounted for more than 50% of those exports, significantly above the share of manufacturing represented by national exports. The commercial intermediation and finance sector accounted for one-fifth of total exports. Global service exports, as of 2013, amounted to around USD 1 000 million with two FTZs dedicated entirely to providing these services. Most of the sectors from the FTZ (except for real estate, logistics and the other sectors) are highly export-oriented (more than 70% of their production is exported). During 2007-10, exports from FTZs grew at rate of 32% per year, with strong differences across sectors. Sectors such as manufacturing (52% per year), trading (32% per year) and professional services (42% per year) have seen above average growth.

Exports from FTZs also contribute to the diversification of markets. The majority of exports from FTZs are destined for the European Union, with 83% of total exports to the European Union being industry-related, 13% related to services and the rest to trade (Figure 2.10). Asia and Latin American economies (non-Mercosur) are the second and third destinations of Uruguayan FTZ exports (representing around 18% of exports each), with a strong preponderance of industry-related exports to Asia (more than 97%), and a diversified basket to non-Mercosur Latin American economies (30% industry, 41% trade services and 29% other services). Contrary to these regions, the United States receives only 9% of total exports from FTZs, with a vast majority of these (88%) related to services.

Figure 2.10. **Composition of exports from FTZs by destination and sectors, 2010**




*Source:* Lalanne, A and M. Vaillant (2014), "Un caso de transformación productiva y comercial: Zonas francas en Uruguay" [Commercial and productive transformation case study: Free zones in Uruguay], background paper, mimeo.

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### *Important structural changes are happening within the primary sector*

In recent years agriculture has assumed a larger role in the composition of the primary activities sector, accounting for more than 30% of the total value of the sector. Within agriculture, economic activity has migrated to cereals and oil seeds, which can be prone to higher cyclicality. In particular, soybean production has been the key driver in the development of the sector. This fact can be explained by the positive evolution of agricultural yields, the expansion of cultivated land, and the superior performance of the summer harvest with respect to the winter harvest. At the same time, livestock production has been shifting from beef production to milk production. Since 2005, milk production, which was about 1 400 million litres, has experienced strong growth; by 2012, milk production levels had reached more than 2 700 million litres. Meanwhile, beef production decreased from more than 1 150 000 tonnes to less than 1 050 000 tonnes.

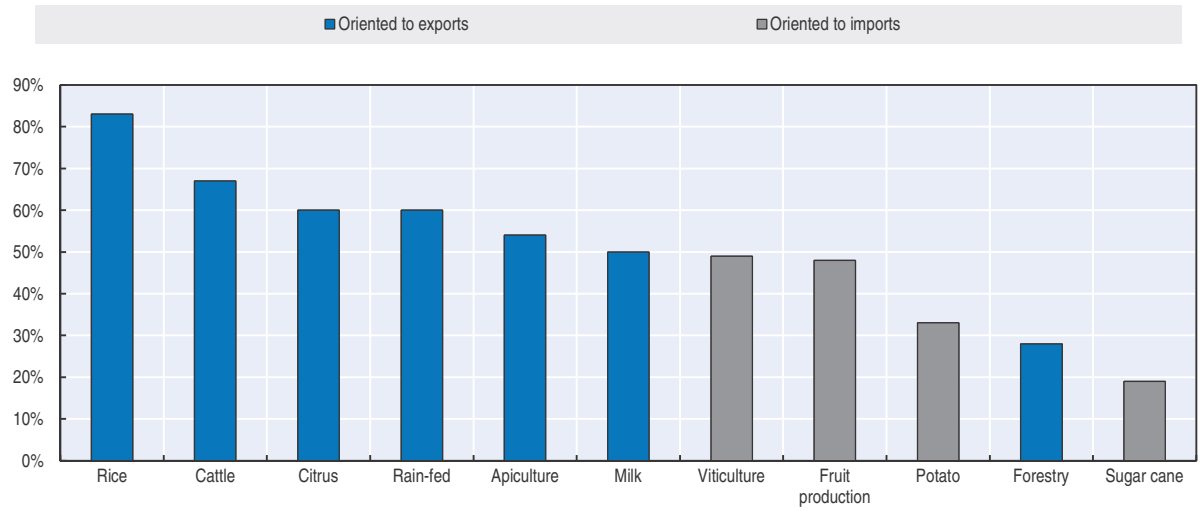
In general, the stock of cattle and sheep has suffered strong reductions, but in the case of sheep the drop has been more accentuated as production has concentrated on meat rather than on wool. In part, the different trajectories can be explained by the reduction in the area dedicated to cattle and the expansion of cereals and oils seeds, as the price of these latter products increased significantly during the period. Productivity has played a key role in the shift from beef production to milk production. In the last decade, the productivity of beef production, measured by the amount of meat per cow, has increased on average by 1.3% (0.1% in the 1990s), while milk production productivity, measured by the amount of milk per cow, has increased by 3.4% (3.6% in the 1990s).

These changes within the primary sector have been accompanied by an increase in total factor productivity (TFP). TFP in the sector grew at 2.2% during the last decade (Bervejillo, Mila and Bertamini, 2011), while output grew at 4.4% over the same period. Thus, productivity improvements have contributed about half of the sector's economic growth. Among the productive factors, the use of intermediate goods presented the highest growth rate (2.7% in average per year); in 1980 they accounted for 16% of the cost structure. However, by 2010 this share had increased to 23%. Labour growth has also been significant in the last decade (3% average per year). Meanwhile, the cost contribution of labour has decreased slightly from 28% in 1980 to 26% in 2010. Similarly, the cost share of capital (and land) decreased from 10% (46%) in 1980 to 8% (26%) in 2010. If the aggregate level of production factors had remained constant since 1980, the estimated level of productivity, would have only accounted for 76% of the 2010 level.

Export-oriented activities within the primary sector tend to innovate more. Sectors such as rice, cattle, citrus, apiculture and milk export more than 50% of their production, and have a higher propensity to innovate. Contrary to this, sectors that are oriented more towards the domestic market (potatoes or sugar cane) have a lower propensity to innovate (Figure 2.11). Innovation is visible also in the forestry sector, which has experienced a transition towards a more diversified export basket. In 1997, paper and cardboard represented 97% of total exports. By 2011, they represented only 10% of total exports with cellulose pulp (64%), chips (14%), wood boards (5%) and other products (7%) accounting for the remainder.

Several indicators of innovation intensity signal the strong performance of Uruguay's primary sector compared to peers in Latin America, as well as other sectors of the economy. For example, the publication of scientific articles related to agriculture per 100 000 inhabitants shows Uruguay ranking at the highest level alongside Chile in Latin

Figure 2.11. **Propensity to innovate by sector, 2007-09**




*Note:* The proportion of agricultural respondents that answered positively to the statement that innovative activities resulted in incorporation of new processes or significant improvement, changes to internal organisation, changes in the commercialisation of products or a significant improvement in the 2007-2009 survey "Encuesta de Actividades de Innovacion Agropecuaria (2007-2009)".
*Source:* Paolino, C., M. Mondelli and L. Pittaluga (2014), "Cambios en la dinámica agropecuaria y agroindustrial del Uruguay y las políticas públicas" [Changes in livestock and agro-industrial dynamics of Uruguay and public policies], background paper, mimeo based on survey data from "Encuesta de Actividades de Innovacion Agropecuaria (2007-2009)".

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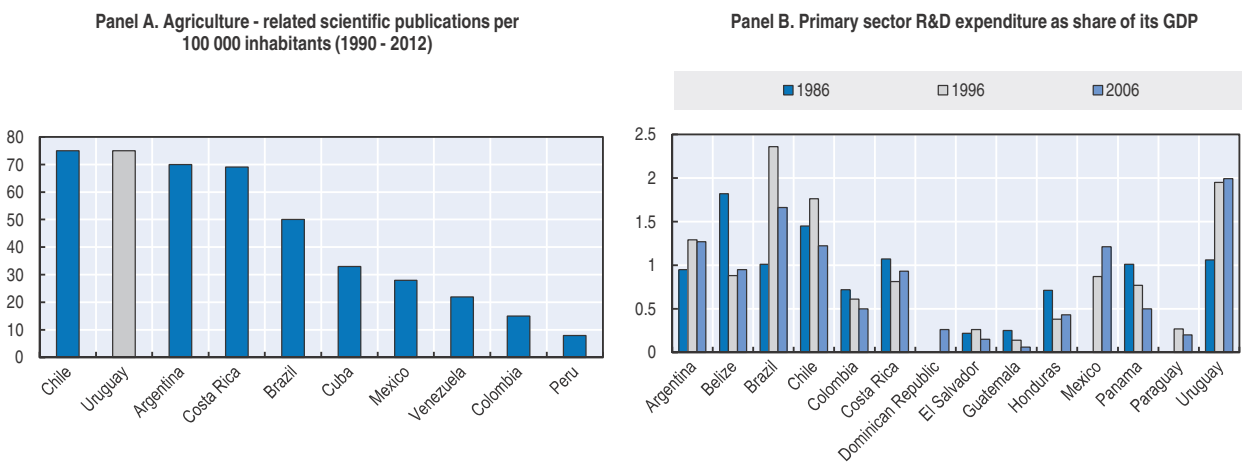
America (Figure 2.12). Furthermore, R&D expenditure as a share of the primary sector's GDP has increased from around 1% in 1986 to almost 2% by 2006. Not only is this the highest rate compared to other countries in Latin America, but it is also five times larger than Uruguay's overall R&D investment as a share of GDP, which was 0.4% for 2006.

Figure 2.12. **Primary sector innovation indicators**




*Source:* ASTI (2012), *ASTI database*, Agricultural Science and Technology Indicators, www.asti.cgiar.org/data and Rodriguez, A., L.E. Meza and F. Cerecera (2013), "Investigación científica en agricultura y cambio climático en América Latina y el Caribe" [Scientific research on agriculture and climate change in Latin America and the Caribbean], paper presented at the IV Regional Seminar on Agriculture and Climate Change UN/ECLAC-FAO, 11-13 November 2013, Santiago, Chile (2013).

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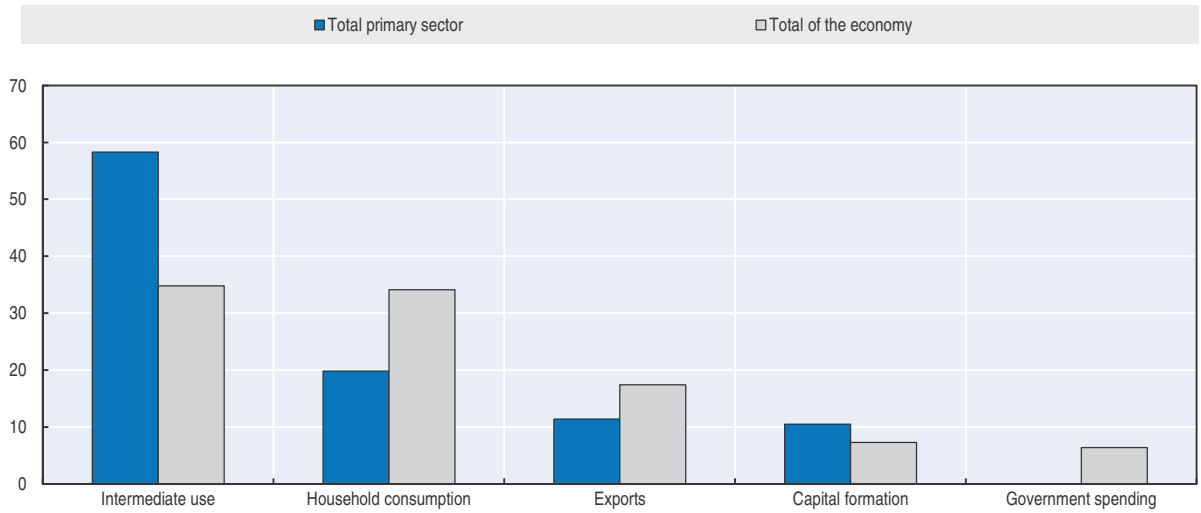
The primary sector also presents the highest linkages with other sectors of the economy. The output-input matrix shows that more than 58% of agricultural production is used as an intermediate for other processes in the agricultural sector, and more than 34% for the total economy (Terra et al., 2009). More than 60% of the production of primary goods is used as inputs for other industries and sectors; specifically, intermediate use (34%), capital formation (7.3%) and exports (17.4%) (Figure 2.13). Simulation exercises using a social accounting matrix show that an exogenous increase in the demand for primary goods would have a slightly higher impact than manufacturing or services. For example, linear multipliers show that an extra monetary unit of demand in the primary sector would have a multiplier of 3.11 on total production. For manufacturing, the multiplier effect would be 3.05 on production, while in the case of services it is 3.09 (Paolino, Mondelli and Pittaluga, 2014).

Figure 2.13. **Intermediate and final sales in the primary sector and national economy**

2005 (%)




*Source:* Terra, et al. (2009), "¿ Cuál es la importancia real del sector agropecuario sobre la economía uruguaya?" [What is the real importance of the agricultural and livestock sector in the Uruguayan economy], *Carta de Acuerdo Red Mercosur-FAO*, Departamento de Economía de la Facultad de Ciencias Sociales, Montevideo, based on data from BCU (2014), *Uruguay Central Bank Statistics*, Banco Central de Uruguay *www.bcu.gub.uy/Estadisticas-e-Indicadores*.

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Traceability in cattle and beef production is a good example of the type of upgrading and linkages present in today's rapid transformation of Uruguay's primary sector (Box 2.2), as are R&D activities related to the UPM pulp factory or seed improvements in soy production. While not all of these projects create new jobs within the primary sector, they have important spillover effects towards other activities such as ICT. In this sense, it is important to consider public policies within value chains in terms of strengthening these linkages, as for example in the case of Hereford genomics, recently encouraged by a project co-ordinated by ANII (Paolino, Mondelli and Pittaluga, 2014).

### *Exports have become more skills intensive*

Another way to ascertain whether the current pattern of specialisation is not jeopardising production capabilities is to study the employment effects and wage content of exports. This can be done by computing the direct and indirect effects of foreign demand

Box 2.2. **Cattle and beef traceability: Comparative advantages meet ICT**

Recent changes in global value chains (GVCs) within the food industry have led to a significant concentration in the retail sector, with a few multinational enterprises playing an increasingly dominant role. One addition to the strategy of these retailers has been product traceability, a response to consumer demand for guaranteed product quality, introduced in the face of the potential threat of lost markets and clients.

The initial objective of these changes was to guarantee food quality in final markets, which would improve market access and increase opportunities for Uruguayan producers. Individual traceability of livestock has existed since 1973 in the form of institutions and monitoring systems to track livestock. However, following the outbreak of foot and mouth disease in 2001, the government and producers agreed to implement electronic traceability as a key element in regaining the confidence of export markets.

However, once the technological platform for traceability was installed, tracing not only the animal from birth to the slaughterhouse, but also its subsequent industrialisation and packaging, the system became an important source for potential product differentiation and a tool to retain more value added within food GVCs. Currently, the public and private sectors are working together to further differentiate beef production in high-value cuts and developed markets, and to explore ways to capture more value added from the commercialisation phase.

*Source:* Based on Paolino, C., M. Mondelli and L. Pittaluga (2014), "Cambios en la dinámica agropecuaria y agroindustrial del Uruguay y las políticas públicas" [Changes in livestock and agro-industrial dynamics of Uruguay and public policies], background paper, mimeo.

through an Input-Output matrix. The results of such an analysis show that the labour content of exports more than doubled between 1997-98 and 2010-11. In 1997-98, approximately 230 000 jobs (around 15% of total employment) were linked to external demand, but by 2011-11 this number had increased to almost 492 000 (27.5% of total employment).

This increase in labour content occurred for all skill levels, but has been particularly strong for high and medium-skilled labour. The high-skilled (15 years or more of education) labour content of exports increased by a factor of 2.3, while the labour content of medium-skilled workers (between 9 and 14 years of education) multiplied by a factor of 3. Therefore, while 15% of medium-skilled workers had jobs linked to exports in the last 1990s, this figure increased to 30% by 2010-11. In comparison, low-skilled labour (less than 8 years of education) content increased by just 60%. However, for the whole economy, low-skilled labour decreased by 18%. Therefore, while around 16% of low-skilled workers had export-linked jobs in 1997-98, this figure had risen to almost one-third by 2010-11 (Ferreira and Vaillant, 2014).

More jobs linked to external demand bring positive consequences, but also risks. The benefits are linked to possible productivity gains, due to greater contact with sophisticated clients and markets that can induce better practices by local suppliers of exporting firms. However, when jobs, especially low-skilled and medium-skilled ones, become dependent on external demand, market access becomes critical. This issue has been problematic for Uruguay, for example, in the case of Mercosur.

## Framework conditions and bottlenecks to economic growth

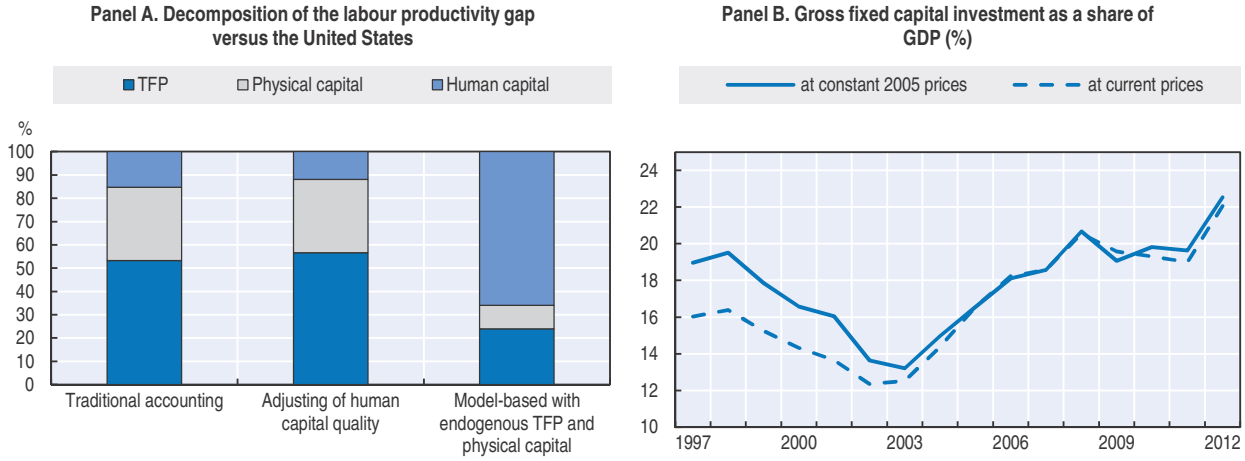
This section focuses on framework conditions and horizontal policies that might inhibit economic growth. It does not provide an exhaustive list of potential areas, but rather focuses on priority areas identified based on benchmarking exercises and firm surveys. Skills and education are analysed in detail, given the importance of human capital to explaining Uruguay's labour productivity with respect to more developed economies. Deficient R&D and innovation policies are also examined with regard to their relevance to understanding relatively low levels of productivity. Financing is also discussed as a critical area for sustaining investments and underpinning entrepreneurship and new economic activities. Finally, the section analyses potential infrastructure bottlenecks.

Human capital and total factor productivity (TFP) are currently the main drivers of the labour productivity gap with respect to more developed economies (e.g. the United States). Traditional development accounting techniques point mainly towards TFP as the principal contributor, accounting for around 53% of the gap. Physical capital contributes around 31% and human capital the remaining 16% (Figure 2.14). However, as human capital indicators are based on years of schooling, this indicator will mask differences in the quality of education and cognitive skills. Unfortunately, Uruguay has not participated in the first "Programme for the International Assessment of Adult Competencies" (PIAAC) rounds and, therefore, no comparable indicators of cognitive skills of the labour force are available as of today. Nevertheless, assuming that differences in PISA scores are a relatively good proxy, they can be employed to adjust the formal years of education used to compute human capital. By so doing, the contribution of human capital to the labour productivity gap increases to around 24%. If this same exercise is performed with respect to Korea, the contribution of quality-adjusted human capital amounts to 49% of the labour productivity gap, while physical capital would account for around 42% and TFP for just 9%. Clearly, the benchmark country matters, but human capital remains an important factor in explaining the labour productivity gap.

Furthermore, if the endogeneity of physical capital accumulation and TFP is taken into account, human capital seems to be the main factor behind the labour productivity gap. For example, physical capital investment depends on the level of efficiency of the economy, which raises the marginal return to capital. Similarly, TFP might depend on the stock of human capital, as it allows absorbing and adapting new technologies. If these endogeneities are taken into account, the human capital gap becomes the main explanation for the labour productivity gap, accounting now for two-thirds. Of course, these results depend on a series of assumptions, but they seem reasonable, especially in the light of two facts. First, the fixed capital investment rose from an average of around 15% of GDP during 1997-2004 to around 20% of GDP during 2005-12 (Figure 2.14). The modifications to the investment promotion law (Decree 455/007) and the fiscal reform of 2007 are relevant policy changes that explain part of this increase (discussed below). Additionally, physical capital has contributed significantly to recent growth in labour productivity, and estimates of the capital-output ratio are slightly above that of the United States as of 2011. Second, given the high dropout rates in secondary education, PISA results are probably upward-biased. Therefore, the estimates presented here are a lower bound for the contribution of human capital to the labour productivity gap.

The previous development accounting exercise shows that human capital, and the interaction with innovation and technological upgrading, seems to be a priority area for

Figure 2.14. **Labour productivity gaps and investment trends**




*Note:* The gap refers to the difference in PPP-adjusted GDP per worker in 2011 with respect to the United States. Traditional accounting refers to a decomposition based on a Cobb-Douglas function with a labour share of two-thirds. See Daude and Fernández-Arias (2010) for details. The adjustment for human capital quality follows Daude (2013) using PISA 2012 scores. The model-based accounting is based on Cordoba and Ripoll (2007), using the calibration by Daude (2010).

*Source:* Based on Daude, C. (2012), "Development Accounting: Lessons for Latin America", *OECD Development Centre Working Papers*, No. 313, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k97f6ws6llp-en; Daude, C. (2013), "Understanding Solow residuals in Latin America", *Economía: Journal of the Latin American Economic Association*, Vol. 13, No. 2, pp. 109-144; BCU (2014), *Uruguay Central Bank Statistics*, Banco Central de Uruguay *www.bcu.gub.uy/Estadisticas-e-Indicadores* and Penn World Tables 8.0 in Feenstra, R.C., R. Inklaar and M.P. Timmer (2013), "The Next Generation of the Penn World Table", *www.ggdc.net/pwt*.

*StatLink* http://dx.doi.org/10.1787/888933077920

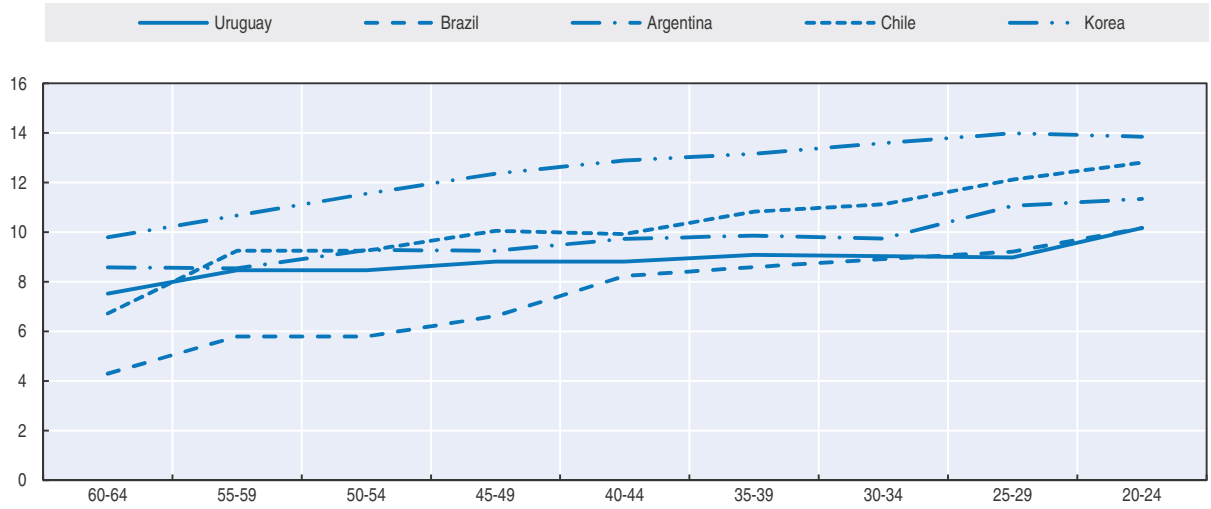
policy intervention in Uruguay. Therefore, the following section places special emphasis on these policies and framework conditions to facilitate transitioning towards a more knowledge-based economy.

### *Skills availability is a major constraint for future economic growth and upgrading*

Low human capital accumulation started more than 30 years ago. Uruguay's relative decline in human capital is evident when comparing the evolution of average years of schooling to other economies that had similar or even lower levels of formal education in the past (Figure 2.15). For cohorts of people aged between 55-59, in 2010, Uruguay presents a positive gap of 2.7 years of schooling with respect to Brazil, a similar level as Argentina and Chile, and a negative gap of 2.2 years with respect to Korea. However, all gaps are negative for the cohort aged 20-24 in 2010. Brazil has caught up with Uruguay, and Argentina and Chile outperform Uruguay by two and three years of schooling, respectively. At the same time, Korea has widened the gap by five years. Uruguay's performance is in sharp contrast to the experience of these benchmark countries, as its average years of schooling have remained constant over the last 8 five-year cohorts (Figure 2.15).

In addition to this evidence, firm and CEO opinion surveys also point towards human capital and skill shortfalls. The World Economic Forum (WEF) survey for 2008-11 ranked "an inadequately educated workforce" 7th among the most problematic factors for doing business, with 5.0-5.5% of respondents reporting this as one of their top five problems. In the 2013 survey the same factor was ranked 4th and frequency had doubled to almost 11%. Other indicators also point towards skills being a constraint. For example, the World Bank Enterprise Survey for 2010 highlighted an "inadequately educated labour force" as the 3rd major obstacle for firms, with 30.8% of respondents identifying it as a major constraint. In

Figure 2.15. **Average years of schooling by age cohorts in 2010**




*Source:* Barro, R. and J.-W. Lee (2010), "A New Data Set of Educational Attainment in the World, 1950-2010", *NBER Working Paper*, No. 15902, National Bureau of Economic Research, Cambridge, MA, (April 2013 update).

StatLink http://dx.doi.org/10.1787/888933077939

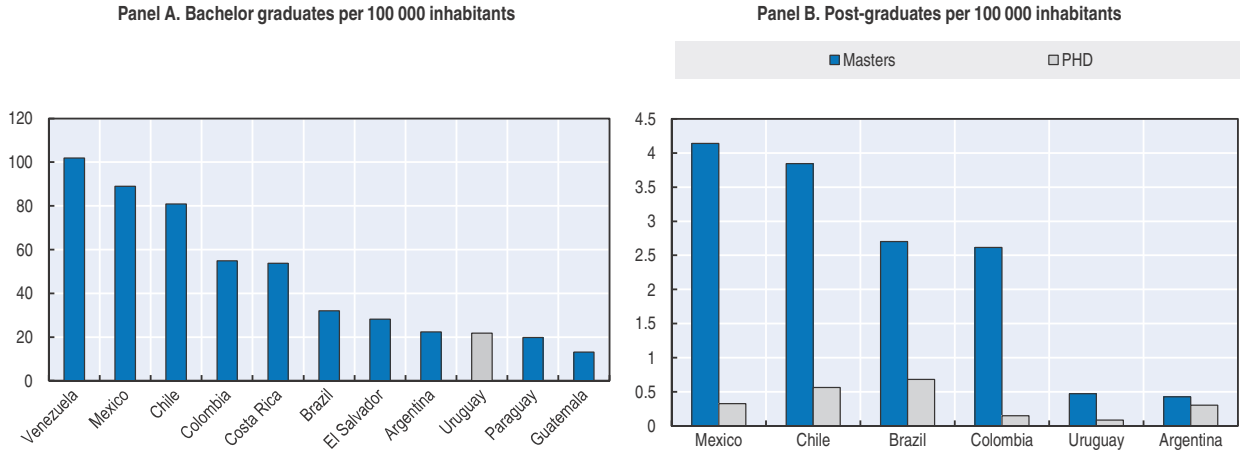
the rest of Latin America inequality has declined due to an increase in the supply of skills (Lustig, Lopez-Calva and Ortiz-Juarez, 2013), however the supply of skills does not explain the recent decline in inequality for the case of Uruguay (Perera and Llambí, 2014).

Uruguay lags behind other Latin American economies in terms of availability of high-skilled workers in the areas of engineering and technology. For example, as of 2011 the graduation rate in Uruguay for graduates with a bachelor degree in engineering and technological careers was around 22 per 100 000 inhabitants, almost four times lower than Chile (Figure 2.16). The gap in terms of postgraduates with masters or PhD studies is even larger. Furthermore, in the last ten years, graduation rates have been rather flat without substantial increases. In the case of computer sciences (Box 2.3), the lack of readily available skilled workers at a sufficient speed and scale hinders progress towards more sophisticated activities. Anecdotal evidence also highlights the relevance of this constraint. For example, the software firm Google initially considered installing a centre with an initial investment of USD 150 million, but finally opted for Chile because of the lack of sufficient qualified human resources in Uruguay.[2]

In the short term, Uruguay could alleviate these shortages by making skilled immigration more attractive and easy for international firms and their staff, and by facilitating movement from Mercosur partners. Although Mercosur has recently started to discuss how to encourage greater labour mobility within the area, in the short term it seems more feasible to implement unilateral measures in this regard. However, simplifying the procedures for skilled immigration or encouraging return migration by talented Uruguayans living abroad would probably help to remedy specific shortages, but would have only a small impact overall.

From a medium-term perspective, Uruguay has to make some important decisions regarding its education and training systems. The creation of a new public university with an applied and technological mandate (UTEC), in November of 2012, could in principle help to increase the supply of skills in relevant areas. One advantage of its planned location, mainly outside Montevideo, is to decentralise the supply of tertiary education, which tends

Figure 2.16. **Graduation rates of engineers and technology students, 2011**




*Source:* Based on RICYT (2014), *RICYT Indicators*, Red de Indicadores de Ciencia y Tecnología, *www.ricyt.org/indicadores* and World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*.

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to concentrate in the capital. This would provide more options for students that cannot afford to move to the capital to study, and could help influence the profile of graduates towards technological career relevant for the specific geographic area. For example, only one-third of students in the public university UDELAR (Universidad de la Republica) come from outside Montevideo and around 94% of students from UDELAR carry out their studies in the capital (UDELAR, 2013). In this sense, the creation of UTEC could contribute to the expansion of coverage of tertiary education and solve some potential skill shortages.

However, several critical steps must be taken to make UTEC more effective. First, it needs to be given a permanent and significant budget. The approach so far has been to create a few new degrees using infrastructure from UTU (Universidad del Trabajo Uruguay), but a more structured attitude with a long-term view of institutional development is needed. In this sense, a clearer administrative organisation and selection of staff and professors is also important. Furthermore, while the initial degrees offered seem to be in line with skills needed and not currently supplied in Uruguay (several technological degrees in agriculture and dairy production, wind energy and mechatronics), a systematic mechanism for consultation with the private sector to identify priorities areas would help to resolve these issues effectively.

At the same time, existing constraints in terms of low education attainment and achievement at the level of secondary education could limit the contribution of UTEC to solving skills shortages and equity problems. Therefore, more investments are needed, as well as curricular and administrative reforms in the formal education system, in particular to provide a larger fraction of the population with the relevant general skills needed to access more technical levels of education (see Chapter 3).

Currently, around one-third of Uruguayan firms indicate that lack of specific knowledge, experience or soft skills – that reduce resistance to change – are a key obstacle to innovation. Furthermore, low overall education levels are one of the main obstacles to increased productivity according to firms, significantly above other potential constraints such as lack of financing (IDB/ILO, 2012). The same survey shows that around 16% of firms could not cover their labour demand in 2011. The main shortages were at the intermediate

skill levels of qualified workers and artisans (31% of total replies), followed by professionals and technicians (25% of total). Most of the job positions were not filled, because the candidates were not qualified or lacked the necessary experience.

The reasons why around one-third of firms do not carry out training programmes for their workers are not completely well understood. Among small firms it seems that the workers often lack interest, while for medium-size firms some (17% of total) argued that they are unable to find relevant training programmes or options. Financing is not seen as a major problem, but almost half of all firms stated that they did not train their workforce for reasons other than lack of interest among employers or employees, lack of adequate supply of training options or finance (IDB/ILO, 2012). Small and Medium Enterprises (SMEs) might also have an incentive not to train workers, as they fear that workers will leave and take better-paid jobs at larger firms once they have acquired sufficient knowledge (OECD/ECLAC, 2012).

Several of the skills needed could, in principle, be developed by the programmes of the National Institute for Labour and Professional Training (INEFOP). Its tripartite governing structure (business associations, trade unions and the government) and the availability of funds would allow INEFOP to function as an effective tool in this regard. However, there are apparently several institutional and management problems undermining its role to identify emerging needs for public policy intervention. These problems could explain the contradictory evidence: firms and business associations complain about the lack of skilled labour and also about the existence of a significant amount of funding not being allocated by INEFOP (around USD 60 million). In the past, the decision process of its governing council, which required consensus among all representatives, was cited as an explanation for the low level of budgetary execution. However, changes in 2012 towards majority voting for most decisions have not resulted in significant movement in allocations.

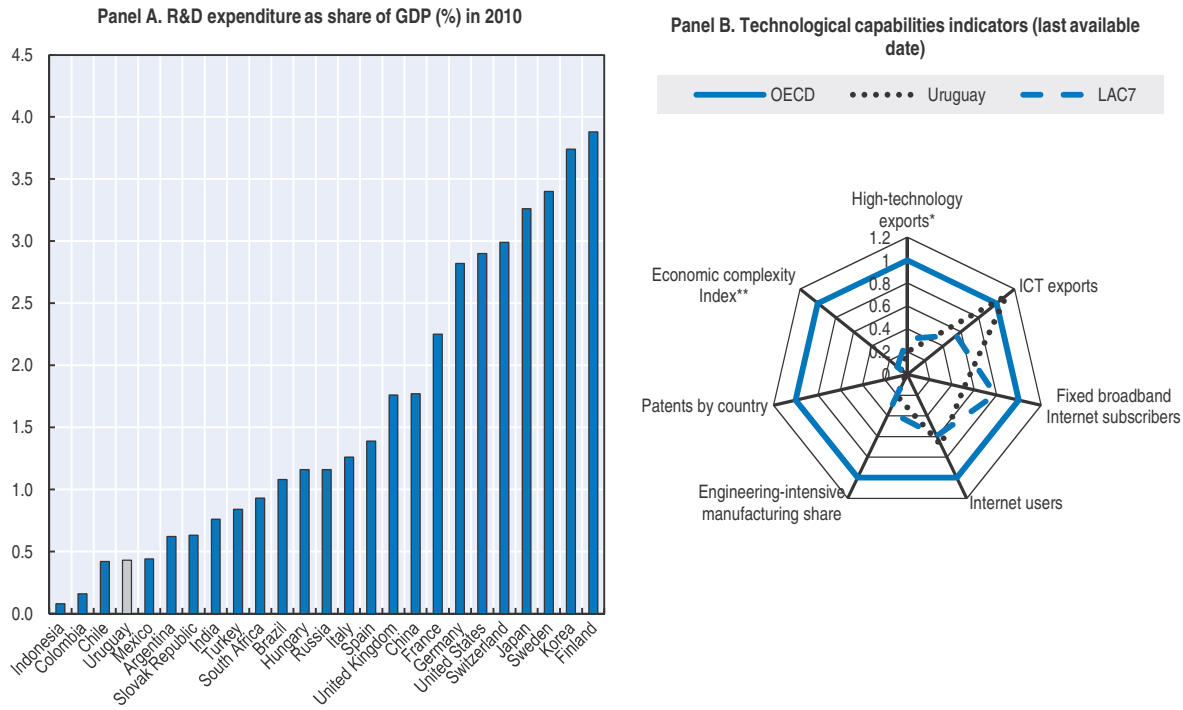
Finally, Uruguay's demographic trend will pose challenges in the future for the consolidation of the labour force. In common with some of the other countries in the region, and most OECD economies, Uruguay's demographic pattern moves towards an older population. The decrease in fertility and mortality rates explains to some extent this pattern. Between 1996 and 2014 the Uruguayan birth rate decreased by 22% (INE 2014). The share of the population aged 65 and over is estimated to increase from 13.8% as of 2014 and to 15.7% by 2025. This demographic constraint poses questions in terms of the composition of the labour force. Considering the important share of skilled workers in the country, the demographic pressure on the stock of human capital will be significant in the following decades. Recent firm surveys indicate that the proportion of non-production workers (managers, administrative, sales) to production workers is high (0.78), even when compared to countries like Mexico (0.42) or Chile (0.73) (World Bank Enterprise Surveys 2010). Therefore, it is important to increase education expenditure to improve the inadequately educated labour force.

### *R&D investment and innovation efforts show progress, but gaps are large*

Although R&D expenditure has almost doubled as a share of GDP during the last ten years, it remains well below international benchmarks. R&D expenditure in Uruguay currently represents around 0.4% of GDP, similar to other Latin American countries such as Chile or Mexico. However, the OECD median is around six times larger: 2.4%. Part of this gap is due to Uruguay's productive structure, which is less R&D intensive. However, other small and natural resource and service-oriented economies present a better performance than

Uruguay in this regard (Figure 2.17). A similar pattern emerges in terms of patents registered at the United States Patent and Trademark Office (USPTO). Uruguay registered around 10.6 patents per million inhabitants during 2002-12, slightly below Argentina or Chile, but above other countries in the region such as Brazil, Colombia, Mexico, Peru and Venezuela. However, the number is significantly below the OECD average of around 813 patents (Figure 2.17). Even compared to low performers within the OECD, such as Portugal or Greece, these economies, respectively, double or nearly triple the patents registered per million of inhabitants.

Figure 2.17. **Innovation, science and technology indicators**




*Note:* High-technology exports refer to high-technology exports as a percentage of manufactured exports. ICT exports refer to information and communication technology exports as a percentage of service exports. Fixed broadband Internet subscribers refer to the number of people subscribed to a fixed broadband per 100 people. Internet users refer to the number of Internet users per 100 people. EIS refers to the contribution of engineering-intensive sectors to manufacturing relative to the level in the United States (2005). Patents by country refer to the number of patents registered in the United States by a given country. Economic complexity index refers to the measure of productive knowledge that each country possesses.

* Circa 2010 (Uruguay 2009, LAC and OECD 2011).

** LAC7 Average excludes Venezuela.

*Source:* OECD (2012a), *OECD Science, Technology and Industry Outlook 2012*, Comparative performance of national science and innovation systems database, Network of Science and Technology Indicators OECD Publishing, Paris, *http://dx.doi.org/10.1787/sti_outlook-2012-en*; For high-technology exports, ICT service exports, fixed broadband Internet subscribers and Internet users, data from World Bank (2013), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org*. The data for Engineering-intensive manufacturing share are based on data from the World Bank's World Development Indicators and UNIDO (2013), *Industrial Statistics* (database), INDSTAT4, United Nations Industrial Development Organization. The data of Patents by country are based on data from the USTPO (2013), *Patents By Country, State, and Year,* United States Patent and Trademark Office, *www.uspto.gov*. Hausmann, R. et al. (2011), *The Atlas of Economic Complexity*, Puritan Press, Cambridge, MA is used to obtain the data from the economic complexity index.

*StatLink* http://dx.doi.org/10.1787/888933077977

The need to increase the knowledge content of economic activities has led to renewed efforts to boost innovation capabilities. An example is the creation of the National Research and Innovation Agency (ANII) in 2006. In the area of human resources, the ANII has created a national system of researchers that aims to consolidate the scientific community in Uruguay with fellowships and grants. Furthermore, by evaluating

researchers based on scientific production (e.g. journal articles) it has created incentives to increase science and technology production in the country. ANII has also created a series of funds to foster entrepreneurship, start-up incubators, quality certification, and some sectoral programmes for research and applied innovation projects in the areas of energy, agriculture, health, fishing and digital TV.

Regarding a broader set of indicators of outcomes and enabling conditions, Uruguay performs well in terms of ICT penetration and exports with respect to other countries in Latin America and the OECD. Indicators based on exports of goods or manufacturing, such as the Economic Complexity Index by Hausmann and Hidalgo (2011), as well as the share of engineering-intensive goods in total manufacturing or the share of high-tech exports, present a relatively weak performance. However, Uruguay's performance is strong when measured by the share of ICT-intensive service exports (Figure 2.17). This fact is related mainly to significant software exports, where the availability of a critical mass of human capital and a sector-specific subsidy were successful in creating a relatively dynamic software cluster (Box 2.3). Finally, Uruguay's performance is average in enabling technologies such as the Internet and broadband penetration. This fact is confirmed by other indicators such as the World Economic Forum's Global Competitiveness indicators, where Uruguay ranks relatively well in ICT dimensions (46th out of 148 countries, compared to its overall ranking of 85th).

### Box 2.3. **The ICT sector in Uruguay: A successful case of diversification**

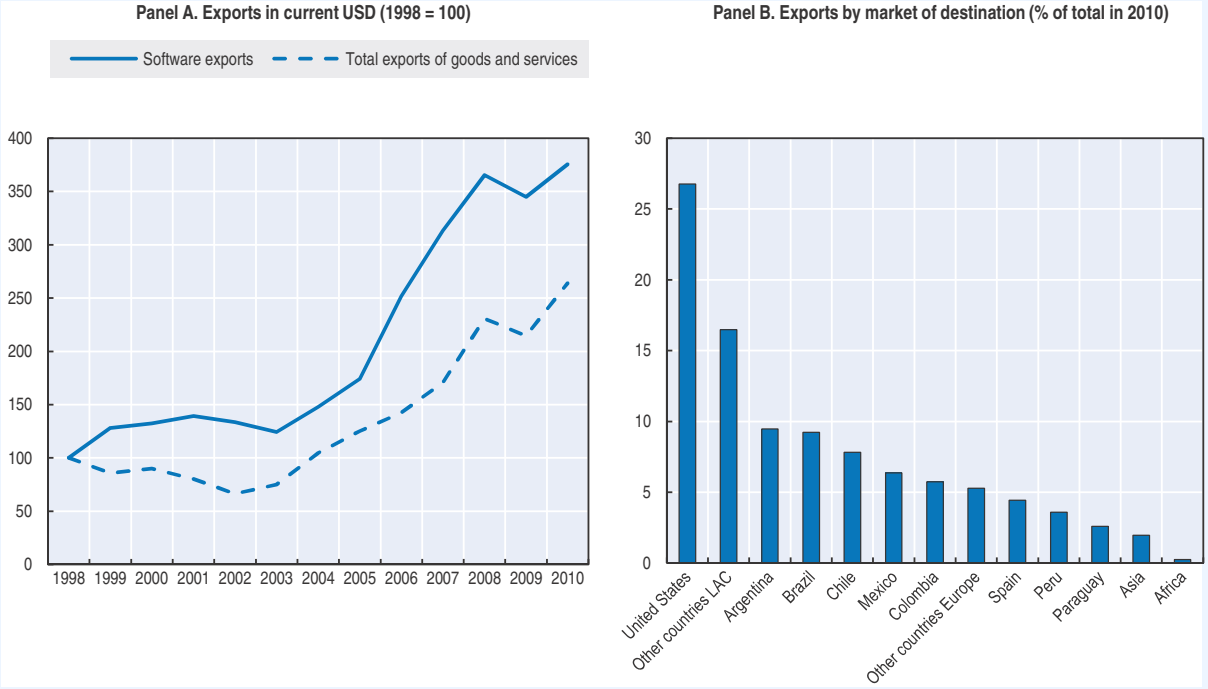
Software was one of the most dynamic service exports in Uruguay during the last decade. In 1993, exports of software were insignificant amounting to just USD 4.5 million. In 2010, software exports reached around USD 225 million. Between 2003 and 2010, software exports in current USD increased by a factor of almost 3.8, while total exports multiplied by 2.6 over the same period. In terms of economic weight, total sales in the ICT sector for 2010 represented around 1.5% of GDP, twice its relative size in 2004. Its size is similar to other successful emerging markets in this sector (Arora and Gambardella, 2004). Exports are quite diversified within Latin America, with more than 25% going to the United States and almost 10% to Europe.

The sector's first successful firm was ARTech, founded in 1988, which had to solve many uncertainties regarding regulations and markets in a country used to exporting natural-resource-based products and commodities rather than intangible services. This experience had a significant effect on potential software entrepreneurs, establishing a good reputation for Uruguayan software services abroad and proving to engineers that entrepreneurship and innovative business plans could pay off. Furthermore, knowledge spillovers could be internalised by collaborating with public and private universities, for example, in the development of a software-testing centre.

Initially the sector developed without explicit public support. However, the presence of a pool of computer science engineers, trained at the public UDELAR university and abroad, and a good public telecommunications infrastructure, proved crucial to the sector's take-off. A series of fiscal incentives were created to promote the development of the sector. In 1999, the industry was exempted from VAT (23% rate) on imported capital goods as well as property taxes (1.5% on assets). Furthermore, in 2000 the industry was exempted from corporate income tax (30% rate) and VAT on exports, which at that point applied only to goods and not services.

Box 2.3. **The ICT sector in Uruguay: A successful case of diversification** *(cont.)*

Figure 2.18. **Software exports: Growth and market diversification**




*Source:* CUTI (2011), Resultados de la encuesta annual de CUTI 2010 [Results of the CUTI 2010 annual survey], CUTI, *www.cuti.org.uy/documentos/Encuesta_Anual_de_Cuti__Resultados__2010.pdf* (accessed 1 March 2014).

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Additional factors that facilitated the development and competitiveness of the industry included: i) the initial focus on market niches and customised solutions instead of massive and standard products; ii) the small size of the initial domestic market, which focused the industry on external markets and clients abroad; and iii) the demanding standards of sophisticated clients from the outset.

In its initial phases the industry did face several internal co-ordination failures that limited its development. These were resolved through public-private sector co-operation. The creation of CUTI is symptomatic of growing efforts in the industry to enhance collective action, foster clustering and resolve problems, such as human resource training, access to global markets, certification and software testing. Beyond fiscal incentives, the public sector also responded to specific needs and impulses from the private sector by financing (with loans from international organisations) projects of the software industry, through the ANII, and by creating incubators in collaboration with private and public universities (e.g. Ingenio and Programa Emprender).

Looking forward, the main challenges for the software industry relate to the availability and adequacy of human resources in the country. Despite the industry's dynamism, graduation rates of informatics engineers have not changed significantly in the last ten years. Linkages with other sectors of the economy could also be strengthened. One interesting example is the collaboration with the traditional agricultural sector to implement a comprehensive traceability system for the beef production chain. This example highlights the potential complementarities and spillovers that efficiency gains in the software industry can have for sectors in Uruguay that traditionally have comparative advantages.

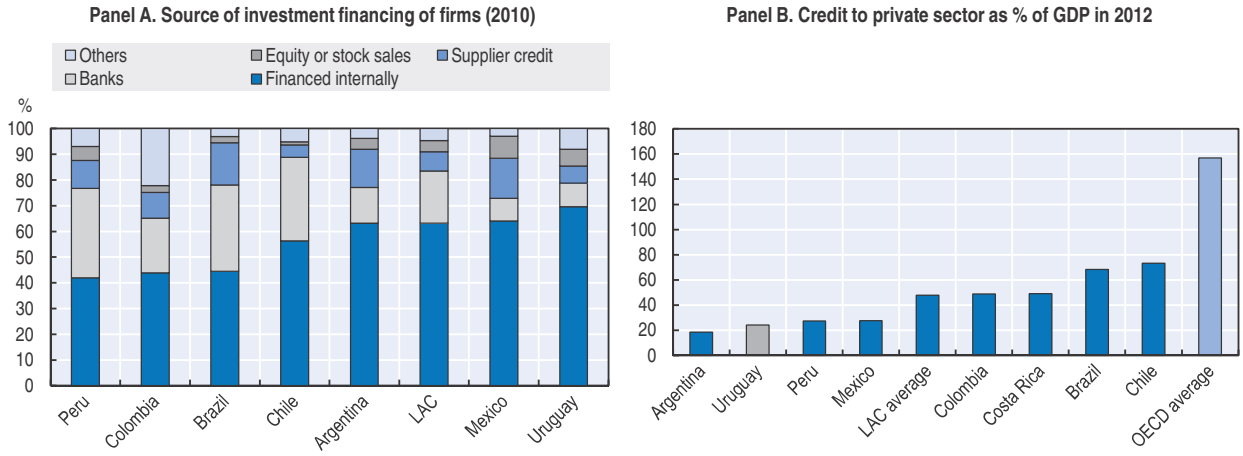
*Source:* Based on Snoeck, M. and L. Pittaluga (2012), "Software discovery in Uruguay: Public-private solutions to co-ordination failures", in C. Sabel, et al. (eds.) *Export pioneers in Latin America*, Inter-American Development Bank, Washington, DC.

### *Low financial development might become a constraint on growth*

Although there is little evidence of firms facing financial constraints, overall more financial development and sources to finance long-term investments and start-ups are needed. According to the World Bank's Enterprise Survey in 2010, just 16% of firms in Uruguay identified access to finance as a major constraint on their growth (fifth among the top ten constraints identified by firms in the country), compared to a 30% average in Latin America and the Caribbean. This might be due, in part, to the economic situation during the survey year (Uruguay grew by 8.9% in 2010), enabling firms with strong sales and profit growth to finance investments using internal funds. Uruguay's financial system is basically bank-based, as local equity and debt markets are very small. For example, market capitalisation is below 0.4% of GDP, compared to the average of 47% in Latin America and the Caribbean and 86% in OECD economies. Similarly, the local bond market is dominated by public sector issuances and corporate debt instruments play a marginal role. In contrast to other Latin American markets, and especially Asia, the development of the local government bond market has not had significant spillovers for the development of the corporate bond market.

Currently, firms finance investments with internal funds rather than bank credit. Almost 70% of investments are financed with internal funds, compared to 63% in Latin America and the Caribbean, This is generally indicative of a problem in financial intermediation (Figure 2.19). Furthermore, domestic credit to the private sector is significantly below regional peers, representing only 24% of GDP. On average domestic credit to the private sector in Latin America amounts to almost 48% and in OECD economies almost 157% of GDP (Figure 2.19).

Figure 2.19. **Indicators of financing constraints**




*Source:* World Bank (2014), *Enterprise Surveys*, *www.enterprisesurveys.org* and World Bank (2014), *Enterprise Surveys*, *www.enterprisesurveys.org*.

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In particular, long-term financing is scarce. This is quite a common feature in other Latin American economies. SMEs, in particular, face more constraints on accessing credit, because of information asymmetries between financial institutions and firms, lack of collateral or guarantees, formal loan eligibility requirements and higher evaluation transaction costs. However, in terms of rates, the interest rate differential between SMEs and large firms is relatively small (between 2-3 percentage points) compared to other Latin American countries (OECD/ECLAC, 2012). The Uruguayan system, as elsewhere in the

region, has shifted in its business model from relationship banking to a multiservice banking scheme, potentially to the detriment of small firms with no credit record. The international experience shows also that recent reforms in financial regulation, embedded in the implementation of Basel II, already adopted almost fully by Uruguay, and Basel III, have had some negative effects on access to finance for SMEs, as they increase liquidity requirements for lending (OECD/ECLAC, 2012). However, recent modifications to Basel III could ameliorate lending conditions to SMEs, as a smaller reserve ratio would be required (75% as opposed to the current 100% reserve ratio). The net impact of these two effects is still to be seen in Latin America, where implementation of Basel III has just begun. Uruguay has started implementing certain Pillar II[3] issues relating to the auto-assessment of capital by financial institutions in 2013 with the process foreseen to finish by 2017. However, evidence for OECD countries shows that most banks have internalise and are already implementing the requirements due in 2017 (Robano, 2014).

As a response to these constraints and financial crises, public financial institutions (PFIs) have regained a more prominent role in Latin America, adapting their activities to a changed financial environment characterised by stringent credit conditions and higher volatility of risk aversion. Across OECD and non-OECD countries, PFIs are a common tool for governments to address failures in the financial market and supply financial services to under-served groups, along with a broader set of economic players. In some countries, PFIs have long existed to address structural gaps in financing, thus complementing the private sector in the provision of funding for large infrastructure projects, long-term investments in the business sector or the financing of new and innovative firms (Box 2.4).

### Box 2.4. **Recent international experiences with public financial institutions**

Public financial institutions (PFI) have attracted increasing attention for their role in the aftermath of the 2007-08 global financial crisis. In many countries, PFIs increased the scale and scope of their activities, both complementing and substituting the private sector in the lending market. The complementary role was accomplished by increasing the scale of lending intended to address structural short-term financing gaps for SMEs. At the same time, in several cases, PFIs substituted private financial institutions in their role of servicing SME segments, as private players had retracted from the SME lending markets due to capital constraints (amplified also by the enhanced regulatory requirements of Basel III) and the increased volatility of risk aversion.

PFIs have become important actors in the financial system by adding the provision of financial and non-financial services, including credit for working capital, leasing, insurance, advisory services, entrepreneurial development and provision of technical assistance, and using new products such as syndication, equity and quasi-equity (OECD, 2013) to overcome the lower availability of funds. In contrast to previous decades, PFIs have focused on better risk management practices and more transparent governance schemes. In countries with long-established PFIs, these have typically been instrumental in implementing anti-crisis measures and their scope of intervention has broadened significantly, as governments aimed to strengthen recovery and boost growth. The countercyclical role of PFIs during the crisis implied mostly an amelioration of credit conditions, through debt-instruments, capital injections and bank recapitalisations. As public budgets remain somewhat stringent, co-participation with the private sector has been fostered, along with indirect instruments to ease access to credit (such as the provision of public guarantees and counter-guarantees), as well as participation in equity-type instruments.

Box 2.4. **Recent international experiences with public financial institutions** *(cont.)*

Other countries announced new PFIs: Portugal and the United Kingdom for the second half of 2014; and Ireland and Latvia in more indeterminate terms. France re-organised existing institutions to foster firm finance by creating a unique entity, *bpifrance (Banque Publique d'Investiseement)*, in February 2013. These PFIs are intended to operate as institutions with a development mandate and a wholesale business model (providing funds through other financial intermediaries), promoting private co-participation in the financing of firms (financing from own funding is capped at about 35-50% of the whole project). Apart from amelioration of the conditions of traditional debt lending (offering higher maturities and administered interest rates), new direct and indirect instruments have been created to reduce financial constraints, with increased co-participation of the private sector. The use of indirect instruments, such as credit guarantee schemes, allows for more leverage of public funds than direct lending.

Recent OECD work identifies a set of good practices regarding the financing of firms through PFIs. In terms of the institutional dimension, having a clear mandate (be it broad or narrow) reduces uncertainty for the private sector, which can expand its activities without being concerned about unfair competition (by providing funds at a lower rate) from the public sector. In addition, a clear mandate limits the possibility of the PFI pursuing activities other than those intended by the government ("mission drift"), or avoiding difficult or costly activities ("mission shrink") (Thorne, 2011). A clear mandate also enables performance assessment and limits the scope for political interference. Recent experiences across OECD and non-OECD countries include the reorganisation of development activities towards a "one-stop window" (i.e. in France since 2013 and in Costa Rica since 2008) in order to reduce bureaucracy and eliminate possible duplication of activities when several development institutions are charged with the same mission, harming co-ordination and leading to inefficiencies (Robano, 2014).

Most PFIs have a government-appointed board (Robano, 2014). Nevertheless, the governance arrangements should guarantee the quality of the management team and the sustainability of the business model undertaken by the institution (Rudolph, 2010). A government-appointed board presents the risk of political interference and poses a set of conflicts for government, which must navigate between its supervisory role and the business role of the institution, and between managerial incentives and the pursuance of development activities.

Across both OECD and non-OECD countries, there is increased awareness of the need for accountability in the use of public funds. PFIs might represent a solution to a structural problem concerning access to finance, but the optimality of the credit provision needs to be assessed, whether through direct lending or indirect provision.

*Source:* Based on Robano, V. (2014), "The role of public financial institutions in fostering SME's access to finance", Document CFE/SME(2013)8, OECD, Paris and OECD (2013), *Perspectives on Global Development 2013: Industrial Policies in a Changing World*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/persp_glob_dev-2013-en.*

Recently, indirect instruments such as credit guarantees have been created to reduce financial constraints. Credit guarantee schemes (CGSs), both public and private, have grown significantly in Latin America to ease financial constraints for SMEs and start-ups, and encourage firm financing through short-term counter-cyclical lending. Following this trend, credit schemes in Uruguay have been strengthened. In 2008, the National System of Guarantees for Enterprises (SIGA) was created and in 2013 it registered 1 940 operations,

accounting for USD 26 million in guarantees (70% of these in foreign currency) and USD 57 million in credits. This represents a 23% increase in guarantees granted and a 26% increase in credit with respect to 2011. Montevideo accounts for most credit operations (44% of the total in 2013) while the rest of the country, mainly Canelones, Paysandú, Soriano and Maldonado, accounts for the remainder (56%). Interestingly, the maturity of loans remains an issue with 78% of loans being short-term in 2011 and 82% in 2013.

A potentially more significant source of funding is the recently created National Development Fund (FONDES). The fund was created to finance projects of interest for the government and focuses mainly on extending credit to workers' co-operatives that have taken over firms that filed for bankruptcy. Financing comes from the public-owned commercial bank BROU, which has to contribute up to 30% of its profits to the fund per annum. These transfers amounted to USD 67 million in 2012, and are foreseen to be around USD 57 million in 2013.

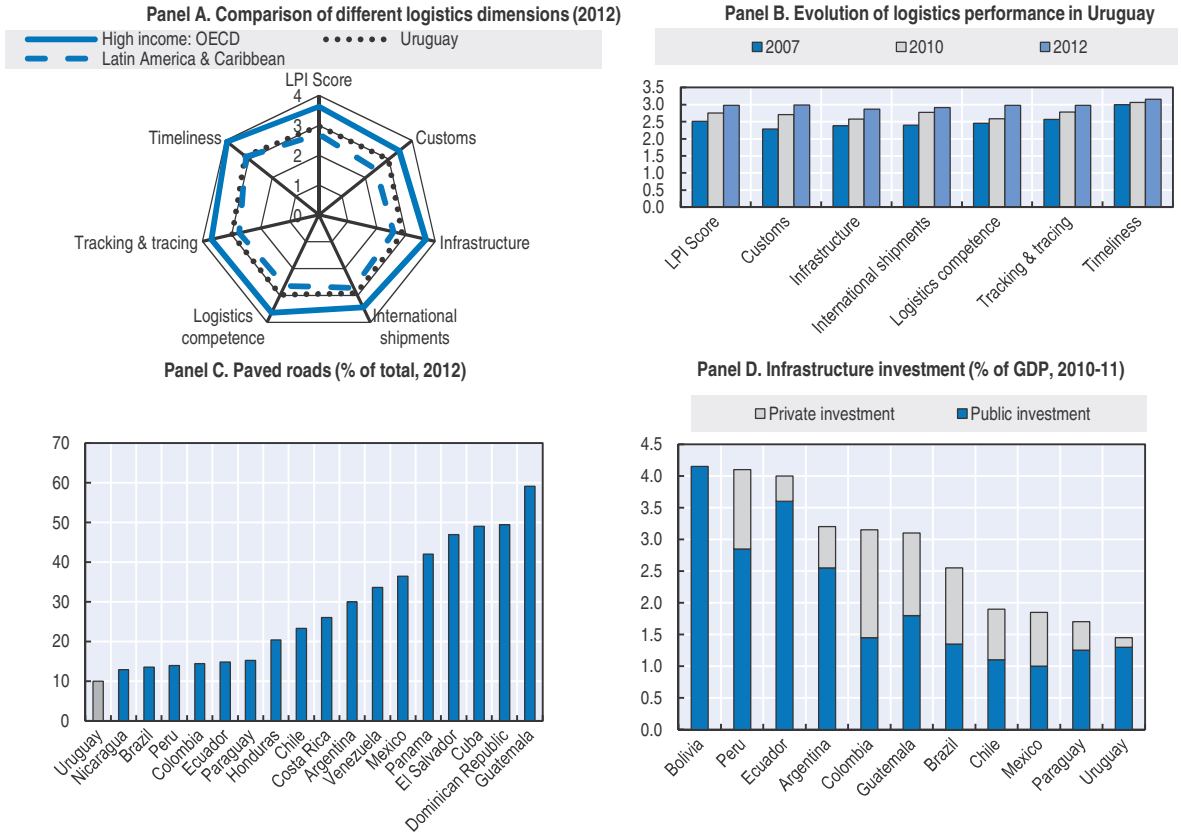
However, for these funds to become an effective tool for development, adjustments to the current institutional framework are needed. In principle, the mandate of FONDES is broader than financing co-operative projects and several of the founding articles (decree 341/011 and 117/013) limit the degree of discretionarily in the decision-making process. In practice, the current set-up of the board, composed of delegates from ministries and the Presidential Office for Planning and Budget (OPP), seems to tilt the decision process towards politically motivated projects rather than those with the highest economic or social returns. A more independent and transparent corporate governance could help strengthen the outcomes of FONDES activities and broaden their scope towards financing entrepreneurship beyond co-operatives. For example, consolidating FONDES and other small funds administered by different agencies within the National Development Agency (which was created in 2008 but never became operational) or the National Development Corporation (CND), would probably help in this respect. The recent experience of OECD countries in creating national development banks or agencies might be an interesting source of institutional and corporate governance alternatives (Box 2.4).

### *Infrastructure bottlenecks could limit growth in the near future*

While most indicators confirm that infrastructure is currently not a binding constraint, strong economic growth in the last decade as well as its sectorial composition has placed greater stress on transport infrastructures and energy markets. For example, as the primary sector (agriculture, forestation, etc.) contributes significantly more to exports nowadays, transport infrastructure is used much more intensively than in the past. Uruguay ranks relatively well in terms of logistics, which includes regulations and other aspects that affect the cost of moving goods towards markets. Performance is good especially in terms of customs, timeliness and logistics competence (Figure 2.20). Furthermore, Uruguay has made improvements in logistics, increasing its overall performance index (LPI) by almost 0.5 between 2007 and 2012; the biggest improvement within Latin America. It is also economically significant: on average such an enhancement is associated with an increase in labour productivity of around 17% (OECD/ECLAC/CAF, 2013).

However, in terms of infrastructure the gap with respect to OECD countries remains relatively large. This is consistent with the WEF survey results which rank infrastructure as the third most prominent constraint in terms of doing business. Furthermore, the relatively good average ranking is the result of differences across different types of infrastructure. While the quality of ports, electricity supply and telecommunication is

Figure 2.20. **Logistics performance and infrastructure indicators**




* The Logistics Performance Index (LPI) has a scale of 1 to 5, where 5 represents the best logistics performance.

*Source:* World Bank (2013), *World Development Indicators (database)*, Washington, DC, *http://data.worldbank.org*., CAF (2013), *Infrastructure in Latin America's comprehensive development*, CAF, Montevideo.

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generally good, Uruguay ranks much lower in terms of transport infrastructure, for example, in railroad infrastructure (117 out of 148). Uruguay also presents the lowest proportion of paved roads, a commonly used indicator of road quality (Figure 2.20).

Uruguay's main problem with roads is one of quality rather than coverage. While coverage is considered to be adequate and substantially better than the average in Latin America, quality has worsened, with up to 55% of roads in mediocre or bad condition in 2012 up from around 50% in 2005 (Cáceres and Farinasso, 2013). As almost 97% of commercial cargo in Uruguay is transported via roads, poor condition can have a significant impact on economic activity. Private estimates show that an additional investment of around USD 1 300 million – around 2.3% of GDP in 2013 – would be needed to make up for insufficient maintenance investments since 2000. This investment amounts to three times the amount of Uruguay's overall infrastructure investment in recent years (Figure 2.20). Furthermore, when the additional road investments needed for forestry and agricultural projects are taken into consideration, as well as the maintenance investment to avoid further deterioration, the whole budget would amount to around 1.4% of GDP between 2015 and 2020.[4] Nevertheless, some estimates show that most of the investment needed could be financed through the existing tax system and fees (Cáceres and Farinasso, 2013).

In addition, complementary investments in ports and railroad are needed to keep up with infrastructure needs, especially from seeds and forestry-related production. In terms of ports, the main issues are whether iron-ore mining is to be developed on a large scale, and whether Uruguay will reach agreements with some of its partners in Mercosur to justify investment in a deep-water port. Furthermore, investments are needed to dredge the access canals to the port of Montevideo, the Martín García canal and those of the River Plate. The estimated required investments over the next 15 years amount to around USD 1 734 million of which USD 920 million would have to be carried out by the public sector (Olazábal, 2013a, 2013b). Despite its environmental and safety advantages, the railroad infrastructure is currently underdeveloped. An investment of around 2% of GDP could boost railroads as a cleaner and more cost-efficient alternative to roads.

According to a survey conducted by the OECD among policy makers in the infrastructure and transport sectors, the most relevant challenge in Uruguay is the co-ordination of public policies, compared to other features such as stability, adaptability, public interest consideration and effectiveness. This result, while also often observed in other Latin American economies (Nieto-Parra, Olivera and Tibocha, 2013), can affect the nature and quality of public policies in infrastructure. Essential aspects of the decision-making process such as assessing the costs and benefits of new investments and creating independent regulatory institutions are key to efficiency (Sutherland et al., 2009). Efforts have been made to improve co-ordination and involve major stakeholders in the transport sector. On example is the National Institute of Logistics in Uruguay, which brings together both public and private actors to promote and further develop logistics capacities. However, more could be done. For instance, a key challenge is to avoid the overlapping of responsibilities between actors in air transportation, where the existence of DINACIA (*Dirección Nacional de Aviación Civil e Infraestructura Aeronáutica*) in addition to the Ministry of Transport does not necessarily promote effective air transport policies.

Public-private partnerships and concessions can make Uruguay more competitive. Because the financing needs listed above are relatively high, private investment has an important role to play in the construction and administration of infrastructure services. Appropriate private-sector involvement can limit future fiscal costs and reduce logistics costs. Regulatory aspects (such as price caps and tenders) and institutional and political aspects (such as the quality of administration, election cycles and the degree of independence of regulators) have been identified as determining factors of these renegotiations in Latin America (Bitran, Nieto-Parra and Robledo, 2013; Guasch, Laffont and Straub, 2008). Similarly to other Latin American countries, the proportion of contracts renegotiated in Uruguay is close to 40% of the total number of concession contracts, according to a survey of policy makers (Nieto-Parra, Olivera and Tibocha, 2013). This might end up increasing costs and uncertainty. Recently, legislation for public-private partnerships (PPP) has improved considerably in line with OECD principles (OECD, 2007, 2012b). However, the current system can still be improved. For example, certain adjustments could reduce the possibility of future renegotiations and promote effective investment in infrastructure (EIU, 2013).

There are three inherent demands that governments need to face when deciding to adopt PPPs. First, the public sector must be a prudent fiscal actor. It falls on government to ensure that the PPP is affordable, that it represents best value for money (see below), and that any fiscal risks, such as contingent liabilities, are limited. Second, the demands for investment from particular sectors such as transportation, health and education have to be

assessed prudently against each other so that the projects that are pursued are those that yield the highest return on investment for society as a whole. Finally, private investors will wish to make the best deals possible. This often means limiting the amount of risk they carry. However, inadequate risk transfer to the private investor undermines the rationale for undertaking PPPs in the first place. Governments must thus balance the risks taken by the private sector and those retained by the public sector in light of a realistic assessment of the price of these contracts. The OECD's PPP Principles (Box 2.5) were developed as a guide to governments on how to organise their public governance system so that it enables them to be prudent fiscal actors, prioritise between projects and construct viable PPP projects that will attract the private sector actors and result in a greater public welfare, which is an important consideration for Uruguay.

Box 2.5. **OECD Recommendation on Principles of Public Governance of PPPs**

**A. Establish a clear, predictable and legitimate institutional framework supported by competent and well-resourced authorities**

1. The political leadership should ensure public awareness of the relative costs, benefits and risks of Public-Private Partnerships and conventional procurement.
2. Key institutional roles and responsibilities should be maintained.
3. Ensure that all significant regulation affecting the operation of Public-Private Partnerships is clear, transparent and enforced.

**B. Ground the selection of Public-Private Partnerships in Value for Money**

1. All investment projects should be prioritised at senior political level.
2. Carefully investigate which investment method is likely to yield most value for money.
3. Transfer the risks to those that manage them best.
4. The procuring authorities should be prepared for the operational phase of the Public-Private Partnerships.
5. Value for money should be maintained when renegotiating.
6. Government should ensure there is sufficient competition in the market.

**C. Use the budgetary process transparently to minimise fiscal risks and ensure the integrity of the procurement process**

1. In line with the government's fiscal policy, the Central Budget Authority should ensure that the project is affordable and the overall investment envelope is sustainable.
2. The project should be treated transparently in the budget process.
3. Government should guard against waste and corruption by ensuring the integrity of the procurement process.

*Source:* OECD (2012), *Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships*, OECD, Paris, *www.oecd.org/gov/budgeting/PPP-Recommendation.pdf.*

The PPP Principles' recommendation emphasises three key issues: i) a capable and suitable institutional framework, ii) a focus on value for money and iii) integrating PPPs in the ordinary budget process. First, competent and well-regulated authorities are instrumental in establishing a clear, predictable, and legitimate institutional framework. In addition to creating broad public awareness around PPPs, co-ordination among key institutional players such as the Central Budget Authority (usually the Ministry of Finance)

or the Supreme Audit Institution is needed for the proper execution of projects. The authority that is procuring the PPP is the institution ultimately responsible for the project, subject to approval, monitoring and advice from the other actors at various stages. In OECD member countries, critical skills to ensure value for money are often concentrated in one or more PPP Units that are made available to the relevant authorities. Such capacity enhancement should not create parallel structures of power to Ministries of Finance or Infrastructure, but enhance the established lines of action and accountability. Indeed, the funding, scope and assessment of dedicated PPP units should not create administrative incentives for or against PPPs (OECD, 2010b).

Second, value for money should be the main criterion for the selection of PPPs over traditional infrastructure procurement. By value for money it means the optimal combination of quality, features and price, calculated over the duration of the project. A key factor is being able to classify, measure, and contractually allocate risk to the party best able to manage it and the ability to monitor the PPP contract through its life. Value for money should be maintained when renegotiating. One of the biggest challenges in Uruguay, and in other countries, is the public sector's lack of preparation during the operational phase of PPP projects, including during renegotiations. The required capacity to ensure value for money thus needs to be built at the institutional level. Third, a transparent budget process that clearly discloses the government's commitments and contingent liabilities is essential in limiting and managing fiscal risks. A clear assessment of the project's affordability and a procurement process that displays integrity will support the government in that regard.

Uruguay can draw useful lessons from OECD practices related to PPPs. The adaptation of favourable policy settings in countries that have accumulated considerable experience in using PPPs, such as the UK and France, can be useful in the context of Uruguay. OECD experiences suggest that PPP contracts are best suited for projects with stable demand, limited need for flexibility in the usage of the assets and very little expected change in the relevant technology (OECD, 2012b). Regardless of the type of project, the complexity of PPPs requires a number of capacities in government both in terms of skills, institutional structures and legal framework. Grounding the choice for PPPs in good governance is the best tool for successful results.

Furthermore, the framework on public procurement has been modified in recent years to include requirements that allow Latin American governments to ensure the social and environmental sustainability in the process. Even though it is in an early stage of development, 13 out of the 32 members of the Inter-American Network on Government Procurement have regulations in place to ensure sustainability of the projects approved, although at present Uruguay does not. Six out of these 13 countries have included processes to enhance environmental sustainability in public procurement regulation and agreements. Of these 13 countries, Dominican Republic, Granada, Honduras and Mexico include environmental variables in the criteria used for evaluation. Also, Costa Rica, El Salvador and Nicaragua require an environmental assessment as one of the project approval criteria.

Still Latin America faces challenges in the implementation of environmental criteria during the public procurement process. Main challenges include: lack of knowledge and information on sustainable public procurement, scarcity of suppliers, lack of adequate legislation and the potential effect of the regulation in the prices (OECD, 2014b).

### *Environmental and energy performance is essential for Uruguay's sustainable development*

Uruguay benefits from vast natural resources, concentrated in land, waterways and oceans. The country surface extends for more than 176 million acres, of which 92% were mainly used for primary activities such as livestock farming (70%), agriculture (13%), or foresting (7%), in 2011. The land occupied by forests (whether natural or planted) accounted for 10% of Uruguay's total land. Renewable internal freshwater resources amounted to a total of 59 billion cubic metres during 2011 in Uruguay. Only 6% of these resources were used for industrial or domestic purposes, whereas the majority of freshwater withdrawals (87%) were used for agricultural purposes. These freshwater resources also allow the development of hydroelectric power plants, as 70% of primary energy supply produced in the country (only 42% of the total primary energy supply is produced in the country) was done via hydro-energy. The country also has access to the South Occidental Atlantic Ocean, with over 660 km of coast line and a 142 mil $km^2$ of national sea. It has access to around 150 thousand metric tonnes of sustainable fishing per year. The mining sector, which mainly extracts non-metallic minerals, only accounted for 0.12% of the national surface (0.33% of GDP) in 2011, yet it shows signs of further development (see chapter 4).

In terms of energy, total primary energy supply (TPES) has increased by more than 43% from 3.09 to 4.43 million tonnes of oil equivalent (Mtoe) in Uruguay, between 2000 and 2011. However, only 42% of this energy is produced in the country, with around 95% of the energy imported produced with oil. From the TPES produced in the country 70% of this is produced using hydro energy, with the remaining energy produced by alternative means (solar, wind, tide, etc.) or biofuels and waste. Total final consumption (TFC) of energy in Uruguay is distributed among different sectors; in 2011 the industrial sector was the biggest consumer of energy in the country (33% of TFC), followed by the transport sector (29%) and residences (21%). $CO_2$ emissions (measured as tonnes of $CO_2$ per capita) have been increasing over the last few years; in fact, between 2004 and 2011, $CO_2$ emissions have increased 34% passing from 1.63 tonnes of $CO_2$ per person to 2.25; still considerably lower than the 9.9 tonnes of $CO_2$ per person presented in OECD economies or slightly lower than the Latin American economies (3.3). On the contrary, GHG emissions have considerably decreased in the last years. The decrease has averaged 8% per year since 2005, reaching an emission intensity of 0.81 per USD of GDP (at 2005 purchasing power parities). However, these levels are higher than the ones presented in OECD economies (0.35) or Latin American economies (0.57). Uruguay's air quality is relatively clean compared to Latin American economies. Average $PM_{10}$ concentrations in Montevideo in 2009 (39) are relatively low compared with other Latin American capitals such as Lima (78), Mexico (52), Santiago (71). However, it underperforms when compared to OECD capitals such as Berlin (26), Brussels (28), Helsinki (20) and Vienna (25).

Uruguay's reliance on hydroelectricity has exposed the country to vulnerabilities in terms of supply, but diversification is underway. The only other alternative for generating electricity until recently was imported fuels. Therefore, times of drought would have a significant impact on the cost of generation. Although increases in costs have generally not been passed on to the consumer by the stated-owned distribution and main generation company, UTE, they have imposed significant fiscal costs. For example, in 2012 the droughts resulted in a shortfall of around 1 percentage point of GDP between UTE's income and costs.[5] The creation of the energy stabilisation fund – Fondo de Estabilización Energética (FEE) – in 2010 reduced the fiscal risks associated with these fluctuations in the

cost of generation. In recent years, there have also been efforts to diversify the energy matrix towards other sources of renewable energy. BROU has special lines for financing investments in renewable energy sources (Robano, 2014). In 2012, renewable energies represented around 40% of the total supply. Biomass generation represents around 10% and significant private investments are being made in wind power generation. Furthermore, the recently approved concession for GDF Suez to build and exploit a gasification plant in the port of Montevideo, over 20 years, would also contribute to lowering the cost of electricity and emissions. This investment is estimated to amount to around USD 1 125 million, around 2% of GDP as of 2013. Therefore, if the projected investments take place, the medium-term gains for Uruguay will be a steady increase in the supply of power, diversification in its sources, and an increase in renewable clean energies.

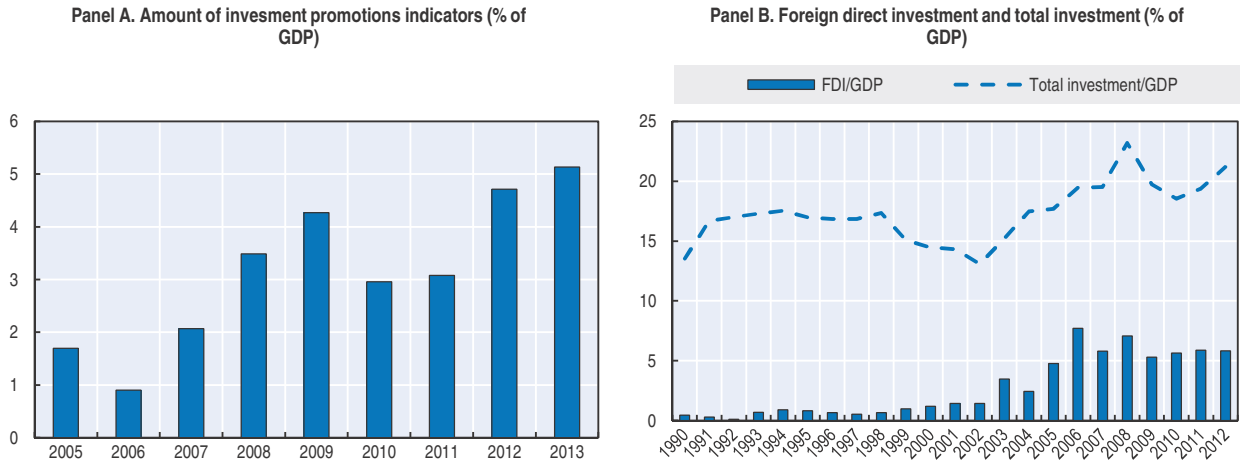
### *Current productive development policies require a more careful evaluation*

The main policy instruments to stimulate the private sector – in addition to some incentives to trade such as export credit and pre-export tax refunds – are based mainly on tax incentives for investment, a special tax regime for free trade zones, and several sector-specific subsidies. Other countries in the region have implemented similar programmes for enhancing investment (see Box 2.6).

Decree 455/007 in 2007 introduced some key changes in the application and administration of existing investment promotion law. In particular, it extended the benefits beyond limited companies; broadened the eligible sectors beyond industrial, agriculture and livestock; and allowed investments financed with external funds to qualify. Furthermore, some administrative rules that increased the cost of access were removed. A new set of performance criteria for assigning tax benefits were approved, including: employment, decentralisation, increases in exports, value added creation, clean energy usage and R&D expenditure. The magnitude of tax subsidies and the duration period of these benefits are assigned according to these criteria, up to 100% of exemption of the corporate income tax for up to 25 years. Other tax benefits are generous, exempting all building structures from property tax for between eight and ten years, all fixed assets for their whole useful life, and VAT tax reductions on certain imported assets.

Although it is difficult to evaluate the impact of this change, clearly investment as well as the use of the general investment promotion instrument picked up after the changes in 2007. In 2005-07, the projects approved under the investment promotion regime amounted to between 0.9% and 2.0% of GDP. In 2012 and 2013 this figure amounted to 4.7% and 5.1%, respectively (Figure 2.21). According to official figures, between 2005 and 2013, approximately 25% of total private investment took advantage of these benefits. While it is difficult to quantify how many of these investments would have otherwise taken place, clearly this widespread use raises concerns. As firms have been using the instrument more intensively, tax expenditures related to them have increased. Despite evidence that, on average, social benefits exceed costs, there is room to reduce revenue loss and focus on high-impact projects (Gervaz, 2012). In terms of corporate income tax (CIT) foregone, estimates by the tax administration amount to 0.5% of GDP. In part, the changes introduced in 2012 address some of these issues, but more could be done. Some criteria should be re-evaluated according to the state of the economy. For example, employment creation in a situation of full employment might not be as relevant as the type of R&D investments or linkages to local providers.

Figure 2.21. **Evolution of investment promotion indicators**




*Source:* MEF (2014), *Economic indicators*, Ministerio de Economía y Finanzas, https://www.mef.gub.uy/indicadores.php, COMAP (2014), *COMAP statistics*, Comisión de Aplicación de la Ley de Inversiones, *www.mef.gub.uy/comap_estadisticas.php*, IMF (2014), *World Economic Outlook Database*, International Monetary Fund, April 2014 Edition, Washington DC.

StatLink http://dx.doi.org/10.1787/888933078053

Another characteristic related to the investment promotion mechanism, but especially the FTZ, is the significant increase in foreign direct investment (FDI) since the early 2000s (Figure 2.21). In particular, the two large pulp mills of UPM and more recently Montes del Plata represent a significant share of these FDI flows, both operating under the FTZ regime. It is not clear whether these incentives were necessary to attract these investments, as the investments in forestry were made in part several years ago (with another sector-specific subsidy) and pulp mills would probably have located during this period anyway under reasonable general framework conditions and the general investment exemptions. In terms of CIT tax expenditures, FTZ represent 0.6% of GDP as of 2012, while for property taxes, tax expenditure amounts to around 0.2% of GDP.

The legislation that created and regulates FTZs was established in 1987 with the objective to promote investment, increase exports, augment employment and foster the integration of Uruguay into the global economy, with a special focus on services. The creation of the regime was part of a more general agenda of trade liberalisation and export promotion during the late 1980s and early 1990s. The FTZs are regulated and supervised by the Minister of Finance and Economics. In terms of tax and regulatory exemptions, FTZs are exempted from all taxes – including those that by law need a specific exemption, with the exception of social security contributions. Firms have to employ at least 75% of Uruguayan citizens to qualify for the exemptions. Furthermore, the state-owned monopolies in services (such as some elements of telecommunications) do not apply to FTZs. Tax exemptions have definitely played a role in attracting investment to the FTZs, but the stability of the regime, which has not suffered any significant changes in 25 years, was likely to have contributed to reducing uncertainty for investments. Moreover, the possibility of investing in specific communications infrastructure at competitive costs in the early 2000s was an important factor in attracting investments (Lalanne and Vaillant, 2014).

Some of the sector-specific instruments (subsidies) have supported declining sectors that have not provided an effective turnaround in performance. This calls for a revision of these subsidies. In particular, the textile and garment industry, as well as the auto industry,

### Box 2.6. **Investment promotion: How the OECD works in Latin America**

The investment-development nexus is at the core of OECD work. For international investment to support sustainable development, a balance is needed that combines rights and obligations and recognises that the benefits of investment globalisation need to be shared. The OECD has been the lead global source of best practice and instruments for international investment policy, promoting the principles of openness, transparency and fairness embodied in the Declaration on International Investment and Multinational Enterprises. Today, the vast majority of countries use open, rules-based investment regimes to attract investment. There is also growing interest in promoting responsible business, including in major emerging markets.

Seven countries in Latin America – Argentina, Brazil, Colombia, Costa Rica and Peru, as well as Chile and Mexico – have adhered to the OECD Declaration. An adherent to the Declaration commits to providing national treatment to foreign investors and to promoting responsible business conduct, in line with the Guidelines for Multinational Enterprises. In turn, the country benefits from similar assurances from other adherents to treat their investors fairly.

Investment is closely linked to other policy areas, such as trade, tax, competition, skills, to name just a few, and a comprehensive and systematic approach is necessary for improving investment conditions. The Policy Framework for Investment (PFI) – developed in co-operation with many developing and transition economies as a follow-up to the UN Monterrey Consensus on Financing for Development – has been used in some 30 countries since 2006 to assess policies, identify priorities and kick-start the necessary actions. The PFI is currently being revised though an inclusive process.

Through its Investment Policy Reviews (IPRs), based on the PFI, the OECD addresses achievements in developing an open and transparent investment regime and efforts to reduce restrictions on international investment. Countries usually select specific areas where they can benefit more from knowledge-sharing and interaction with the OECD policy community. In countries that have undertaken Investment Policy Reviews, in Latin America and elsewhere, the PFI-based processes have brought together a wide range of stakeholders across all relevant sectors in the government and business communities. As such the IPR exercises have contributed towards enhanced policy coherence at the national level, which is critical for successful policy implementation. For example, the Costa Rica Review recommends making better use of Public Private Partnerships (PPP) in the fields of transport and electricity, to develop management expertise, and offer more opportunities for foreign investors to participate in PPP projects. It also encourages the authorities to continue efforts to fight corruption in the public sector and foreign bribery, as set out in the Guidelines for Multinational Enterprises, part of the Declaration.

The OECD has also been active in the region through the Latin America and the Caribbean (LAC) Investment Initiative. It was established in 2010 and aims at enhancing regional economic integration through policy dialogue, capacity-building and the use of the PFI. The Initiative's next meeting will be held in Lima, Peru in July 2014.

The Inter-American Development Bank (IDB) has worked closely with the OECD on these activities. The IDB financed the IPR processes of Colombia in 2011 and Costa Rica in 2013 and has also supported generously the LAC Initiative.

*Source:* OECD (2014) *Latin America and Caribbean-OECD Investment Initiative*, OECD, Paris, *www.oecd.org/corporate/mne/latin-america-caribbean-investment-initiative.htm*.

have received significant support in the form of sector-specific subsidies. However, textile and garment production has continued to decline; as of October 2013 production was less than half that of 2007 when the subsidy was approved. Employment also declined in the sector by around 44% during the period. Therefore, the adjustment seems to be taking place despite the support. Other instruments that would help workers move towards other activities – especially in the favourable context of a very tight labour market – would be more efficient. The automobile and auto-parts sector has received special support since the creation of Mercosur in the early 1990s, which amounts to 10% of the free-on-board (FOB) value of exports. This might seem a relatively small subsidy, but as imported intermediate goods amount to around 80% of the gross value of production in assembling and around 60% in auto parts, it actually represents a large subsidy in terms of value added. In some cases, the subsidy is greater than the total wage bill of the sector. Despite these generous subsidies, the sector has not become competitive. Furthermore, while the subsidy was created initially as a temporary measure, it was later extended indefinitely (MEF, 2013).

### *Expanding international market access from within Mercosur: A complex reality*

FTZs have contributed significantly to a more diversified export basket and contributed value added to the economy, but Uruguay faces challenges in increasing market access, despite efforts to increase trade facilitation. The country has conducted a process of commercial liberalisation during the past two decades. Through unilateral trade opening and bilateral accords, it has gradually reduced its original anti-export bias. FDI regulation has developed in parallel, allowing for a significant surge in the arrival of external capital. This trend gained momentum during the last decade, particularly in export-oriented sectors. With regard to multilateral accords, the Uruguay Round (1994) led to a more adequate framework for trade defence instruments, as well as for harmonising domestic trade policy. Market access, on the contrary, did not register significant improvements. Preferential trade accords experienced a landmark with the passing of Mercosur in 1991. Initially, the most important effect of the accord was the increase in import competition from intra-regional goods. In parallel, there was a significant adjustment in many manufacturing industries, which previously benefited from trade protectionism. At the time of its inception (1994), the agreement envisioned a path of convergence of national policies towards a common Mercosur commercial policy. Nevertheless, after two decades the degree of compliance of national trade policies with the common trade policy is still low. In fact, the balance thus far can be summarised by the completion of a free trade area and a series of policy harmonisations, without reaching a true custom union.

Several factors have disrupted the development of a common commercial policy front within Mercosur. First, free trade within the area is very uncertain, due to the proliferation of non-tariff barriers to trade (NTBs), a practice that stands in the way of greater intra-regional trade. Thus, the creation of a common trade policy has also been complicated by the lack of harmonisation with regards to bilateral trade agreements. As with the rest of Mercosur members, Uruguay is subject to trade compromises with some countries, both through an existing bilateral trade agreement and that developed under Mercosur. This duplicity is especially evident in the case of Andean countries.

The slow progress of Mercosur in securing common preferential trade agreements (PTAs) with third countries has led successive Uruguayan administrations (Jorge Batlle, 2000-04,

and Tabaré Vazquez, 2005-09) to push the agenda of bilateral trade agreements. Trade negotiations with the United States started in 2002, which eventually resulted in a Bilateral Investment Treaty (BIT) in 2006. A year later a Trade and Investment Framework Agreement (TIFA) came into place. In addition, Uruguay signed an FTA with Mexico in 2004, which aimed to negotiate and establish effective compromises for trade in services and other areas. With Chile, Uruguay initiated the process of granting "Mercosur plus" status in 2008, in practice an agreement approaching a standard FTA.

Considering the broad issues involved in the different agreements, Uruguay has a diversified trade agenda. However, the set of PTAs is narrow. Furthermore, if trade agreements are compared with the effective level of fulfilment, the reciprocal trade agenda is limited and less deep than it may appear on paper. Uruguay is a small economy that increases its openness by combining the reciprocal agreements with a set of unilateral policies, which play a fundamental role in integrating the country internationally. However, Uruguay's trade policy regarding PTAs is difficult to manage. On the one hand, agreements with Chile and Mexico are rather similar to the FTAs with the United States. Uruguay is also an observer in the Pacific Alliance between Colombia, Mexico, Peru and Chile. On the other hand, Uruguay is a full member of Mercosur and is subject to the protectionist stance led by Brazil, which blocks negotiations with third-party countries outside Mercoplus.

With several PTAs currently in place Uruguay is placed in a difficult position. Uruguay has often accessed markets just under the most favoured nation tariff while competitors do so at a zero tariff. In this sense, pursuing just efforts to increase market access might have a limited impact. While being part of Mercosur could in principle strengthen Uruguay's attractiveness for other regions, the Uruguayan government should continue to push its partners towards a more active trade agenda within Mercosur and with other partners. A potential agreement with the European Union for which negotiations were re-launched in 2010, which currently has at least more support on behalf of Brazil, could in this sense be an important step, but remains highly uncertain.

## Conclusions

The current economic expansion of Uruguay constitutes the longest and strongest growth acceleration in decades. After a severe economic and financial crisis in 2002, the country has been able to ignite and sustain high growth rates, even during the international financial crisis. Part of the challenges Uruguay faces concern bottlenecks that result from this strong growth and the changes in the economic structure. In many aspects, the country has well-established foundations to address these problems, such as strong political and public institutions, but several issues will need rapid, determined and sustained action over a long period.

The main challenge to sustaining the current growth process is lack of human capital and skills. Labour shortages are currently constraining growth in several sectors of activity. Exports have become more skill-intensive, particularly at medium but also at high-skill levels. In the short term, policies should aim towards increasing the supply of relevant skills by using existing tools more effectively to train the unemployed and people outside the workforce, and increase on-the-job acquisition of skills. In addition, the government should consider at least temporarily lifting the requirements on minimum percentages of national hires to quality for investment incentives (e.g. for firms in FTZs), and facilitate

immigration. Another major challenge is to improve the coverage and quality of secondary schooling, as well as vocational training. Without such improvements, it will be extremely difficult to increase the value-added content and competitiveness of new economic activities where Uruguay has recently demonstrated strong performance.

Policy actions are also needed in other domains. In terms of horizontal policies, two areas that stand out are long-term financing and infrastructure investments. While many firms currently have no cash constraint to finance investments with retained earnings, more financing for entrepreneurship and start-ups is needed if Uruguay is to benefit from interesting opportunities, for example, in services and biogenetics. In terms of infrastructure, several important projects are underway, which in principle should lift most of the constraints in the near future. However, delays or other problems in execution could create bottlenecks.

Some policies to foster investment and innovation have been effective, but will have to be enhanced and adapted to new requirements. The creation of the ANII and many of its programmes to subsidise science and technology, as well as innovation, have been quite successful. Other programmes and institutions, in particular in the field of agriculture and livestock improvements, have also created considerable gains. However, other more traditional programmes concerning industrial policies have tended to protect uncompetitive sectors at a time where adjustment costs would have been particularly low. Furthermore, programmes such as FONDES could increase their effectiveness by adopting a different institutional setting. Moreover, several of the funds that contain subsidies are currently dispersed among small programmes. This fragmentation is probably reducing the effectiveness of such programmes. Concentrating these funds within a single institution, with greater technical capacity and transparency, could be considered as an option.

### *Notes*

1. This measure is calculated as the difference between the revealed comparative advantage (RCA) from exports, and its counterpart for imports. Positive values suggest that the country is a competitive exporter in a given sector, while negative values signal the lack of competitiveness. Values closer to 0 imply intra-industry specialisation. The index is close to zero under two situations: first, when both export and import RCA are low, suggesting the absence of specialisation in the sector. Alternatively, when both RCA indexes are greater than zero with similar size, suggesting instead the existence of intra-industry specialisation.
2. See the coverage in the press here: *www.elobservador.com.uy/noticia/263361/google-huyo-de-uruguay-por-falta-de-mano-de-obra-calificada/*.
3. Basel III, Pillar II "Risk management and supervision": Address firm-wide governance and risk management; capturing the risk of off-balance sheet exposures and securitisation activities; managing risk concentrations; providing incentives for banks to better manage risk and returns over the long term; sound compensation practices; valuation practices; stress testing; accounting standards for financial instruments; corporate governance; and supervisory colleges.
4. These figures are based on the study by Cácerec and Farinasso (2013), assuming a long-term GDP growth rate of 3.5% per annum. They do not include the potential cost of a road connecting with the Port of La Paloma if the iron-ore project in Durazno and Florida goes ahead and the deep-water port is built in La Paloma.
5. This is based on the MEF's monthly report on fiscal accounts corresponding to December 2012, available at: *www.mef.gub.uy/comunicados/comunicados_fiscales.php*.

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*Chapter 3*

# Inequalities in Uruguay

*Economic growth and recent reforms have reduced poverty and inequality in Uruguay, overcoming the effects of recent economic crises. Despite these improvements, inequalities remain high in several areas.* Ex-ante *income inequality, one of the lowest in Latin America, is persistent and calls for more effective targeting of policies towards disadvantaged groups. Overall, education quality and access have underperformed in recent years. Disparity in access to and quality of education is a fundamental challenge, particularly in secondary education. Labour markets have performed well, however unemployment remains a problem among youth. Wage differentials by educational attainment have tumbled, due to a re-composition of household incomes. In terms of expenditure, the rise in per capita income and the growing middle class will lead to greater demand for social transfers and higher medical expenses.*

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Uruguay has shown considerable progress in reducing poverty rates and income inequalities over the past decade. Although income inequality continues to be a challenge for most Latin American countries, favourable external conditions, improvements in educational attainment, and a new set of social policies have proven effective in reducing the income gap in the region, including Uruguay (López-Calva and Lustig, 2010). Historically, Uruguay has been recognised as one of the most equal and stable democracies in the continent, with low income inequality levels and a redistributive system perceived as effective. While economic disparities are lower than for other countries in the region, other forms of inequality persist among different groupings by age, sex and geographical location.

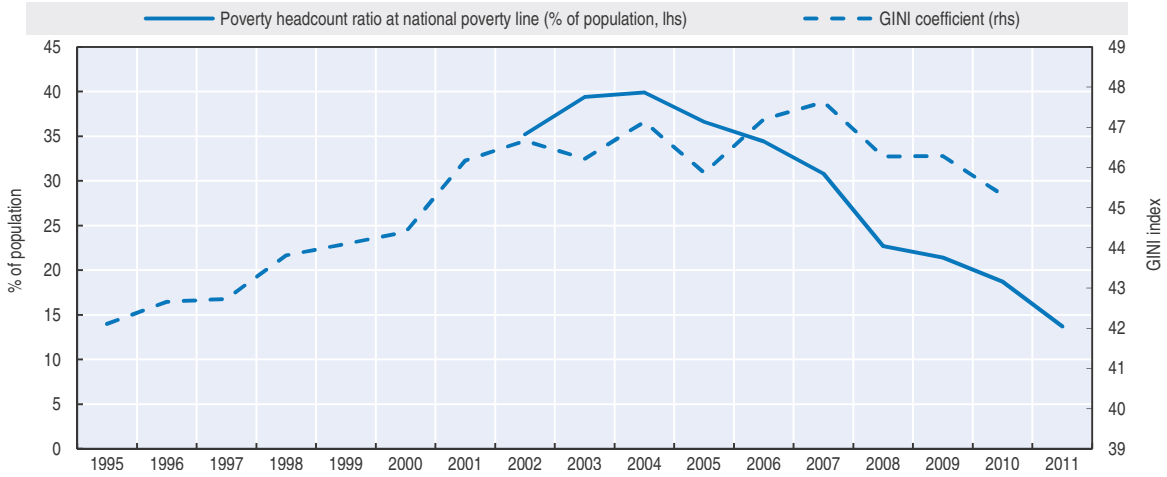
This chapter presents an overview of Uruguay's disparities across five main dimensions. The first section describes the evolution of inequality and poverty measures. The second presents an outlook for labour markets and inequality. The third examines different patterns of inequality in terms of coverage, performance and equity in education systems. The fourth assesses the main policies used by the Uruguayan government to tackle different forms of inequality, with a focus on instruments and programmes. Finally, the fifth section explores the link between fiscal policy and inequality, with a focus on revenues and spending.

## Poverty and inequality trends have significantly improved in Uruguay

Poverty and income inequality trends have seen significant improvement in recent years. Inequality increased steadily until the early 2000s, but began to fall around 2007 with a decline of 7 points in the Gini coefficient up to 2011 (Figure 3.1). Rapid economic growth over the last decade has propelled improvements in redistribution and poverty reduction (as measured by the Gini coefficient, income shares or other), with the share of the population under the national poverty line decreasing from 40% to less than 15% in a decade (Figure 3.1). The poverty incidence can be broken down into growth and distribution effects. The distribution component explains the increase of poverty during 1995-2000, whereas the growth component explains the rise of poverty during the period 2000-05, and its subsequent decline after 2005 (Amarante, Colafranceschi and Vigorito, 2011).

Income inequality in Uruguay, despite being high by OECD standards, is the lowest among Latin American countries (Figure 3.2). The current levels indicate, in part, a mean reversion to pre-crisis values of poverty and inequality. The poverty headcount and the extreme poverty indicators suggest that, notwithstanding the improvement, there is a large share of highly vulnerable people that fall below national poverty lines. Alternative poverty measures, such as the Poverty Gap Index,[1] which provides a normalised measurement with respect to a poverty line, illustrate a similar evolution for Uruguay. Individual estimates of the Index (and different orders of dominance) that use the USD 4 poverty line for Uruguay, show that the poverty gap after the 2002 crisis had a persistent effect on income inequality, but that this declined considerably after 2006.

Figure 3.1. **Evolution of poverty headcount and Gini coefficient in Uruguay, 1995-2011**



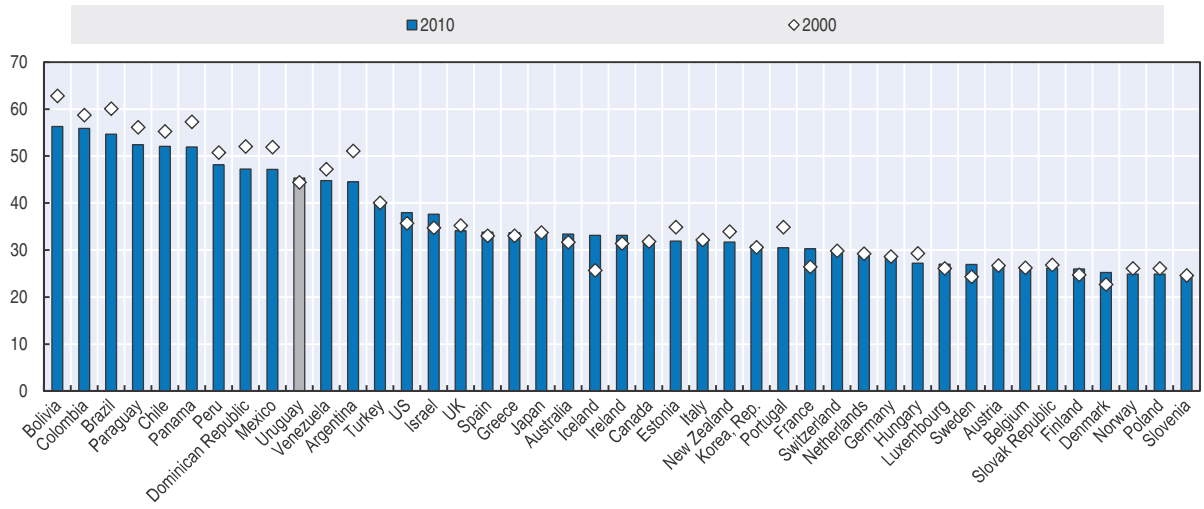

*Note:* The national poverty line is based on minimum consumption in cities above 5 000 inhabitants. The Gini index, measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

*Source:* INE (2012), *Uruguay en Cifras 2012 (Uruguay in Figures 2012)*, INE, Montevideo, *www.ine.gub.uy/biblioteca/uruguayencifras2012/Uruguay%20en%20cifras%202012.pdf* and World Bank (2014), *World Development Indicators* (database), Washington, DC, *http://data.worldbank.org* (poverty estimated using the income method, 2011).

*StatLink* http://dx.doi.org/10.1787/888933078072

Figure 3.2. **Income inequality in international comparison**

Uruguay's Gini vs. OECD and LAC




*Note:* The Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

*Source:* World Bank (2014), *World Development Indicators* (database), Washington, DC, http://data.worldbank.org; CEDLAS and World Bank (2014) *Socio-Economic Database for Latin America and the Caribbean (SEDLAC)* (database), *http://sedlac.econo.unlp.edu.ar/eng/index.php* and OECD (2013), OECD National Accounts Statistics (database), OECD, Paris, *http://dx.doi.org/10.1787/na-data-en*.

*StatLink* http://dx.doi.org/10.1787/888933078091

The recent decrease in income inequality has been attributed to several drivers. These include targeted government interventions, the creation of various social programmes (PANES, Plan Equidad), the introduction of an income-tax scheme, the reform of the national health system, the re-establishment of centralised wage-setting mechanisms and a significant increase in wages. Labour income as a share of household income also grew

from 57% to 60% between 2007 and 2012 (Llambí and Perera, 2014), while the share of contributory and non-contributory public transfers also increased. Other mechanisms, such as the fall in the wage premium between skilled and non-skilled workers, could explain this phenomenon.

If the effect of economic growth on redistribution has been significant, the effects across different income groups have been uneven. The evolution of labour income shares provides an indicator of the income-growth relationship by quintile along the income distribution. It allows for a comparison of growth in poorer segments of the population with that of richer segments or mean labour income. Four main episodes of growth incidence can be identified. The period 1981-85 was more favourable to low and middle income households, whereas higher income households experienced falling income shares (Figure 3.3). In contrast, the period 1990-2005 saw considerably lower income growth for households at the bottom tail of the distribution, thus increasing income inequality. The economic crisis was particularly harsh in 2000-05, reducing average household income by 6.7% (Amarante, Colafranceschi and Vigorito, 2011). After 2005, as in the second half of the 1980s, income growth was concentrated in the poorer households, together with lower income growth in the top quintile. The recent evolution of household income, as explored later in this chapter, responds to a combination of effects, from higher transfers to the poorest households to lower dispersion in wages.

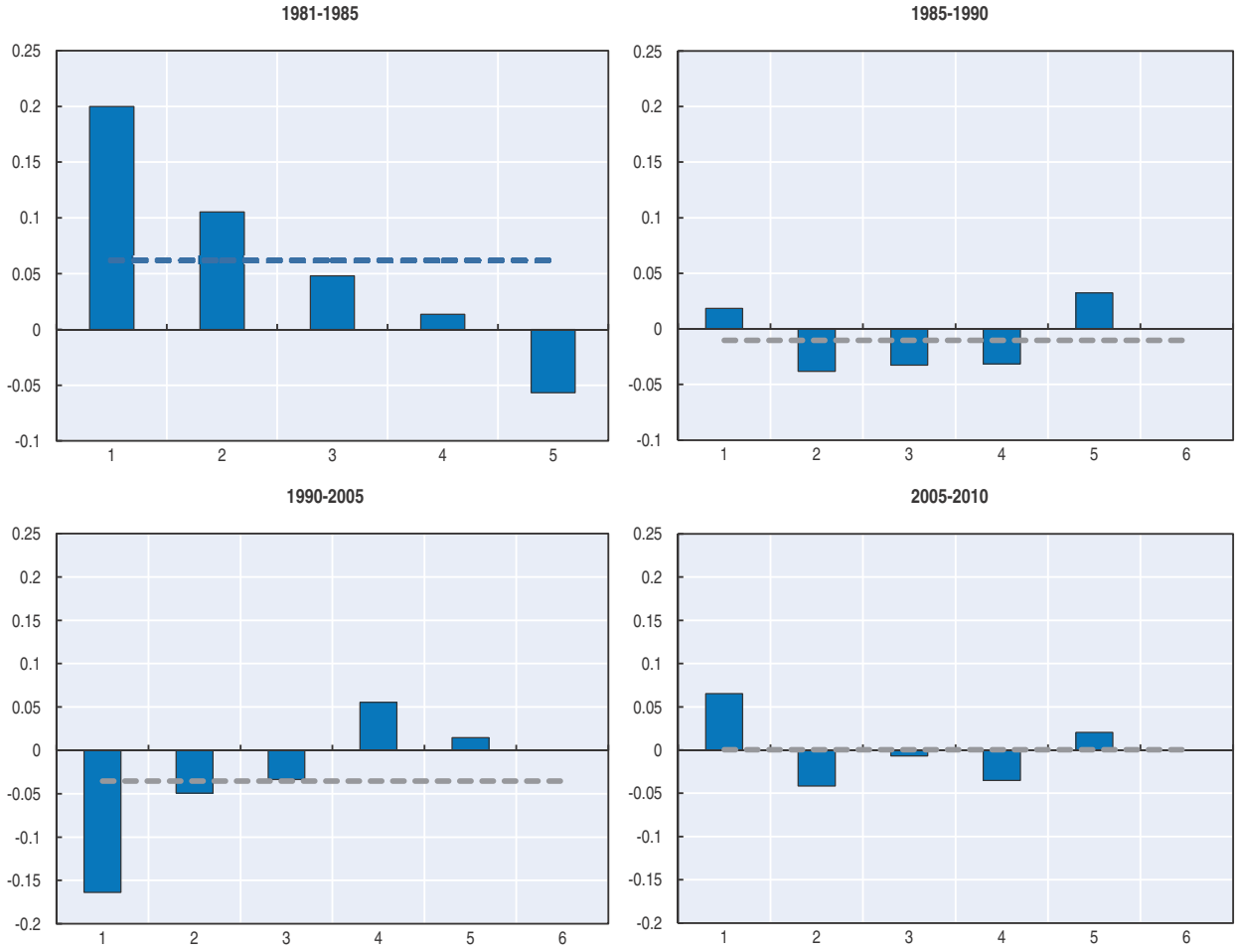
Despite the positive distributional effect of policies in recent years, there are areas for improvement in Uruguay's policy agenda for tackling inequality. Regardless of the decline in post-fiscal inequality (Bucheli et al. 2013), which highlights the effectiveness of redistributive mechanisms, market income inequality, and therefore ex-ante disparities, remain high. In Uruguay, 14.1% of pre-tax income is owned by the top 1% of the population, a proportion well above the 9.4% among the OECD. Furthermore, the share of the top 1% of the population in Uruguay has slowly increased during the period 2009-11. The increase has not been matched by a major redistributive effect of the tax system, as direct taxes' redistributive effect has remained constant from 2009-11 (Burdin, Esponda and Vigorito 2014). This may be, as suggested in this chapter, the result of a regressive capital income tax.

Ex-ante income inequalities are important to consider before looking at other forms of discrimination, either in access to education, health or the labour market. As will be discussed in this chapter, recent social policies have aimed to target social spending to the most disadvantaged groups. Education policies can be illustrative, as the most vulnerable population in Uruguay remains concentrated among children and youth (World Bank, 2010). Policies today aim at reducing grade repetition and school desertion, and promoting investment in human capital through conditional cash transfers. They have become more suitable by providing equality of opportunity, and not just focusing on ex-post inequality. A review of social policies in Uruguay and their effect on inequality is discussed in the last section of this chapter.

### *The middle class has consolidated in recent years*

When analysing income distribution and trajectories across income groups in the region, a phenomenon that stands out is the consolidation of the middle class. About 40% of Latin American households moved upwards in socio-economic class between 1995 and 2010 (World Bank, 2012). Middle-income households have a lower probability of falling into poverty and are less vulnerable. However, they illustrate other important dimensions such

Figure 3.3. **Growth of labour income share by quintile**
(1981-2010)



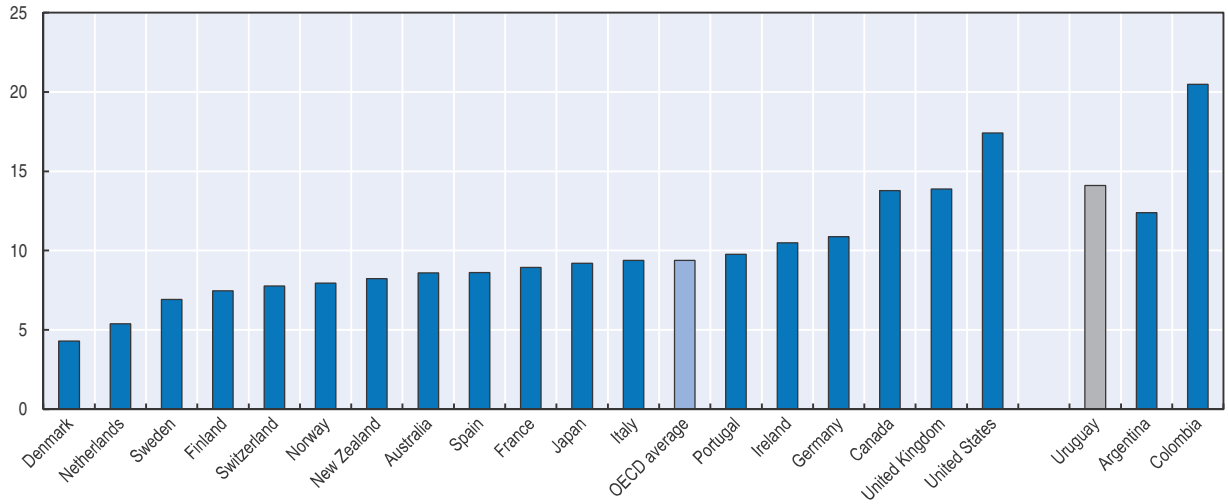

*Note:* Grey dotted line is the average growth of labour income by period
*Source:* Amarante, V., M. Colafranceschi and A. Vigorito (2011), "Uruguay's income inequality and political regimes during 1981-2010", *WIDER Working Paper*, No. 2011/94, United Nations University World Institute for Development Economic Research, Helsinki.
StatLink http://dx.doi.org/10.1787/888933078110

as social and intergenerational mobility, an understanding of values and beliefs, and participation in the tax and social security systems. By both relative and absolute measures, the size of the middle class in Uruguay is large by Latin American standards. In absolute terms, 56% of the population belong to the middle class. Middle class households have higher consumption possibilities, and support domestic consumption to a large extent (consumption expenditure for households and non-profit private institutions (IPSFL) in 2011 reached 68% of GDP). Although the increase in size of the middle class is less remarkable than in other LAC countries, it remains significant. The distinctive class distribution and demographic profile of Uruguay, which resemble more closely OECD economies than Latin American ones, are important factors for consideration in the implementation of policies tackling inequality.

Uruguay's income distribution has an impact on the effectiveness of targeted policies. Estimations on the contribution of income growth and redistributive policies to population shares for each class show a different pattern for Uruguay than for other countries in the

Figure 3.4. **Pre-tax income share of top 1%**

2010 or latest available year




*Note:* The OECD average is an unweighted average of the 18 OECD shown here. 1990 estimates for all countries except Colombia (1993), Switzerland (1991), and Germany (1992). Estimates exclude capital gains for Canada, Germany, Japan, Spain, Sweden, Switzerland, and the United States. For Portugal, estimates exclude most capital gains. For Italy, estimates exclude most capital gains and several components of capital income (as interest income).

*Source:* Burdin, G., F. Esponda and A. Vigorito (2014). "Desigualdad y altos ingresos en Uruguay: un análisis en base a registros tributarios y encuestas de hogares para el período 2009-2010" [High income inequality in Uruguay: An analysis based on tax records and household surveys for the period 2009-2010], background paper, mimeo.

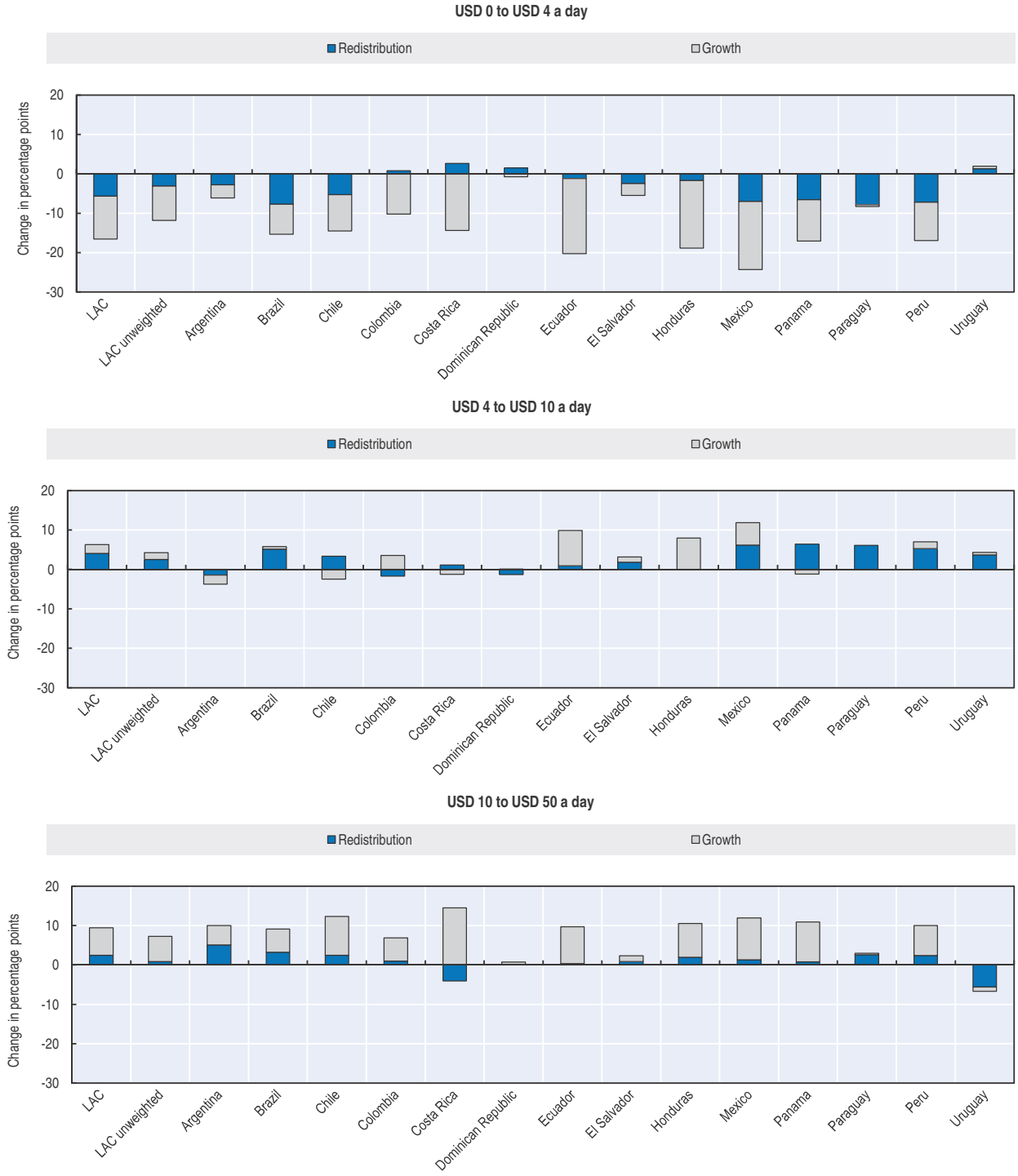
StatLink http://dx.doi.org/10.1787/888933078129

region (Figure 3.5). Whereas on average both growth and redistributive policies contributed to decrease poverty among the poorest households in Latin America (34% of the impact is attributed to policies and 66% to growth in per capita income), the scenario for Uruguay shows a positive effect for the poor and vulnerable (mostly through redistribution), and a negative effect on the share of the middle class (through the same channel). Interestingly, the effect of redistributive policies in the lowest income groups (USD 0-USD 4 per day) is limited. Class mobility in other countries in the region, with a decreasing share of poor and an increasing vulnerable and middle class, is not observed in Uruguay. The low incidence of redistributive policies could be explained by the already-large size of the middle class in Uruguay, in contrast to other LAC countries.[2]

### *Regional disparities remain significant in Uruguay*

Income disparities are more pronounced in Montevideo than in other departments, yet they present a similar evolution. A decreasing pattern in income inequality is observed in both rural areas and Montevideo, with a persistent 4-point differential in the Gini coefficient between 2006 and 2012 (Figure 3.6). Traditionally, regional disparities have been the second most important source of relative share on overall income inequality after educational attainment (Alves et al., 2012). The wage differential between rural and urban areas remains significant, and has been explained by the distribution of workers' characteristics or differences in the distribution of returns (Bergolo and Carvajal, 2010). With a population of 1.3 million inhabitants (1.9 million including the metropolitan area), Montevideo comprises the bulk of the industry and services sector of the country, exacerbating differences in labour income by educational attainment or ability.

Figure 3.5. **Decomposition of class growth by income growth and redistribution**




*Source:* World Bank (2012), *Economic Mobility and the Rise of the Latin American Middle Class*, World Bank, Washington, DC.; based on CEDLAS and World Bank (2014) *Socio-Economic Database for Latin America and the Caribbean (SEDLAC)* (database), *http://sedlac.econo.unlp.edu.ar/eng/index.php*.

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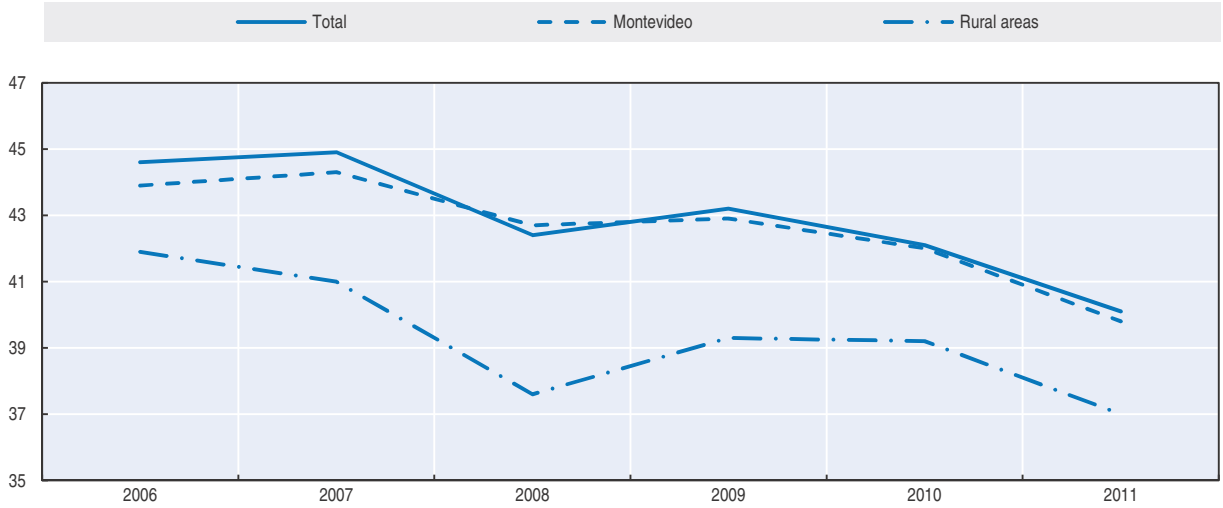
Figure 3.6. **Gini coefficient by region: Montevideo and rural areas**




*Source:* CEDLAS and World Bank (2014) *Socio-Economic Database for Latin America and the Caribbean (SEDLAC)* (database), *http://sedlac.econo.unlp.edu.ar/eng/index.php*.

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Regional programmes have been implemented to address disparities between Montevideo and the interior. Through a partnership between the Office for Budget and Planning (OPP) and the European Union, the government launched the programme "Uruguay Integra" in 2007. The programme, designed to strengthen decentralisation policies and contribute to social and territorial cohesion, aims at strengthening rural areas through productive employment policies and higher autonomy for local governments. The first phase of the programme (2007-12) promoted rural areas through different instruments, including the improvement of information systems for decision-making, technical training for local public officials and national plans for key areas such as rural tourism. The second phase, currently being executed (2013-15), focuses on areas of youth integration (sport, cultural and recreational areas) to guarantee better access to health and job training for those living in remote localities.

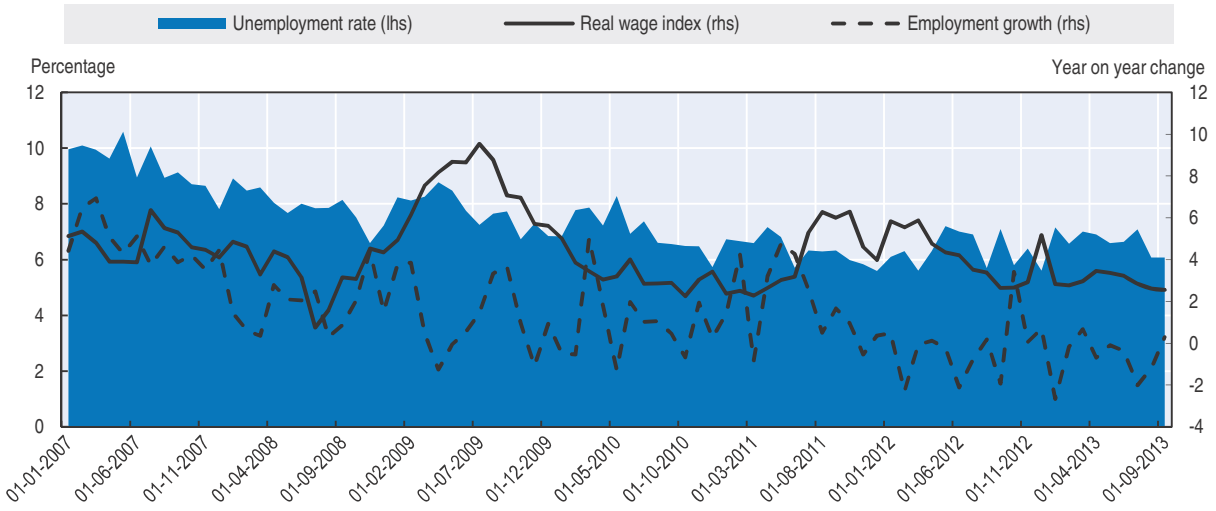
The implementation of territorial policies for reducing social and economic disparities is common to many OECD economies. Some of these programmes, introduced in the 1950s, tackle regional disparities through wealth distribution and large-scale public investments in lagging regions. In the 1970s, due to the geographical concentration of unemployment, several programmes started to include employment policies. More recently, and given the persistent disparities in income and labour in some regions, territorial policies have aimed at improving regional competitiveness and eventually boost national growth. Yet, the heterogeneity of regional policies in OECD countries is important. While Germany and Italy integrate regional policies in the national development strategy, other countries (e.g. Czech Republic, Hungary) have decided to focus on national growth policies, whereas Finland and Japan target regional policies for low-development regions. A better understanding of the way territorial policies are currently implemented in Uruguay can provide some guidance on the best model for regional development.

## The outlook for labour markets has been good, with quality jobs in the formal sector

The recent labour market performance of Uruguay has been positive. Uruguay enjoys one of the lowest unemployment rates among Latin American countries (6.8% over the last five years). While real average wages experienced a downturn after the 2002 crisis, they had a steady recovery to previous levels in 2011. Labour demand has expanded as a result of strong economic growth, even though employment growth has slowed slightly since 2011 (Figure 3.7). The 2.6% average employment growth between 2007 and 2009 fell to 0.54% during the period 2010-13. During the same period, the average real wage growth index went from 5.2% to 3.7%. Recent transformations in the labour market include higher activity among labour-intensive sectors (e.g. construction), the re-establishment of collective wage bargaining and a policy to increase the minimum wage (Dominguez, Rego and Regueira, 2013). Despite its positive performance, Uruguay ranks low in terms of labour-market efficiency, positioned 139th out of 148 in some labour market rankings (WEF, 2013).[3] Some labour regulations are considered relatively inflexible and could have implications for less benign macroeconomic scenarios.

While Uruguay's performance in employment is positive, the fact that "vulnerable employment" makes up a very low proportion of total employment signals that the quality of formal jobs available is relatively high. The vulnerable employment rate shows the number of own-account workers and unpaid family workers as a share of total employment. Vulnerable employment is often characterised by inadequate earnings, low productivity and difficult conditions of work that undermine workers' fundamental rights (ILO, 2010). In 2010, only 22% of total employment in Uruguay fell into this category, much lower than in most countries in the region, and only slightly higher than the average rate of vulnerable employment amongst OECD member countries (15 %).

Figure 3.7. **Evolution of Labour Market Indicators 2007-13**




*Source:* ILO (International Labour Organization) (2013), *LABORSTA* (database), International Labour Office, Geneva.

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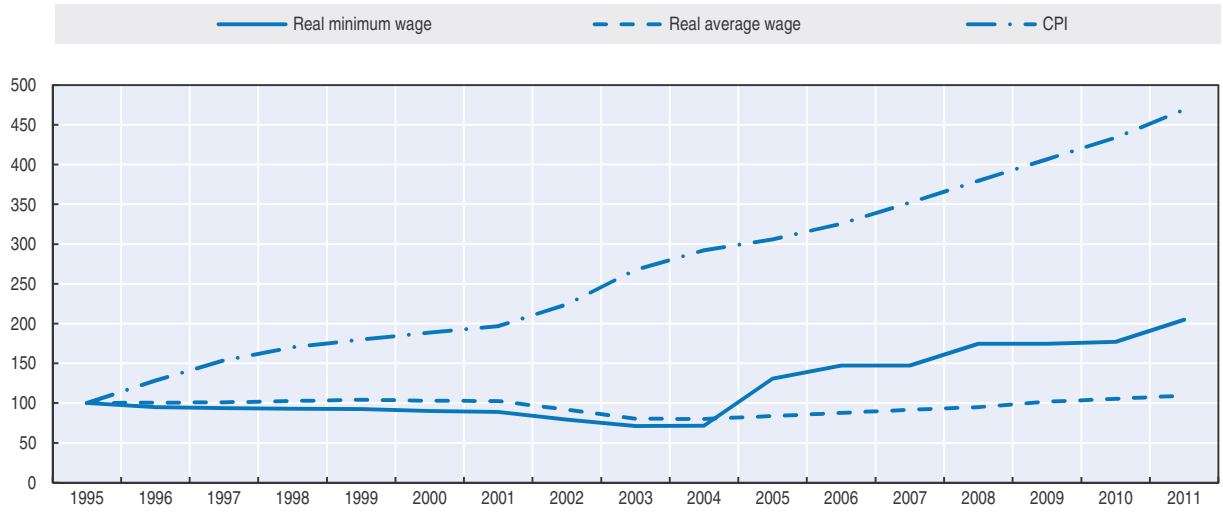
### *Labour costs are rising fast across all sectors*

Labour costs have increased in recent years with a decreasing effect on income inequality. Uruguay's minimum wage has grown fast in real terms with an increase of 185% between 2004 and 2011, compared with the 36% increase on real average wages over the same period (Figure 3.8). The present wage negotiation system aimed to fix salaries at similar values to those prior to the 2002 economic crisis, an objective attained in 2010. The wage increase responds partially to the evolution of labour productivity, which between 2003 and 2012 has been one of the highest on the continent at 2.6% growth (MEF, 2013). However, productivity increases in some sectors have been lower than salary increases, generating misalignments between labour productivity and wages (MEF, 2013). The ratio of minimum wage to average wage in Uruguay is currently close to 40% (Figure 3.9), similar to Brazil, as well as Korea or the United States. The minimum wage is still comparatively low when compared to the average wage; however, its rapid increase merits close attention.

Figure 3.8. **Evolution of real average and minimum wages**

Index, 1995 = 100




*Source:* ILO (International Labour Organization) (2013), *LABORSTA* (database), International Labour Office, Geneva.

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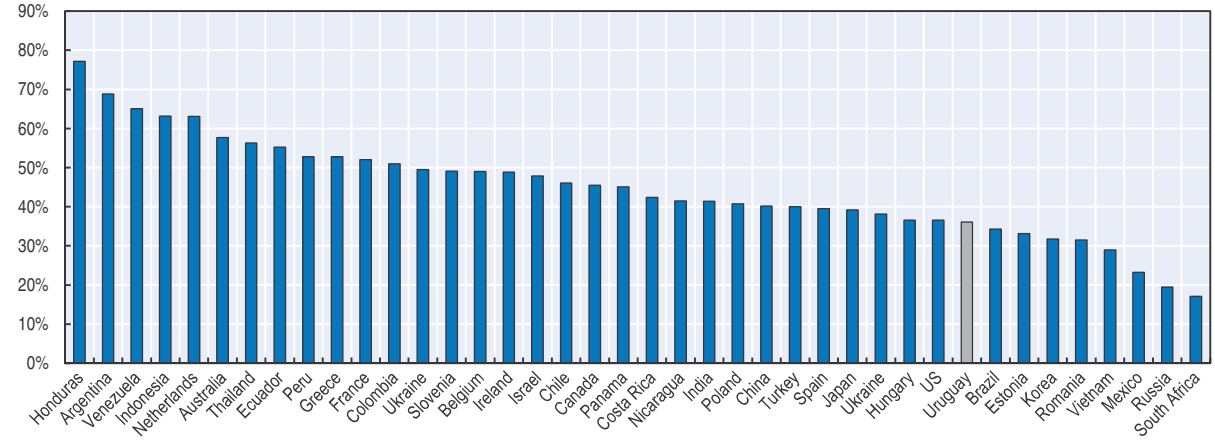
Figure 3.9. **Ratio of minimum wage to average wage, circa 2011**




*Source:* ILO (International Labour Organization) (2013), *LABORSTA* (database), International Labour Office, Geneva.

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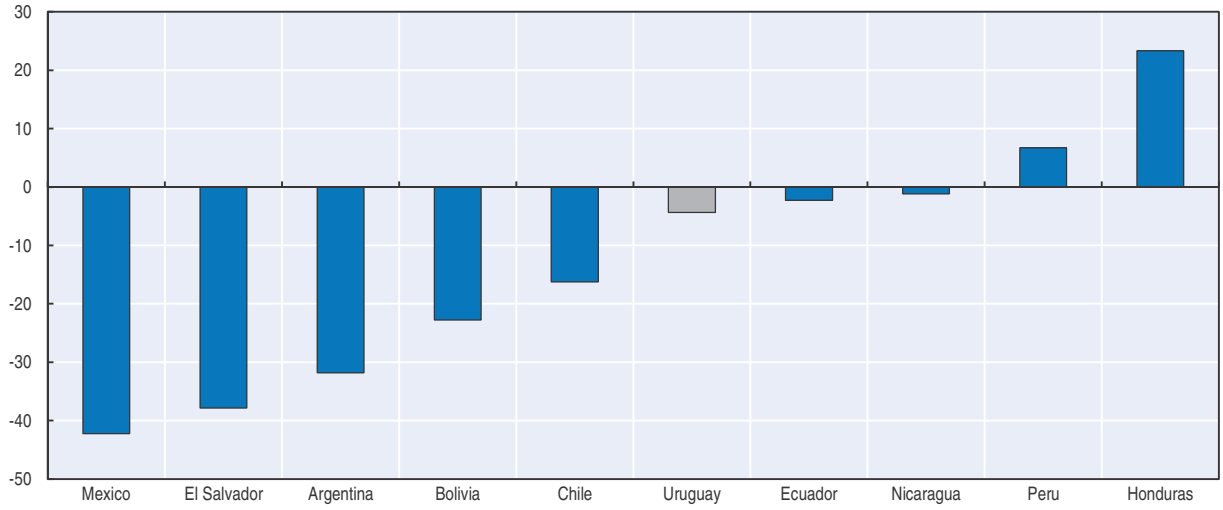
Inequalities in wages by educational attainment have been historically high, but are decreasing. Over the last decade, returns to secondary education have remained relatively constant, whereas those for university graduates decreased between 1995 and 2009 from 64% to 59% (Bassi and Ñopo, 2013, Figure 3.10).[4] Plausible factors for explaining the reduction in the wage differential for educational attainment include uneven increases by sector of activity usually favouring the poorest employees, which are often the less educated (Perazzo, 2012). In some countries, like Uruguay, institutional factors such as the increase in the minimum wage and the creation of collective wage bargaining councils have also reduced wage dispersion, even if the existence of an informal sector has offset this effect. The same phenomenon has been observed in other Latin American economies (Gasparini et al., 2011), and has been associated with both changes in the relative demand and supply of skills. The rise of the relative supply of skilled workers – due to the expansion of access to tertiary education – translated into a decline of returns to tertiary education in the last decade. An additional explanation to this decline is the reduction of quality associated with a more overcrowded education system and with the access of people coming from poorer socioeconomic backgrounds with lower cultural levels. On the demand side, the recent boom in commodity prices may have favoured the unskilled (non-tertiary educated) workforce, at least in some countries in the region. Other factors, related to technological diffusion or skill mismatches may have also reduced labour productivity of skilled workers.

Figure 3.10. **Differential in schooling premium in tertiary education 1995 vs. 2009**




*Source:* Bassi, M. and H. Ñopo (2013), "Technical high school and vocational training in Latin America", presented at the 18th Annual LACEA meeting, 31 October-2 November, Mexico City.

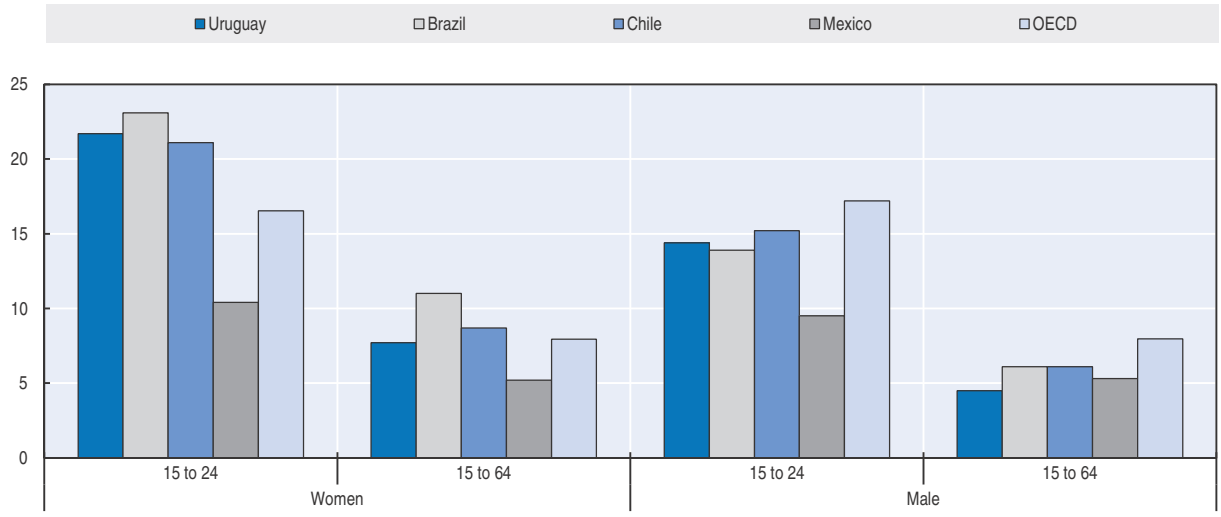
StatLink http://dx.doi.org/10.1787/888933078243

### *Labour force participation is close to OECD levels, but youth unemployment remains high*

Uruguayan labour force participation is close to OECD performance, whereas youth unemployment remains high, in particular for women. About 52% of young individuals (aged 15-24) participate in the labour market compared to 76% for the whole labour force, which is slightly higher than OECD participation rates. However, the gap among age groups could reflect poor basic skills and barriers to movement from study to work, as observed in

other countries in the region such as Chile (OECD, 2013a). About 17% of young Uruguayan workers are unemployed, a figure considerably higher than Mexico (10%) and slightly higher than the OECD (16%) (Figure 3.11). The share of young people categorised as NEET (not in education, employment or training) is increasing, and the proportion of young Uruguayans in this group is almost three times as high as in OECD economies (estimated at 15%). Furthermore, the educational attainment of the NEET category has increased over the years (62% and 71% had lower secondary education in 2011 and 2012, respectively). The segmentation of labour participation by gender goes beyond the NEET group. In total, 67% of women in the 15-64 age range belong to the labour force in Uruguay, compared to 84% in men (ILO, 2013). The fact that women are more often excluded from the labour market than men responds, to a great extent, to the deficiencies in existing childcare services (Box 3.1). Targeted programmes, such as the seven-zone plan, implemented by the Ministry of Social Development since 2013, aim to guarantee access to mono-parental childcare services.

Figure 3.11. **Unemployment rate by age, gender and region**




*Source:* ILO (International Labour Organization) (2013), *LABORSTA* (database), International Labour Office, Geneva.

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Informality in Uruguay, measured both in terms of informal employment or tax evasion, is low when compared with other countries in the region (Figure 3.13). Nevertheless, those in the informal sector earn less and this can exacerbate inequalities. While 39% of the labour force works in informal employment, value-added tax evasion is estimated at 15% (Gandelman and Rasteletti, 2013). These figures suggest that informality in the labour market is related to necessity and subsistence strategies, and not towards tax evasion. However, with nearly two-fifths of the population in the informal sector, the distribution of income in Uruguay is likely to be affected by the earnings of informal workers. Formal jobs are more frequent among the most educated, women and people in urban areas. Earnings tend to be higher in the formal than in the informal sector (Bucheli and Ceni, 2010). Furthermore, informal workers tend to have less access to training and education than formal ones.

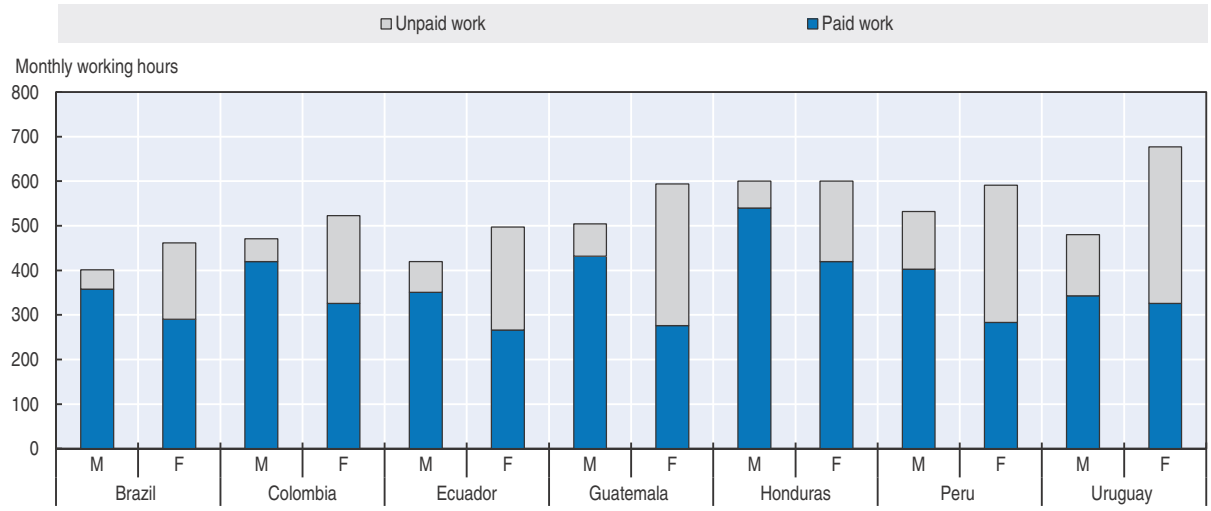
## Box 3.1. **Improving Childcare services in Uruguay**

In Uruguay, childcare is viewed predominantly as the responsibility of mothers (CEDAW, 2007). Mothers spend on average 2.7 times more than working fathers on domestic work time (see Figure 3.12, below), one of the highest gaps in the Latin American region. Women's sole responsibility for childcare also has consequences for their ability to be active in the labour market. In 2010, 34% of mothers were not in employment, 22% had part-time employment and only 34% were in full-time employment. These figures point to the difficulties for women to balance their childcare and other care responsibilities with employment.

For Uruguay's 190 000 children under the age of 3, most of their care takes places within the home. Their attendance in a public or private childcare institute is low: in 2010, only 29% of these children were in a childcare institution while the remaining 71% were taken care of at home by their families, notably their mothers, or by hired personnel. For those in childcare, the preference seems to be for private institutions: in 2010, the majority of children between 0 and 2 years old were in a private childcare institution (71% for under one year olds, 76% for one year olds and 55% for two year olds). Public childcare services are provided by the *Centros de Atención a la Infancia y la Familia* (CAIF), which targets low-income households, as well as the Institute for Children and Adolescents of Uruguay, the Ministry of Social Development (*Programa Nuestros Niños*) or the National Administration of Public Education (*Jardines de ANEP*) (Salvador, 2010).

When compared to OECD or other high-income countries, Uruguay's low percentage of children in childcare becomes apparent. Within OECD economies, around 33% of children under three were in a childcare facility in 2010. In Korea, Denmark, Norway and the Netherlands, this increases to over 50%. However, there are important differences to note even within OECD economies: in Mexico and Chile, only 5.8% and 9.8% respectively of children are in childcare. This higher percentage of children in childcare also parallels with higher levels of women in the labour force (54%): Korea (49%), Denmark (59.1%); Norway (61.5%) and the Netherlands (79.9%), suggesting a close relationship between childcare provision and labour force participation.

Figure 3.12. **Total workload for the employed population**




*Source:* CEPAL (2013) "Cepalstat database and publication statistics", *http://estadisticas.cepal.org.*

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Box 3.1. **Improving Childcare services in Uruguay** *(cont.)*

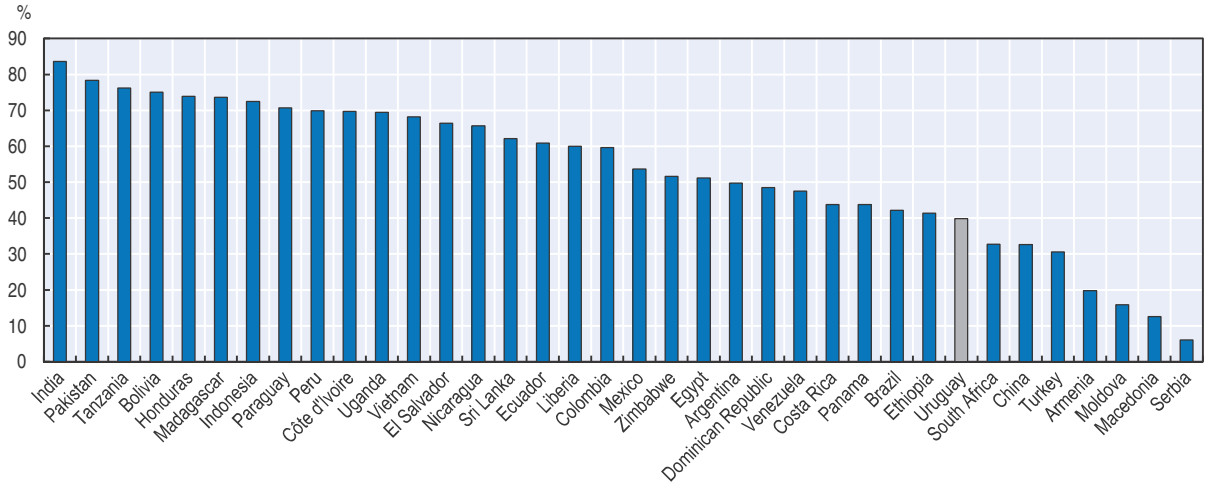
Uruguay's low percentage of children in childcare may be explained by several social and economic factors. First, cost appears to play a role in determining choices over childcare: whereas 21% of poor households used childcare services in 2012, this increases to 29% of non-poor households. For children over three, the gap increases to 45% and 70%, respectively (SIG-Inmujeres, 2012). Second, the infrastructure of childcare also appears to affect access: distance to childcare centres and transport issues increase the time burden for working families. This can be seen in the rural and urban gap in childcare: 67% of children below the age of three in urban areas contrasted with only 38% of children in rural areas (González and Deus, 2010).

Third, the legislation for childcare in Uruguay, as in other countries in the region, is poor regarding parental leave. Recent reforms in the law for parental leave have aimed at improving the distribution of childcare in the household. In 2013, Uruguay enacted law 19.161, which regulates maternity and paternity leaves. Maternity leave was extended from 12 to 14 weeks. The law also modifies the criteria for paternity leave of private employees, extending it from 3 to 10 days of leave, but still well below the 4.8 weeks in OECD countries. Moreover, either of the parents is entitled to a new-born subsidy until the child is 6 months-old.

Finally, social norms that emphasise women are the ideal caregivers for young children also influence family decisions over childcare. The increase in attendance rates with the age of the child (2% for children under the age of one; 12% of one year olds, 35% of two year olds and 60% of three-year olds) confirms studies indicating strong preferences for neo-natal and early childcare to be the responsibility of the mother or the family in Uruguay (Batthyány, Genta and Perrota, 2012). Social expectations dictate that women stay home to take care of their children. There are few public initiatives or policies to encourage fathers' role in childcare and a more even distribution of caring responsibilities within the family.

Figure 3.13. **Share of informal employment in selected countries**

As % of non-agricultural employment




*Note:* Data circa 2009.
*Source:* ILO (International Labour Organization) (2013), *LABORSTA* (database), International Labour Office, Geneva.

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### *Labour market outcomes and social protection programmes have reduced income inequality*

If the effects on income inequality of recent labour market policies and social programmes have been considered, the individual effects of different components of household income are less understood. By considering different sources of income in the

evolution of inequality over the past decade, the following section aims at describing how each of these factors has had an effect on the level of income inequality. The section aims, first, at characterising the evolution of income inequality between 2001 and 2012, based on household surveys data, and second, to account for the incidence of schooling returns and the structure of employment on the evolution of inequality.

Household income in the last decade has depended mainly on labour income. Llambí and Perera (2014) study the evolution of Uruguay's income inequality using household surveys from 2001 to 2012.[5] Results show that labour income dominates household income in Uruguay with an average share of 60% of total income in 2012. Both income sources are highly correlated: between 2001 and 2003 total and labour income fell in real terms by 16% and 14%, respectively, due to the contraction of real wages. From 2004, both income sources recovered steadily at a 5% and 6.3% rate on real terms, respectively.

Ambitious social programmes have had a positive effect on the total income of the poorest households. From 2006, the implementation of the Monetary Transfers Programme (*Programa de Transferencias Monetarias* or PANES) and later the *Plan de Equidad* resulted in a re-composition of income sources. In 2012, social transfers represented 18% and 8% for the first and second deciles, while the richest deciles did not receive any transfers. In contrast to social transfers, private retirement and pension income shows a regressive pattern, as this depends on past contributions based on income. For the highest decile, retirement and pension income represented, on average, 18% of total income.

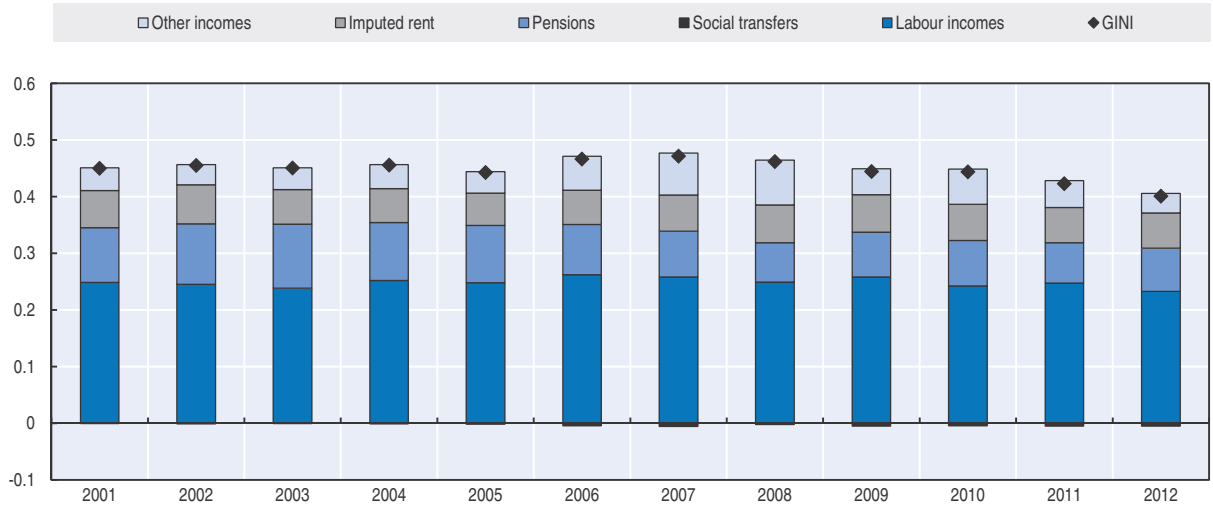
The drivers of income inequality along the last decade have changed. Between 2001 and 2007, labour income and other income sources, such as capital gains, increased their share in terms of total income and concentration, contributing to a rise in inequality.[6] At the same time, retirement and pension income and social transfers had an increasing effect on inequality. In contrast, from 2007 to 2012, the same sources that previously contributed to a rise in inequality caused its fall. Labour income, even if it increased proportionally, reduced its concentration considerably and became more progressive, contributing to a reduction in inequality.

Retirement and pension income was also an equalising factor due to its lower concentration (Llambí and Perera, 2014). Taking the period 2001-12 as a whole, the fall in inequality is explained by the evolution of all income sources (Figure 3.14). However, the main equalising factors were retirement and pension income, and labour income. Each of these factors explains, by 2 and 1.5 points, respectively, the 5-point decrease in the Gini coefficient. The other sources contributed, on average, to a reduction of 0.5 points in the Gini coefficient. All things being equal, labour income and social transfers have decreased inequality during the period 2001-12. As illustrated in Figure 3.15, labour income and social transfers have had an equalising effect, *ceteris paribus*, with an increase in the absolute magnitude between the first and second half of the period 2001-12 (Llambí and Perera, 2014).

### *Uruguay's decreasing schooling premium goes someway to explaining the reduction of inequality*

If labour income and social transfers reduced inequality, the incidence of the return to schooling and the structure of labour markets on the evolution of inequality remain less clear-cut. A comparison of real labour income based on employment surveys between 2001 and 2012 shows two major effects: an increase in the growth rate of labour income by quintile (Figure 3.16), and decreasing inequality of labour income between 2001 and 2012 (Llambí and Perera, 2014).

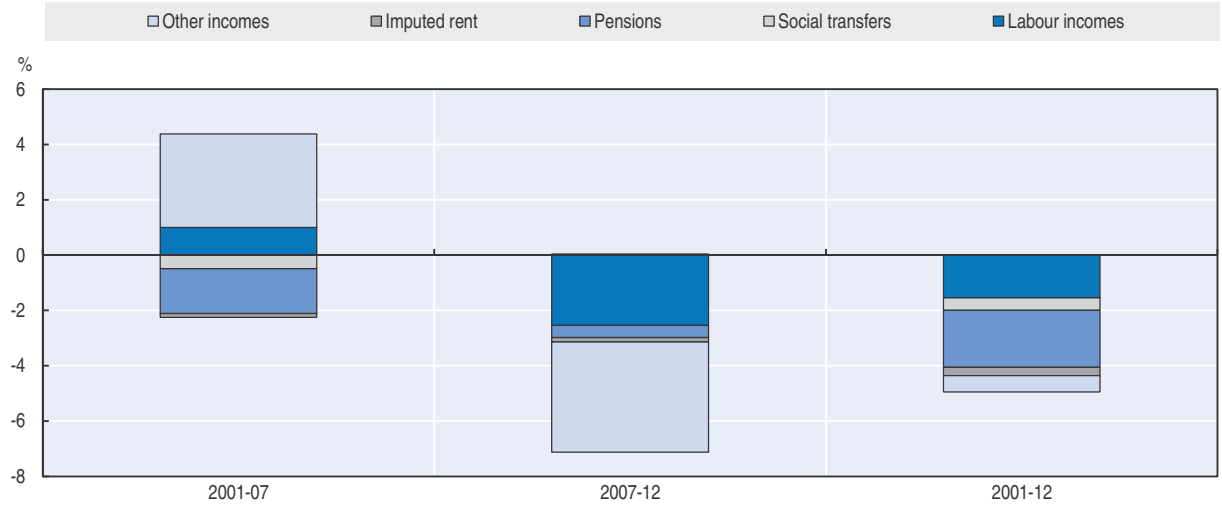
Figure 3.14. **Gini coefficient and incidence by income source for urban areas in Uruguay**




*Source:* Llambí, C. and M. Perera (2014), "Análisis de la incidencia del mercado de trabajo en la evolución de la desigualdad de ingresos en Uruguay y en la última década" [Analysis of the impact of the labor market on the evolution of income inequality in Uruguay in the last decade], background paper, Paris.

StatLink http://dx.doi.org/10.1787/888933078319

Figure 3.15. **Incidence of each income source on the variation of Gini coefficient**




*Source:* Llambí, C. and M. Perera (2014), "Análisis de la incidencia del mercado de trabajo en la evolución de la desigualdad de ingresos en Uruguay y en la última década" [Analysis of the impact of the labor market on the evolution of income inequality in Uruguay in the last decade], background paper, Paris.

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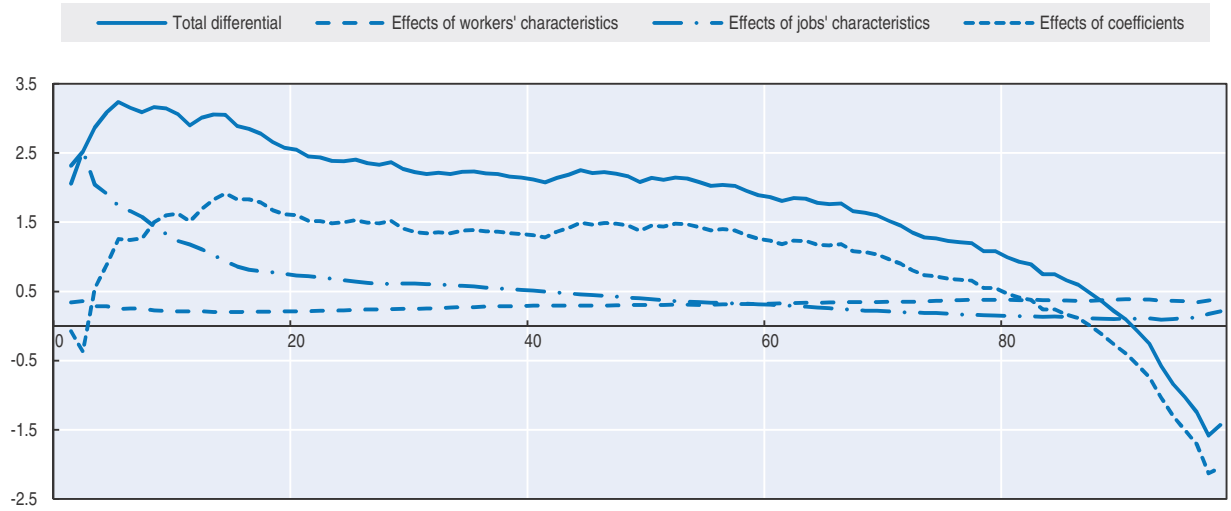
An estimation of returns to education for Uruguay between 2001 and 2012 shows a decreasing trend for the skill premium since 2006, accentuated in the last two years. Given the strong correlation of schooling years and labour income, the fall in the skill premium could have played an important role in the decrease of inequality for labour income. The inequality decline can also be explained by the change in distribution of workers' characteristics (e.g. sex, age and qualifications) and employment attributes (e.g. sector, occupational status and formality), a composition effect, and the returns of each of these characteristics, a price effect. The decomposition of labour income growth by quantiles

shows that the return of employment characteristics is the main determinant of the unequal growth of labour income (Llambí and Perera, 2014). These returns were more favourable to the lowest quantiles (Figure 3.16).[7]

Figure 3.16. **Decomposition of labour income by quantile, 2001-12**




*Source:* Llambí, C. and M. Perera (2014), "Análisis de la incidencia del mercado de trabajo en la evolución de la desigualdad de ingresos en Uruguay y en la última década" [Analysis of the impact of the labor market on the evolution of income inequality in Uruguay in the last decade], background paper, Paris.

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Differential returns to education, together with employment factors (formality, occupational status) explain the recent fall in inequality. About two-thirds of the fall in inequality is explained by decreasing returns to education. In addition, the increasing share of female participation in the labour market (from 29% to 38% for women aged less than 55) also had an incidence on the evolution of labour income. Indeed the negative composition effect associated to gender across all quantiles is explained by the higher female labour participation in the labour market. In summary, the lower concentration of labour income in Uruguay is not explained by predetermined changes in workers' characteristics, as was the case in other Latin American countries, but the adjustment process of the labour market, that resulted in a reduction of education returns in the highest quantiles.

## Inequalities in the access and quality of education are critical

Uruguay is one of the pioneers in the universalisation of access to education in Latin America. Primary education became mandatory by the end of the 19th century, and since then has undergone different periods of expansion. Pre-school and lower secondary school (first three years) is also mandatory. Attendance at the national level goes from 98% for children aged 7-13, 81% for teens aged 14-17, and 42% for young people aged 18-22 (Bucheli et al., 2013). The public education system is present across all levels, with a large portion of primary school enrolment (82%). At all levels, public and private education systems co-exist. The public education system has the larger enrolment, and accounts for 85% of elementary school enrolment, 82% of secondary school enrolment and 83% of post-secondary enrolment (Table 3.1).

Table 3.1. **Basic data on education in Uruguay, 2011**

| | | Number of institutions | Students enrolled | Enrolment by type of instiution (public/private) | Net enrollment rate | Teacher-student ratio | Public expenditure per level as share of GDP | Public expenditure per level as share of GDP- OECD average |
|---|---|---|---|---|---|---|---|---|
| All institutions, *of which* | | 3 777 | 864 749 | | n.a | n.a | 4.4% | 0.063 |
| | Public | 2 789 | 685 015 | 79.2% | | | | |
| | Private | 651 | 127 257 | 14.7% | | | | |
| Pre-school institutions, *of which* | | 252 | 108 244 | | 91.8% | 29 | 0.5% | 0.006 |
| | Public | 189 | 79 405 | 73.4% | m | 27 | | |
| | Private | 63 | 28 839 | 26.6% | m | 35 | | |
| Primary schools, *of which* | | 2 477 | 325 509 | | 95.2% | 13 | 0.013 | 3.9% |
| | Public | 2 074 | 273 440 | 84.0% | m | 15 | | |
| | Private | 403 | 52 069 | 16.0% | m | 7 | | |
| Secondary schools, *of which* | | 930 | 272 535 | | 74.4% | 7 | 0.014 | m |
| | Public | 588 | 230 153 | 84.4% | m | m | | |
| | Private | 342 | 42 382 | 15.6% | m | m | | |
| Initial VET schools (lower and upper secondary) | | 118 | 57 158 | | | | | |
| Tertiary institutions, *of which* | | | 101 303 | | m | n.a | 0.011 | 1.6% |
| | Public | | 81 774 | 80.7% | m | n.a | | |
| | Private | | 19 529 | 19.3% | m | n.a | | n.a. |

* "m" refers to missing data.

*Note:* Column 1: excluding post-secondary and tertiary institutions. Column 2. Excluding early childhood institutions. Column 3. Excluding institutions for children with special educational needs. Column 7. Primary and secondary education combined. Excluding Ciclo Básico Rural Data from 2010.

*Source:* MEC (Ministry of Education and Culture) (2012), *Anuario Estadístico de Educación 2012 (Statistical Yearbook of Education 2012)*, MEC, Montevideo, *http://educacion.mec.gub.uy/boletin/Anuario2011/ANUARIO%202011%20-%201-2-13.pdf.*

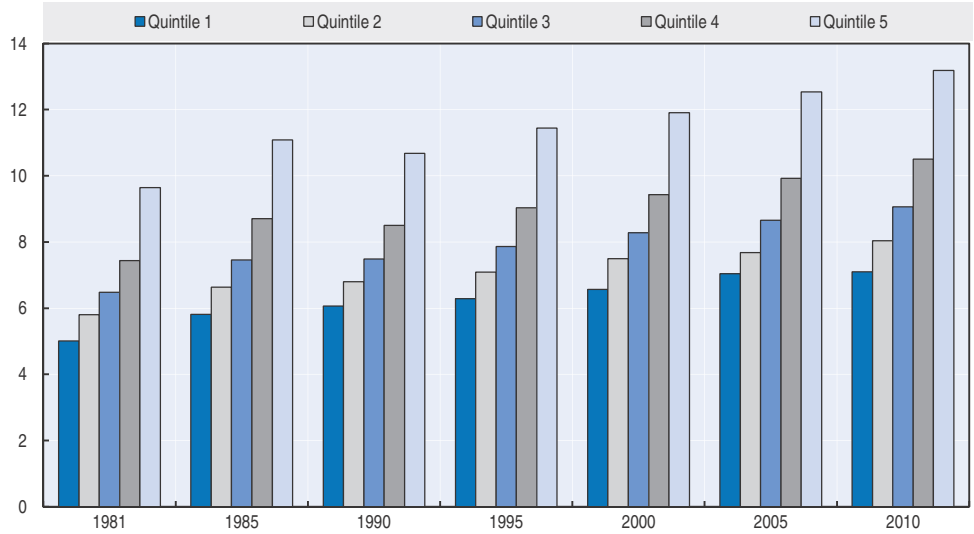
Management of the education sector in Uruguay is highly centralised, but the responsibilities are shared by several independent councils. The Ministry of Education and Culture is responsible for setting the general direction of national educational policies, but does not have a strong operational mandate. The agency in charge of managing the public system is the National Administration of Public Education (*Administración Nacional de Educación Pública* or ANEP). The agency enjoys full autonomy and comprises several bodies of importance for the education system: the Central Board Council (*Consejo Directivo Central* or CODICEN), the Council of Early and Primary Education (CEIP), the Council of Secondary Education (CES), the Council of Technical-Professional Education and the Council of Educational Training.

### *Education performance remains linked to socio-economic background*

Educational attainment and achievement are closely related to socio-economic status. As in other Latin American countries, access to education in Uruguay is strongly related to socio-economic background, which can also be seen in the coverage and performance of students. Over the last three decades, average years of schooling have increased for all income quintiles, but the gap between them remains significant. Between 1981 and 2010, the gap on the number of years of schooling between the highest and lowest quintile increased from 4.6 to 6.1 years (Figure 3.17). High levels of repetition and dropout among students from the lowest quintiles, as discussed below, explain part of these gaps. Moreover, attendance to education institutions by income quintile shows discrepancies in access from early childhood. Whereas less than 50% of children from the poorest quintile have access to education by age 3, more than 80% of children in the richest quintile are

already enrolled (Figure 3.18). The importance of early childhood development (ECD) at the cognitive, emotional as well as health and nutritional levels has been highlighted as an important factor for increasing opportunities for the disadvantaged. Evidence from OECD countries also shows that increasing spending on pre-school education significantly weakens the link between parental education and child secondary education performance (OECD, 2010).

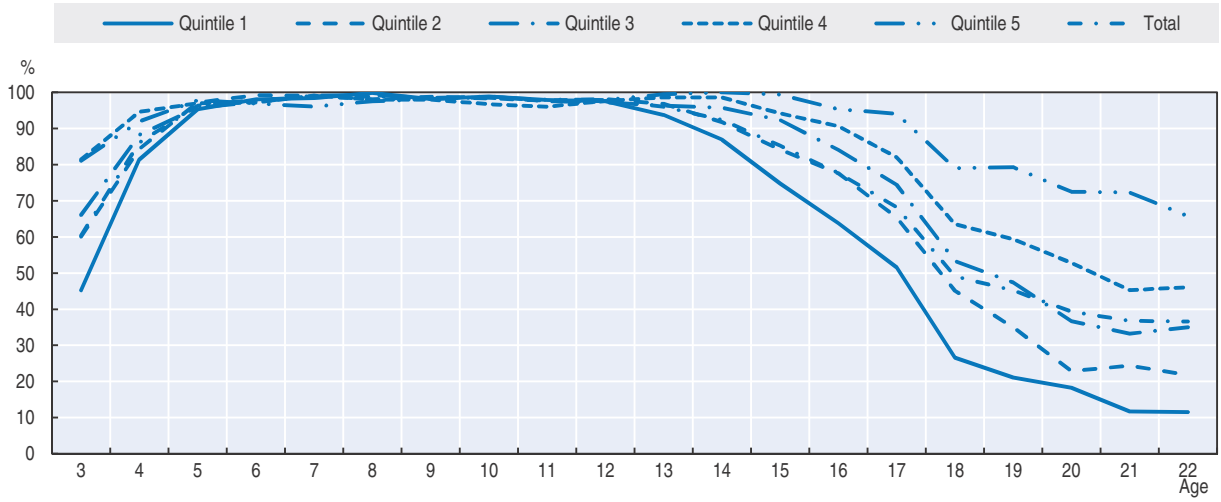
Figure 3.17. **Average years of schooling by quintile of per capita household income**




*Source:* Amarante, V., M. Colafranceschi and A. Vigorito (2011), "Uruguay's income inequality and political regimes during 1981-2010", *WIDER Working Paper*, No. 2011/94, United Nations University World Institute for Development Economic Research, Helsinki.

*StatLink* http://dx.doi.org/10.1787/888933078376

Figure 3.18. **Attendance at education institutions by income quintile**

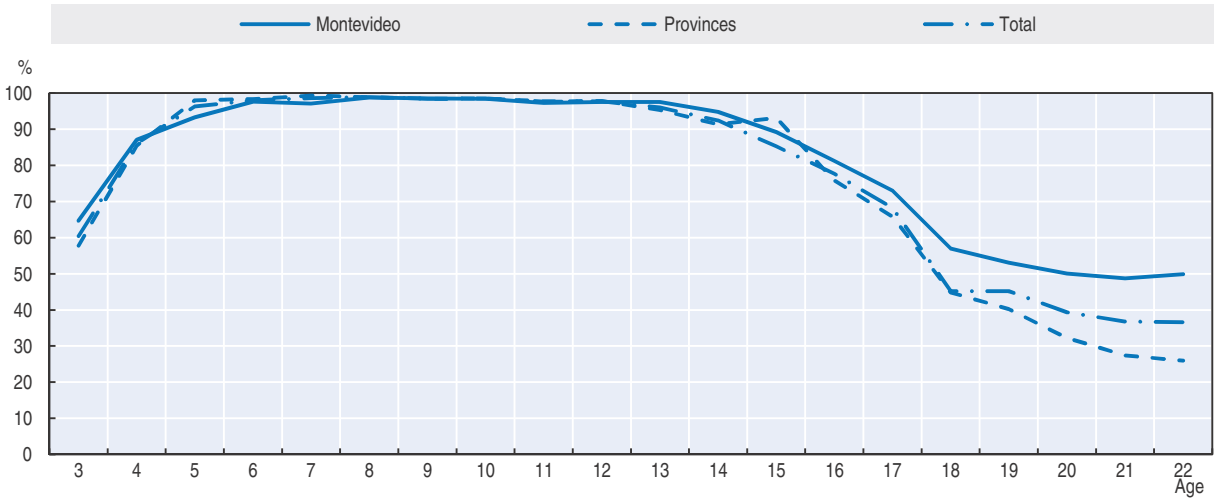



*Source:* MEC (Ministry of Education and Culture) (2012), *Anuario Estadístico de Educación 2012 (Statistical Yearbook of Education 2012)*, MEC, Montevideo, *http://educacion.mec.gub.uy/boletin/Anuario2011/ANUARIO%202011%20-%201-2-13.pdf.*

*StatLink* http://dx.doi.org/10.1787/888933078395

There is also a significant difference between urban and rural areas in terms of enrolment rates, with more years on average in the education system for urban inhabitants (Figure 3.19). However, again, the difference in coverage is more striking by socio-economic background, with 60% of urban students in the richest quintile attending education institutions after turning 20, and less than 10% in the lowest quintile. Geographic disparities are more striking in tertiary education; only a small share of lower secondary students from lower-income groups in rural areas continue their studies in upper secondary and tertiary education institutions.

Figure 3.19. **Attendance at education institutions by region**




*Source:* MEC (Ministry of Education and Culture) (2012), *Anuario Estadístico de Educación 2012 (Statistical Yearbook of Education 2012)*, MEC, Montevideo, *http://educacion.mec.gub.uy/boletin/Anuario2011/ANUARIO%202011%20-%201-2-13.pdf.*

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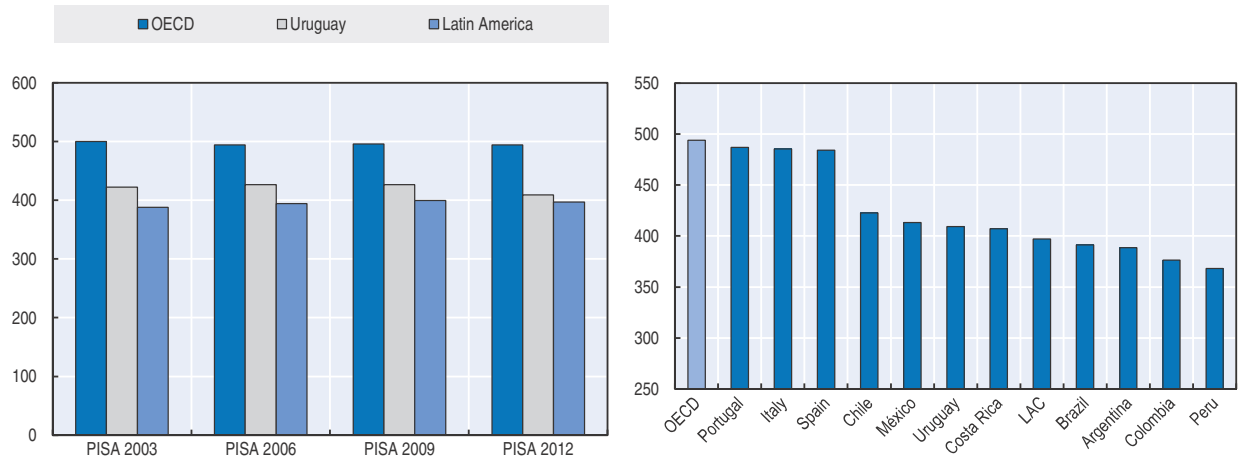
Low school heterogeneity of students within schools contributes to persistent inequalities in the educational system, particularly between private and public schools. Heterogeneity by socio-economic background, a source of concern among education authorities in Uruguay, can have positive externalities among students through peer learning effects (Llaudet and Peterson, 2013). In 2008, about half of the students in secondary school came from unfavourable backgrounds, placing the question of diversity at the core of the debate on education. As in other Latin American countries, the socio-economic gradient is important when looking at performance.

The performance of the Uruguayan educational system needs further attention. The recent PISA 2012 results show that Uruguay is performing at similar levels to the rest of Latin America, the lowest-performing region. Costa Rica and Mexico mean scores are not statistically different to those of Uruguay. With 409 points in the 2012 mathematics test, the difference with the OECD average score (494 points) is nearly equivalent to two years of schooling (114 points). Nearly 52% of Uruguayan students perform below Level 1 and 2 of proficiency, which are considered as basic comprehension (Figure 3.20).

Figure 3.20. **Mean performance in mathematics test, PISA 2012**




*Source:* OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264208780-en.*

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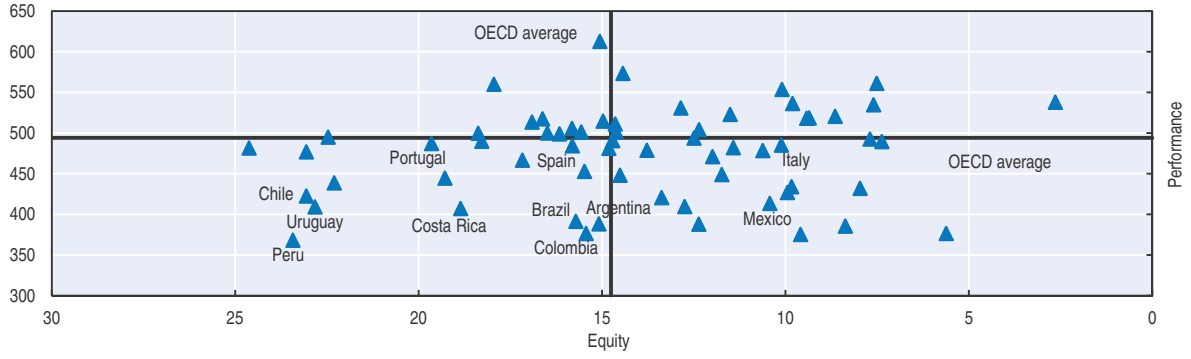
Together with these results in academic evaluations, there is a general perception that quality of education at secondary level has declined. One reason for this is the extension of secondary education to a segment of the population that was hitherto excluded. This expansion, however, was not accompanied by the proper provision of human and physical resources. As a result, performance indicators have diminished (ANEP, 2012). The performance of the education system in Uruguay is in marked contrast to the country's nearly universal primary education and its high level of per capita income (World Bank, 2010).

PISA defines equity in education as providing all students, regardless of gender, family background or socio-economic status, with similar opportunities to benefit from education (OECD, 2014a). The stronger the impact of the students' socio-economic status on their performance, the less equitable the school system. Uruguay's results show a high dependence of performance on the socio-economic gradient, as is the case for other countries in the region such as Chile and Peru (Figure 3.21). The difference in mathematics

Figure 3.21. **Student performance and equity, PISA 2012**




*Source:* OECD (2013c), *PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264201156-en.*

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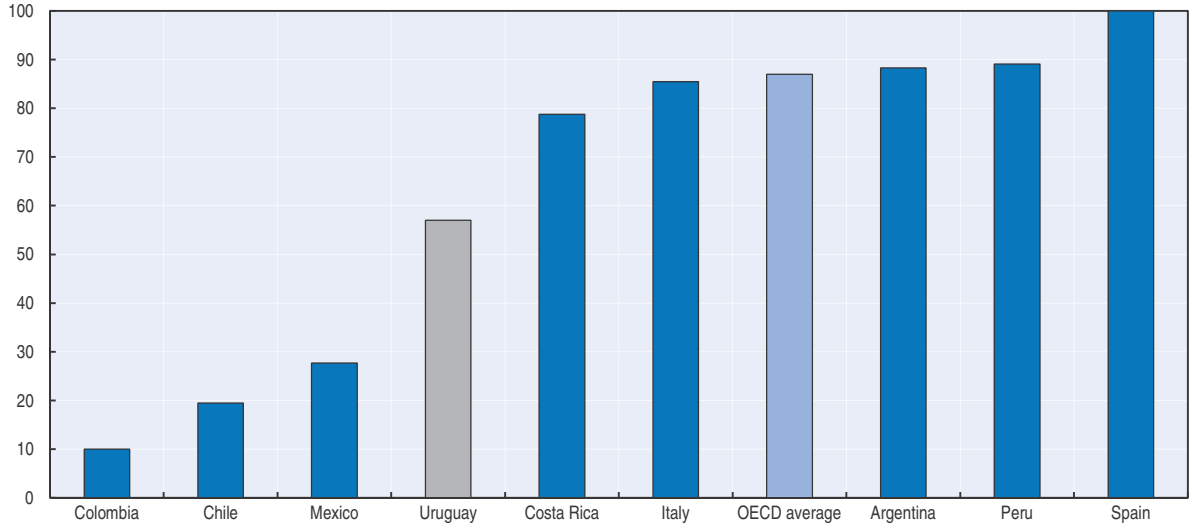
performance before and after accounting for socio-economic status is about 18 points, whereas the average difference in OECD is 13 points. In 2003, disparities in the mathematics test in OECD countries (19 points) disappeared after adjusting for socio-economic background of students. In 2012, however, these differences shifted in favour of students in private schools for most OECD participants. While in countries such as Brazil and Mexico the gap in performance in 2012 diminished, in Uruguay it remained stable and significant with respect to 2003 (55 points) (OECD, 2014a).

There is a great deal of awareness about the equity challenge, and all education reforms in Uruguay since the 1990s have attempted to target inequities in the education system. This is a commendable choice of priority not only for reasons of fairness, but also because improvements in education quality are hardly possible without concomitant improvements in equity (OECD, 2010). Efforts involved the directing of services and compensatory actions to underprivileged children, for example, by extending pre-school coverage, financing school outreach programmes to increase enrolment in secondary education, providing more hours of instruction for students from weak economic backgrounds, and introducing full-time schools.

Differences in equity are present among Uruguayan schools in the availability of resources. The PISA test allows for exploring equity in different dimensions other than student performance, including distribution of resources among schools and distribution of learning opportunities. School resources in Uruguay tend to be linked to socio-economic background more than in OECD countries. In contrast to primary school, where teachers' qualifications are compulsory, the percentage of teachers with a certification from the adequate authority in Uruguay's secondary schools (57%) is lower than in other countries in the region (Figure 3.22). Despite deficiencies in the allocation of resources, recent initiatives, such as the *Plan Ceibal*, have proven effective in improving the infrastructure and connectivity of schools (Box 3.2). This initiative will be extended to public secondary schools.

Figure 3.22. **Percentage of teachers with a certification from the adequate authority, PISA 2012**




*Source:* OECD (2013c), *PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264201156-en*.

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### Box 3.2. **The CEIBAL project: Integrating ICTs and education**

In 2005, the Vazquez administration introduced an ambitious plan for universal access to technology in public education. The Ceibal Project or *Plan Ceibal* (*Plan de Conectividad Educativa de Informática Básica para el Aprendizaje en Línea*) was conceived to facilitate the use of personal computers in education and to reduce inequalities derived from access gaps to such technology.

Based on the One Laptop per Child (OLPC) initiative, initiated at the Massachusetts Institute of Technology, the first objective of the project was to provide portable personal computers to all students and teachers in public education and to train all teaching staff in their use. The terminals (known as XO) are especially designed for children, who own the computer and are free to take it home (mobility is an important characteristic of the devices). A specific network was built to guarantee remote access. Besides promoting equity of knowledge, one of the goals of the project was to develop and gradually consolidate a culture of collaboration among children, teachers, families and schools.

In 2010, more than 370 000 units were distributed covering a significant part of the national territory. At present, all children entering public primary education receive one unit, under a subsidised scheme for schools who wish to join the programme. Secondary school centres have begun to host the Ceibal programme on a voluntary basis. Today, Uruguay has the lowest computer-per-student ratios in Latin America (close to 1).

Part of the project's success is due to the governance structure, which is based on inter-institutional collaboration. Following the establishment of the Agency of Electronic Governance for Information and Knowledge Society (AGECIC) and the National Agency for Research and Innovation (ANII), the Ceibal Project was set up at the Technological Laboratory for Uruguay (LATU) with the close involvement of the Ministry of Education and Culture (MEC). It is currently managed by the Centro Ceibal, which includes a Co-ordination Committee. This combines representatives of different government agencies (LATU, CODICEN, MEC, AGESIC, ANII) and teaching and educational institutions (CEP/ANEP).

Other Latin American countries have also adopted ITC programmes, either through the One Laptop per Child initiative or computer laboratories. Whereas nearly 100% of primary schools have computer laboratories in Uruguay, the coverage in countries such as Argentina or Brazil is only 30%. At the same time, while computer laboratories help encourage the integration of ICTs in the educational system, they possess more limitations (less use of ITC per student) than the One Laptop per child programme (UNESCO 2013).

Reception to the project has been positive in Uruguay, with an approval rate above 85% in most socio-economic and age groups. However, the impact of these programmes among students and households is still to be seen. Recent evaluation programmes have estimated the impact of the Ceibal Project on mathematics and reading results, children' studying habits and cognitive skills, and they have found no significant effect on these outcomes (De Melo et al., 2013). The IABD also undertook a large-scale randomised evaluation on 319 public schools in small, poor communities in rural Peru (Cristia et al., 2012). The study reaches a similar conclusion, while non-experimental studies have found a positive effect of the One Laptop per Child policies (Fernando et al., 2011).

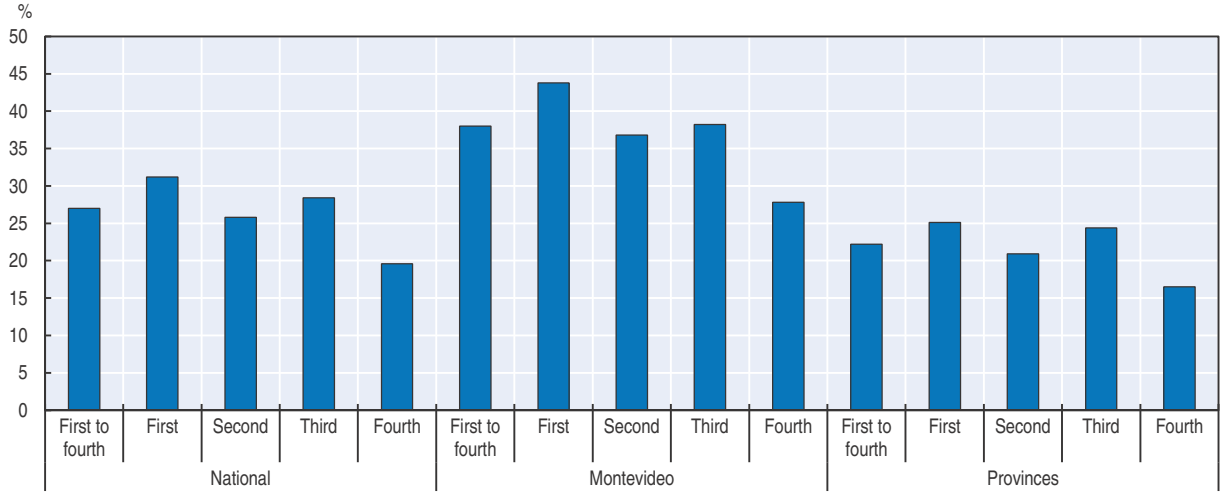
Shortage of full-time public schools at the secondary level and high turnover of teachers are among the factors affecting performance. Full-time schools are characterised by a longer school day (7.5 hours against 4), an improvement in infrastructure and catering, and a more comprehensive academic programme including extra-curricular activities.

Uruguay accounts today for more than 170 full-time schools in primary, about half of which are located in more deprived economic zones. In contrast, the model of public secondary schools does not involve full-time schools, with detrimental effects on the quality of teaching. The contrast between the two models, primary and secondary schools, is striking. Primary schools consist of one full-time teacher and are often located near the student's household. Secondary schools consist of one teacher for each subject, often without supervision responsibilities regarding the students.

Dropout and repetition rates in Uruguay are high. Although there is a growing consensus that problems exist at the secondary education level, the underlying causes remain less clear. Although basic education schooling (9 years) is compulsory in Uruguay, the high dropout rate, particularly in public secondary education, is symptomatic of a two tier educational system. Over the past 25 years, only 60% of enrolled students have completed secondary school. Students from the poorest quintile are four times more likely to quit primary school than those from the wealthiest (ANEP, 2012). This self-selection process, which allows only some students to pass from primary to secondary school, and then from secondary school onwards, generates disparities in educational outcomes.

Repetition and dropout are related, as repeaters are about seven times more likely to drop out than non-repeaters (Patron, 2008). The average repetition rate in the first year of secondary schooling is above 25% at the national level and above 40% in Montevideo. The children of families who cannot afford to invest in remedial teaching and support must be prepared to absorb the shock of repeating school years. The self-reported repetition rate among students in Uruguay in 2009 was 26% in lower secondary education, the fourth highest in PISA. Across OECD countries, on average, 6% of students that participated in PISA in 2009 reported they had repeated a lower secondary grade. Over 95% of students in 8 other OECD countries, and 12 partner countries and economies, reported that they had never repeated a grade (OECD, 2013b).

Figure 3.23. **Repetition rates in secondary schooling by region**




*Source:* ANEP (National Administration of Public Education) (2012), *Observatorio de la Educación* [Education Observatory], National Administration of Public Education, Montevideo.

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### *Providing more opportunities in post-secondary and tertiary education remains a task*

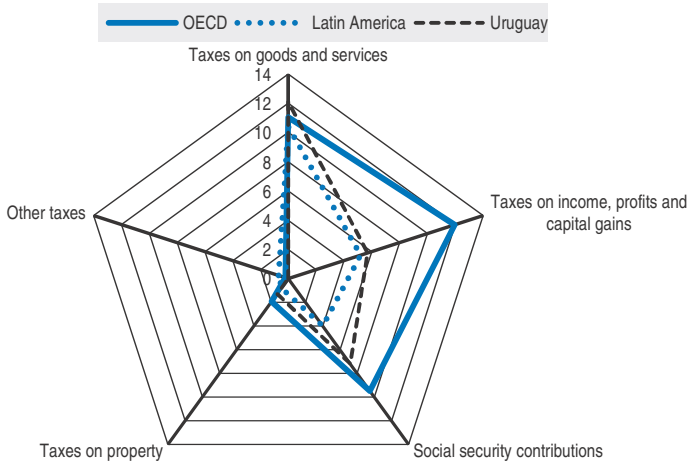
The tertiary education landscape in Uruguay is dominated by one public university, the Universidad de la República (UDELAR), which attracts more than 80% of students. However, several smaller private universities have strengthened their participation and coverage over the last two decades. As in the case of primary and secondary schools, differences between private and public universities in terms of management, accreditation systems and quality assurance mechanisms generate disparities in performance. The low degree of internationalisation and the limited research and innovation capacity of higher education institutions (public and private) also lessen potential in some areas. One of the large tasks ahead seems to be diversification of opportunities for post-secondary education through the establishment of a new technological university (UTEC). It is hoped that the approach will help unburden the public university, which traditionally caters for the needs of a vast majority of secondary school graduates, thus trading off quality for equity, and raising the relevance and quality of tertiary education. An in-depth analysis of Uruguay's education system will be undertaken in the second volume of this review.

## Current public policies to tackle inequality in Uruguay

Uruguay registered a significant reduction in inequality when taxes and transfers are taken into consideration, yet it remains below the OECD average. In Latin America, direct fiscal policies only have a slight effect on income inequality, the magnitude of the reduction due to direct taxes and transfers, even though it is higher in Argentina, Brazil and Uruguay (5% of Gini), is relatively low in the rest of the region (2% in average) (Martner, Podestas and Gonzales 2013). The 2007 tax reform improved the progressivity and redistributive character of taxation in Uruguay, increasing revenue collection and reducing the tax burden on the poorest taxpayers. Yet, the majority of its redistributive effect is caused by social protection programmes, specifically those related to health and education.

Figure 3.24. **Indirect taxes are a major source of revenue in Uruguay**

Percentage of GDP




*Source:* OECD (2014), *Revenue Statistics in Latin America 2014*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264207943-en-fr*; and OECD (2013), *Revenue Statistics 2013*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/rev_stats-2013-en-fr*.

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### *Tax revenues have increased, but remain below the OECD average*

The capacity of the tax system to reduce income inequality depends on the amount of tax collected, the tax rates per level of income, the level of tax evasion in the economy and tax incentive schemes (Martner, Podestas and Gonzales 2013). The participation of direct taxes is expected to increase in the forthcoming years as a result of the tax reform and further modifications to the system. In Uruguay, social security contributions and income tax jointly accounted for 49% of total government revenue in 2012; whereas, indirect taxes represented 46%. Personal income tax was reintroduced in 2007, with rates ranging from 10% to 30% (Box 3.3, below).

Box 3.3. **Key features of 2007 fiscal reform**

In December 2006 the parliament approved Law No. 18.083 reforming its tax system. The reform's core principles were: i) to increase equity in the distribution of disposable (post-tax) income; ii) to simplify, rationalise and modernise the system of taxes; iii) to increase the efficiency of revenue collection, and iv) to stimulate investment.

Personal income tax (IRPF) was reintroduced, after being eliminated by the 1974 Tax Reform. IRPF treats income derived from work (labour) and income derived from capital differently. Income derived from capital is taxed at rates between 3-12% depending on income source, whereas rates for income derived from work vary from 10-30% depending on the tax bracket. Additionally, the reform created a special income tax regime for non-residents with tax rates between 3-12% depending on income source, including corporate income tax.

The 2007 reform modified contributions to social security; the contribution was set at 7.5% plus 0.125%, a reduction from its previous 12.5%, which is applicable to all taxable remuneration. In 2008 the income tax base was modified to exclude pensioners, and an Income Tax for Social Security Assistance (IASS) was created (presidential decree No. 344/08). IASS has a similar structure to income tax derived from work, but with lower rates (10-20%). Additionally, a tax to finance the National Health Fund (FONASA) was introduced. It is composed of an employer's contribution rate of 5% of the beneficiary's salary and a personal rate proportional to the salary, with a base rate of 3%.

Corporate income tax (IRAE) was generalised to all sectors with a reduced flat rate of 25%, and its tax loss carryover period was extended from 3 to 5 years. IRAE substituted for several special regimes, such as income tax on industry and commerce (IRIC), and agriculture income tax (IRA).

VAT's basic rate was reduced from 23% to 22% and its minimum rate from 14% to 10%. In addition, the reform included some exempted goods at the minimum rate (e.g. health services, passengers' transportation), or at the basic rate (e.g. tobacco) (Llambí et al., 2009).

Fourteen taxes were eliminated in 2007, including the contribution to the financing of social security (COFIS) which was intended to finance the increasing social security deficit during the crisis of 2001/02, and a specific tax on health and services (IMESSA), that taxed health services exempt from VAT. Preferential regimes applicable to free trade zone, forestry, industrial and commercial qualifying activities were maintained, whereas financial incorporated corporations (SAFI) were to be included in the general tax regime after 31 December 2010.

As a result of the reform, the reliance on indirect taxes has been reduced and progressivity has been introduced to the system. In 2010, the effect of taxes on income, profits and capital gains alone reduced the Gini Coefficient by approximately 3%, according to data from the Commitment to Equity Project.

Tax on income and pensions has a moderate redistribution effect in total income, wage and pensions, whereas the effect on capital income is considered regressive. The latter is a consequence of the dual nature of the capital income tax, its flat tax rate, and the fact that the highest income sector is more likely to have a high share of tax exempt capital income (Burdin, Espoda and Vigorito, 2014). The pre-tax income share of the wealthiest 1% of the population in Uruguay has remained around 12-14% from 2009 to 2011. This value is below Colombia and some developed countries (e.g. Canada, United Kingdom and United States), yet is still above OECD average. Similar to Colombia, the wealthiest 1% has a major share of its wealth in capital assets and thus may benefit from pre-existing tax exemptions.

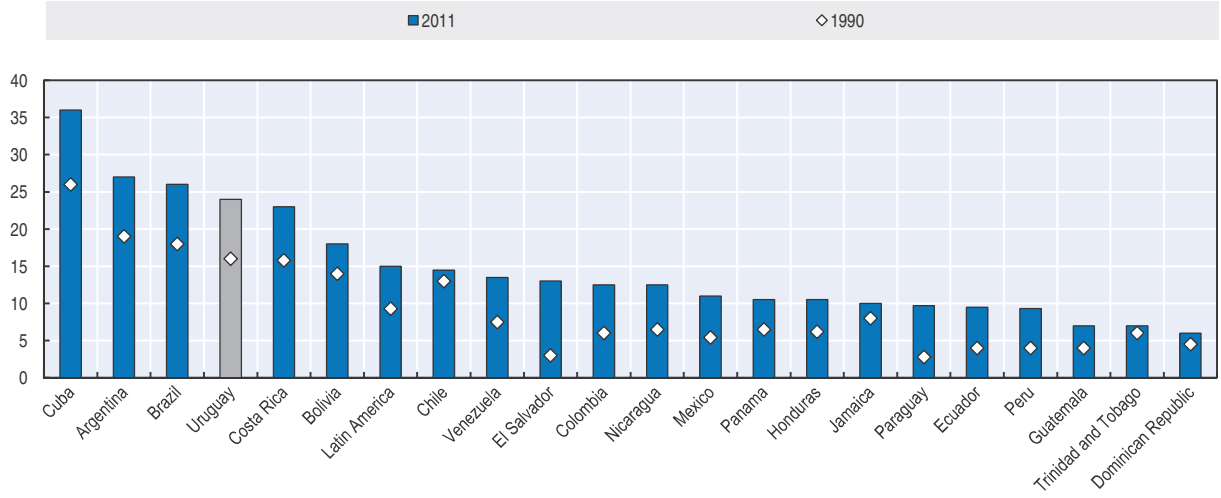
The total tax wedge on labour is relatively high in Uruguay at 35%, compared with Latin America (32% in 2010), but below the OECD average (41%). The main difference between OECD countries and the region is the tax rates on personal income. Even though Uruguay has one of the highest income tax rates in the region, it is still 48% lower than the OECD average. Uruguay has similar rates for social contributions relative to the OECD average, except in the case of workers' contributions to social security (14%) which are above OECD rate (9.8%); these contributions include charges for compulsory public and private health insurance and pensions.

### *Social expenditure has more than doubled in the last two decades*

Public expenditure rose from 2% to 4.7% of GDP between 1990 and 2012 in Latin America. Most of this increase may be explained by an expansionary fiscal policy to cope with the contraction in private sector demand due to the global financial crisis, with a major concentration on public investment in infrastructure. Nevertheless, Uruguay kept relatively similar expenditure in infrastructure between 1990 and 2012 (Martner, Podestas and Gonzales 2013); most of the increase in public expenditure was in health, education and social transfer programmes, including labour market policies. A similar tendency has been experienced throughout the region; on average social expenditure increased from 45% in 1990 to 63% in 2010-11 (Martner, Podestas and Gonzales 2013).

Figure 3.25. **Public social expenditure in Latin American and Caribbean countries**

1990 and 2011, % of GDP




*Source:* Martner, R., A. Podesta and I. Gonzalez (2013), "Politicas fiscales para el crecimiento y la igualdad" [Fiscal policies for growth and equity], *Serie Macroeconomia del Desarrollo*, No. 138, Naciones Unidas, Santiago, Chile.

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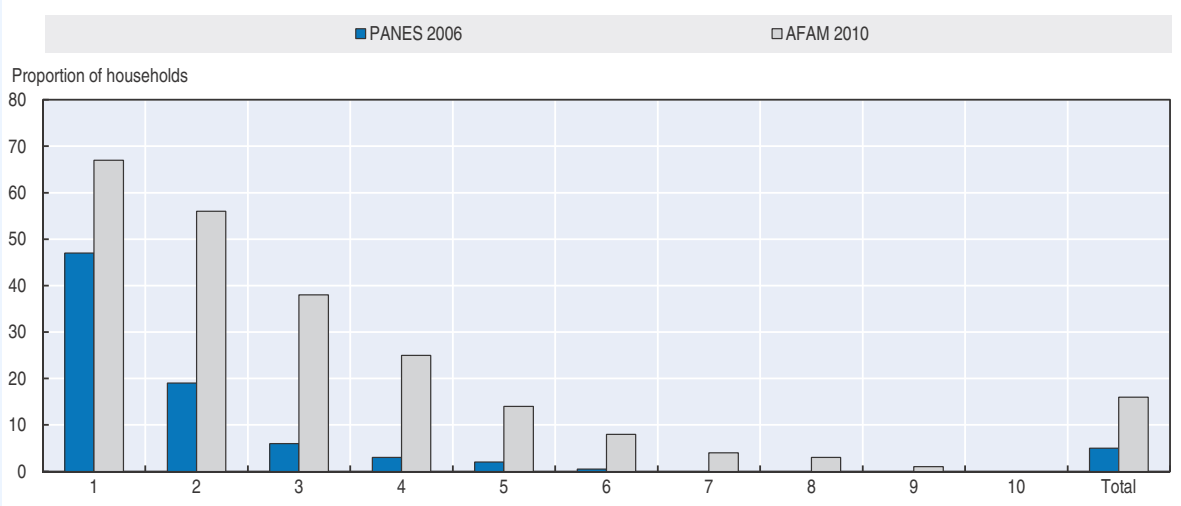
## Box 3.4. **PANES and Plan Equidad**

Important modifications were introduced to the social protection matrix after the economic crisis of 2002. As a result, the number of households benefiting from non-contributory cash transfers has notably increased in the last decade. In this regard, two of the more significant programmes implemented after the crisis are National Emergency Plan (PANES) and Equity Plan (Plan Equidad). The first, PANES, was implemented between 2005 and 2007; with goal of improving income and life conditions of beneficiaries in the short-term, and to provide them with better skills for their insertion in the job market.

PANES, targeted 20% of the population below the poverty line, approximately 8% of the total population. By the end of 2007, it had benefited more than 83 000 households, equivalent to 5% of households in the country and 10% of the population. Its different intervention levels included cash transfer programmes (income transfer and food allowance), educational and social insertion programmes (*ruta de salida*), housing projects, and programmes to ensure insertion in the job market (*Trabajo por Uruguay*). Around 80% of the selected households received cash transfers and 20% were included in the social and job market insertion programmes.

### Figure 3.26. **Non-contributory cash transfer programmes**




*Source:* Amarante, V. and A. Vigorito (2012), "La expansion de las transferencias no contributivas en Uruguay en los últimos años" [The expansion of non-contributory transfers in Uruguay in recent years], *Research brief*, No. 29, International Policy Centre for Inclusive Growth, Brasilia.

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At the same time that PANES was being implemented the Ministry for Social Development was created. The Ministry was responsible for the co-ordination of social protection policies, at a time when co-ordination of the different programmes to target inequality was dispersed. Yet, in order to implement PANES the recently created Ministry had to use the platform offer by the BPS, which helped to develop the database of potential beneficiaries and administered the payments of the cash transfer income programme. Additionally, the Council for Social Policies was established, as a space for discussing the policies to be implemented after the end of the PANES in 2007, which came to be known as Plan Equidad.

Plan Equidad was designed as a public strategy to reduce poverty and inequality. The plan included social, health and tax policy reform (for the tax reform see Box 3.3). In the social policy reform the cash transfers programmes were redesigned (family allowance programme). Complementary interventions for the plan included a food allowance programme which remained from PANES, childhood care coverage was extended, non-contributory pension age requirements were reduced to increase the number of beneficiaries, and the introduction of some relatively new social programmes with limited coverage. Among these new programmes you can find those that promote access to the labour market and education.

Box 3.4. **Panes and Plan Equidad** *(cont.)*

Plan Equidad has made a greater contribution to the reduction of inequality than PANES and is on the same magnitude as the impact that income taxes have on inequality. This result is exceptional since in some developed countries transfers have a less distributive effect than direct taxes.

*Source:* Amarante, V. and A. Vigorito (2012), "La expansion de las transferencias no contributivas en Uruguay en los últimos años" [The expansion of non-contributory transfers in Uruguay in recent years], *Research brief*, No. 29, International Policy Centre for Inclusive Growth, Brasilia.

Government expenditure has been focused on social investment since 2005, with aims of transforming the matrix of social protection. These programmes have concentrated on non-contributory monetary transfers, e.g. Plan de Equidad and Tarjeta Uruguay Social (TUS), which have been designed to focus on the most vulnerable socio-economic groups. Plan de Equidad was created as a permanent public programme or strategy to reduce poverty and inequalities. It does not only include a cash transfer programme, e.g. family allowance transfer programme (AFAM), but a set of social, fiscal and health sector reforms that have been implemented in the last five years (Amarante and Vigorito, 2012). In 2012, AFAM had more than 200 000 beneficiary households, from which more than half (114 000) were located in the lowest income quintile, while in May 2013 TUS had 65 162 beneficiaries, this number is forecasted to rapidly grow due to the extended coverage of the programme to rural areas.

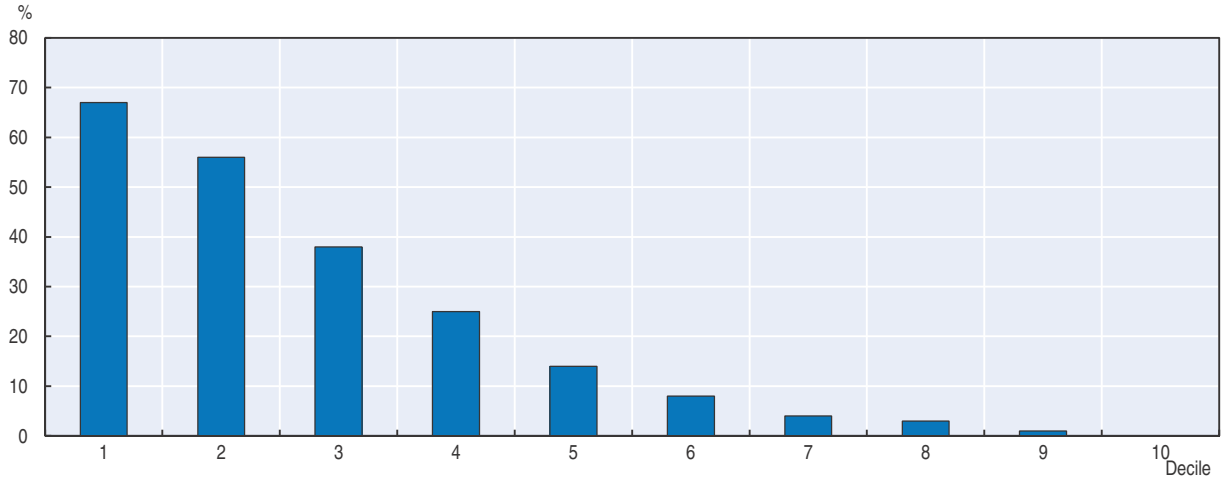
Compared with 2004 there has been major progress in targeting monetary transfers (AFAM and TUS) to the most vulnerable segments of the population. From 2004 to 2012 the transfers received by the beneficiaries increased by 13 percentage points (p.p.) when compared with total transfers. As of 2006, TUS included a means-tested food voucher targeted to households with children under 18, which allows households to obtain food and hygiene products free of charge. In 2009, the transfer to beneficiaries was USD 53 million PPP and the monthly average transfer was USD 50 PPP. Food assistance programmes, managed by different institutions, account for 0.3 percent of GDP.

AFAM is a family allowances programme that covers all families with income below USD 100 per month and in 2009 it accounted for 0.4% of GDP. The target population remained the same as previous family allowance programmes, but with higher benefits and a wider coverage than the old programmes. The income threshold for eligibility is higher but other characteristics (such as the type of housing) were added to determine eligibility. The benefit increases with the number of children, but at a decreasing rate, and is greater for a child attending secondary school than for one studying in an elementary school. In 2009, there were 337 000 beneficiaries (41 percent of children of eligible age) with an average monthly transfer of USD 38 PPP (Bucheli et al., 2013). According to the Planning and Budget Office of Uruguay AFAM covered 76% of children in extreme poverty and 68% of children in poverty in 2010; if added to the coverage reached through the transfers made to workers in the formal sector, the programme will have covered the entire first quintile and households in a state of poverty (Amarante and Vigorito, 2012).

*Uruguay Crece Contigo*, another social programme, focuses on women who are either pregnant or with children under 4 years old. In its first year, the programme reached 2 500 families in 10 departments; for 2013 it is expected to reach a national level and more than 10 000 families. Furthermore, the social security system administers a set of

Figure 3.27. **Percentage of households who received AFAM transfers**

Areas with more than 5 000 inhabitants




*Source:* Amarante, V. and A. Vigorito (2012), "La expansión de las transferencias no contributivas en Uruguay en los últimos años" [The expansion of non-contributory transfers in Uruguay in recent years], *Research brief*, No. 29, International Policy Centre for Inclusive Growth, Brasilia.

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programmes directed to its contributors: unemployment insurance, maternity and family benefits, disability coverage and sickness allowances; in 2009 they were equivalent to 1% of GDP (Bucheli et al., 2013).

Several social programmes have been implemented to cope with social, sanitary and housing emergencies in Uruguay. *Plan Nacional de Integracion Socio-Habitacional Juntos* (Plan Juntos) was created in 2012 to address problems related to the low quality and shortage of housing. In 2012, it invested in the renovation of 1 207 houses, and constructed 561 new ones. Additionally, the plan developed social infrastructure and public space. Another programme, Plan 7 Zonas, was implemented in the last months of 2012; it targeted issues of community security, infrastructure, and access to social security, among others.

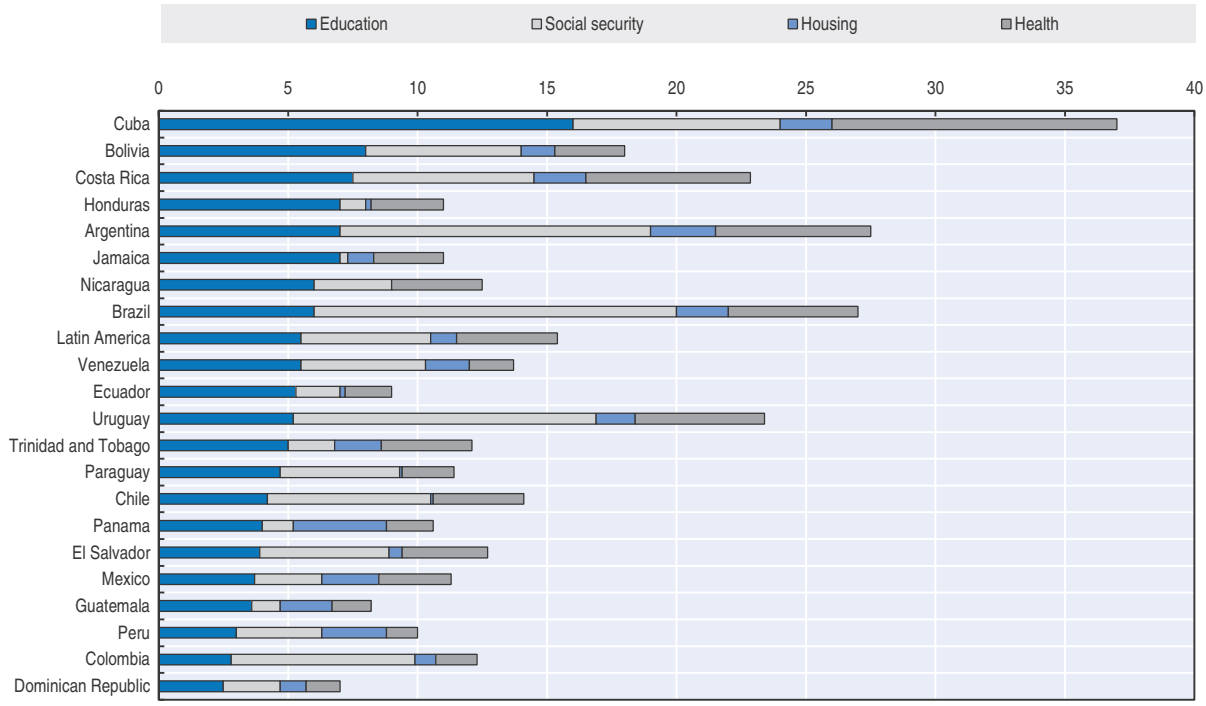
*Jovenes en Red*, another relevant social programme, targeted young people between 14 and 24 years old living below the poverty line, without employment in the formal sector and with a low level education. The programme has different stages of work: the first one concentrates on guiding the student through high school, while the second one concentrates on college and technical education. It has three areas of work with the beneficiaries: college education, technical education and a flexible programme of formal education. The third stage is related to insertion in the job market. Different work seminars and job market intermediation activities are carried out. In 2012, the programme was expected to reach 2 200 beneficiaries, from which 1 840 were located in Montevideo, San Jose and Canelones, and 360 in Artigas and Cerro Largo. It is expected that it will reach 5 000 beneficiaries by 2015.

### *Educational expenditure in Uruguay is above the Latin American average*

Public spending on education is currently around 4.2% of GDP in Uruguay (INE, 2012). Latin America is quite heterogeneous in terms of expenditures on education (Figure 3.28), which may be explained by the private-public structure of the service provision, as well as by the capacity of the government to generate the required resources. Enrolment in public

Figure 3.28. **Social expenditure structure in Latin America and the Caribbean**

% of GDP




*Source:* Martner, R., A. Podesta and I. Gonzalez, (2013), "Políticas fiscales para el crecimiento y la igualdad" [Fiscal policies for growth and equity], *Serie Macroeconomia del Desarrollo,* No. 138, Naciones Unidas, Santiago, Chile.

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education increased 7 percentage points for children between 0 and 1 year old (child care), and 10 percentage points for children aged between 2-3 years old between 2006 and 2011. Enrolment in the private education system has increased in recent years, as household income has risen. The number of centres with a full school day rose from 109 in 2006 to 168 in 2012, an increase in coverage of public education of 4.4 percentage points during that time. Pre-school, elementary school and the first three years of secondary school are mandatory in Uruguay.

A major educational programme is Centres for Childhood and Families Development (Plan CAIF). It was created in 1998 to promote and protect the rights of children from the moment of conception until 3 years of age, targeting families living below the poverty line. CAIF helped increase coverage in early childhood education, and took actions to improve education quality and the length of the school day. Between 2006 and 2009, 9 new day care centres were opened, while 33 other centres entered the full time school day programme.

### *Health expenditure is high, but still below OECD countries*

Public expenditure on health care is approximately 4.6% of GDP, below 6.7% of OECD in 2011 (OECD, 2013e). It comprises of two programmes: direct public health care for people living in poverty – a programme that has existed since the end of the 19th century – and the National Health Insurance System (SNS), which was launched in 2007. This system subsidises the private health care of workers, their spouses and dependent children under 18 years-old. It currently covers some inactive workers, and the intention for the future is to attain universal coverage (Bucheli et al., 2013). The coverage of the SNS increased from

23% of the population in 2007 to 62% in 2012. Pensioners and retirees began the affiliation process for the health insurance in 2012, with which 160 000 people were affiliated.

Health coverage is expected to reach approximately 70% of the population by 2016, nevertheless there will be around 30% of the population that may fall outside of the system either because they belong to one of the special schemes, or because they work in the informal sector of the economy and lack the resources to pay for a health care provider (Antia et al., 2012). Transfer to care providers, public or private, are managed by a state owned fund, FONASA; the number of beneficiaries have increased from 724 830 in 2007 to 2.11 million in 2012. The amount transferred by the fund is financed by a tax composed of an employer's contribution of 5% of the beneficiary's salary and an employee's contribution of a rate proportional to their earnings, starting with a rate of 3% of salary. The rate the employee pays varies according to the age and gender of the beneficiary; it is larger for those between 15 and 64 years of age, and is greater for women than for men (Bucheli et al., 2013).

### *Pension and unemployment insurance coverage has increased in recent years*

The largest component of social spending is the contributory pension programme (8.7% of GDP in 2009), which includes retirement and survivors' pensions. The programme was created towards the end of the 19th century for workers in specific sectors. During the 20th century, coverage was extended to all workers, including the self-employed. Currently, the system is organised with a pay-as-you-go pillar administered by the public sector and an individual capitalisation fund pillar administered by a private company selected by the contributor (Bucheli et al., 2013). The minimum age for retirement is 60 years old (64 years old prior to July 2009) with a minimum of 30 years of contributions.

The non-contributory pensions programme (*Pensión a la vejez e invalidez*) provides monetary transfers of less value than those in the contributory system. It has been in place since 1919 and is available to adults with a low-income who are older than 64 years of age (over 69 years of age prior to July 2009) and disabled individuals who are not eligible for benefits from the contributory system (Bucheli et al). In 2009, 92% of individuals older than 64 years were covered by either a contributory (479 000 individuals) or non-contributory pension (51 000 individuals).

The unemployment insurance (UI) is administered by the BPS, although its design is mainly the responsibility of the Ministry of Labour. The UI covers all private sector dependent workers except for workers in the financial sector, who have a separate programme. The UI has a low coverage in part explained by the characteristics of the Uruguayan labour market. Workers in the formal sector are the only ones that can apply for the UI; they represented around 40% of the workers in 2007 (Amarante, Arim and Dean, 2012). The unemployment insurance programme covers three risks: dismissal, suspension and reduction in the hours of work.

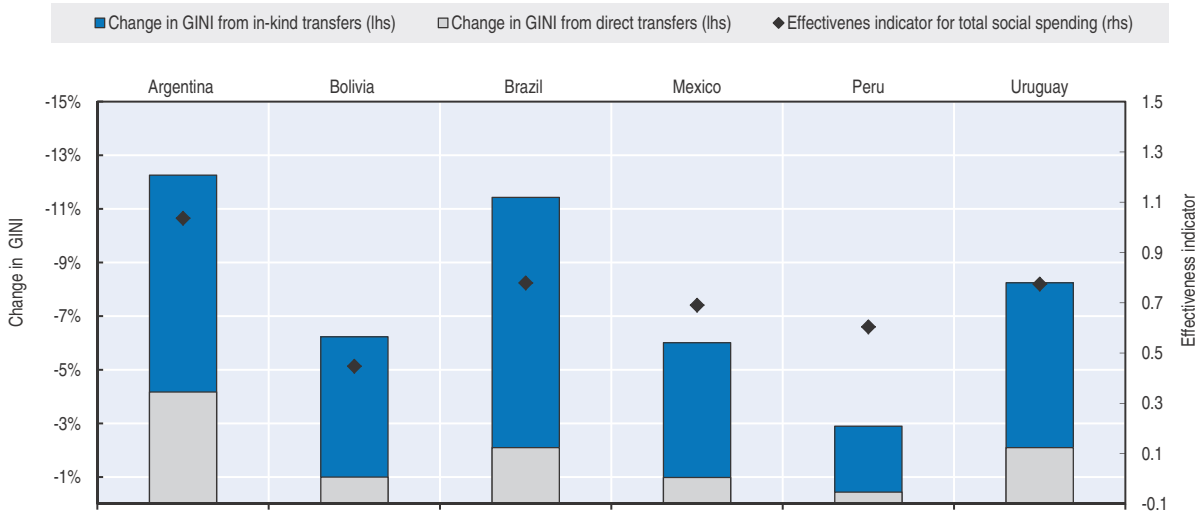
Important modifications to the unemployment insurance programme were introduced with the approval of law 15.180, implemented in February 2009. The most relevant change affects the amount of benefits for those unemployed in the modality of job loss: instead of being an equal sum for every month, the new system establishes a decreasing scheme of benefits. Also, it was established that the Executive Power, through the Ministry of Labour, may extend the duration of the unemployment subsidy, for those who were dismissed (job loss), up to a maximum of eight months, when the economy is going through a recession. This happens when GDP falls during two consecutive quarters.

For those UI beneficiaries due to suspension, the duration of the programme was reduced to four months (or 48 labour days). During this time, they continue to get 50% of their average wage for the previous six months (or 12 labour days). Another important change refers to workers aged 50 or more, who can now keep the subsidy for six additional months. The new regulations also attempt to co-ordinate UI with active labour market policies. UI beneficiaries in the job loss modality may lose their UI benefits if they do not participate in training courses offered by the Ministry of Labour.

### *One of the most effective social expenditure programmes*

Uruguay's social expenditure programmes improve income redistribution by more than 10%. Despite spending considerably less than Bolivia and not much more than Mexico, Uruguay is highly effective at reducing inequality (Lustig, Pessino and Scott, 2013). Uruguay's direct transfer programmes are one of the most effective among the Latin American countries (Figure 3.29). Yet, most of the change in income inequality, measured by the Gini coefficient, is explained by transfers related to the education and health sector (in-kind transfers). In Figure 3.29 we can observe the effectiveness of social expenditure (i.e. direct transfers) for selected Latin American countries, where effectiveness is measured as the ratio of the change in the net market income Gini coefficient with respect to the final income Gini, and the size of the direct transfers as a percentage of GDP.

Figure 3.29. **Effectiveness of social expenditure in selected Latin American countries**




*Note:* Data for Mexico is from 2010

*Source:* Lustig, N. and S. Higgins (2013), "Estimating the Incidence of Social Spending, Subsidies and Taxes" Handbook, Commitment to Equity Assessment (CEQ), *Working Paper*, No. 1, July 2011; revised September 2013, New Orleans, LA.

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The Commitment to Equity Project (Box 3.5, below) develops two analyses when evaluating the effectiveness of the fiscal system in reducing inequality. The benchmark analysis considers all contributions to social security except the portion going towards pensions, which are treated as savings; and a sensitivity analysis where all contributions to social security are considered without exemptions. The results used in this document are those of the benchmark analysis. Figure 3.30 shows how much the income of an individual in a determined income group changes when pensions are added as part of

Box 3.5. **Commitment to Equity**

Commitment to Equity (CEQ) is a joint project of the Inter-American Dialogue (IAD) and Tulane University's Center for Inter-American Policy and Research (CIPR) and Department of Economics. It was designed to analyse the impact of taxation and social spending on inequality and poverty in individual countries, and to provide a roadmap for governments, multi-lateral institutions, and non-governmental organisations in their efforts to build more equitable societies.

The main purpose of CEQ is to inform governments of how their fiscal policy affects their equity goals, recommend practical measures, and enhance accountability and transparency through better data collection and evaluation systems. In order to achieve this, CEQ assessments use incidence analysis and a specially-designed diagnostic questionnaire to address three questions: i) How much inequality and poverty reduction is being accomplished in each country through social spending, subsidies and taxes?; ii) How progressive are revenue collection and government spending?; iii) Within the limits of fiscal prudence, what could be done to increase redistribution and poverty reduction in each country through changes in taxation and spending?

The CEQ incidence analysis provides the first comprehensive assessment of how taxes and social spending (including indirect subsidies and taxes, and education and health expenditures) affect income inequality and poverty across Latin America. The assessments will be comparable across countries and over time. The country-level studies will examine the distributional effects of individual programmes and policy measures – and the net effect of each country's mix of policies and programmes. The results will give policy makers, multilateral institutions, and non-governmental groups the data and analysis necessary to determine what changes in tax and spending policies will lead to greater equality and poverty reduction.

The CEQ provides new opportunities for civil society organisations to monitor the distributional effects of government taxes and spending. It will also provide a critical source of information and analysis for international donors regarding external resources needed to meet specific goals in low-income countries. Furthermore, the CEQ results can also be used to monitor the situation of minority and other excluded groups – including for example, Afro-descendants and indigenous groups – and determine the extent to which government taxes and spending affect their incomes and well-being.

Currently CEQ has carried out its diagnosis questionnaire and incidence analysis in Argentina, Bolivia, Brazil, Colombia, Mexico, Paraguay, Peru and Uruguay with the results available on the web page (www.commitmentoequity.com), and has work undergoing in Chile, Costa Rica, El Salvador and Guatemala.

*Source:* Commitment to Equity (2014), *www.commitmentoequity.org/whatisceq.php*, (accessed 24 April 2014).

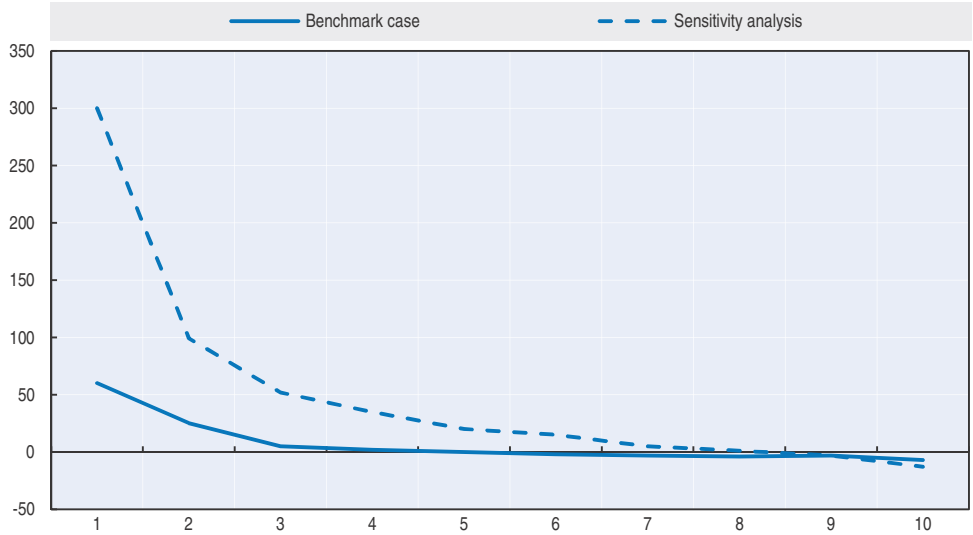
market income. One key of the Uruguayan success in targeting the poorer population is the effective use of the non-contributory pension system, although this is a strategy that may not be sustainable over time due to the pressures it may generate for the fiscal balance.

### *Social expenditure has a high impact for reducing inequality*

Uruguay has the second most progressive fiscal structure among the six countries studied in the Commitment to Equity Project,[8] when considering its concentration shares. Overall, no components are outright regressive as none of the programmes have a greater concentration coefficient than the market income[9] Gini (Figure 3.31). Uruguay's food

Figure 3.30. **Change in income by decile**

Change in disposable income when pensions are considered part of the market income of individuals




*Source:* Bucheli, M. et al. (2013), "Social spending, taxes and income redistribution in Uruguay", *Working Papers*, No. 217, Tulane University, Department of Economics, New Orleans, LA.

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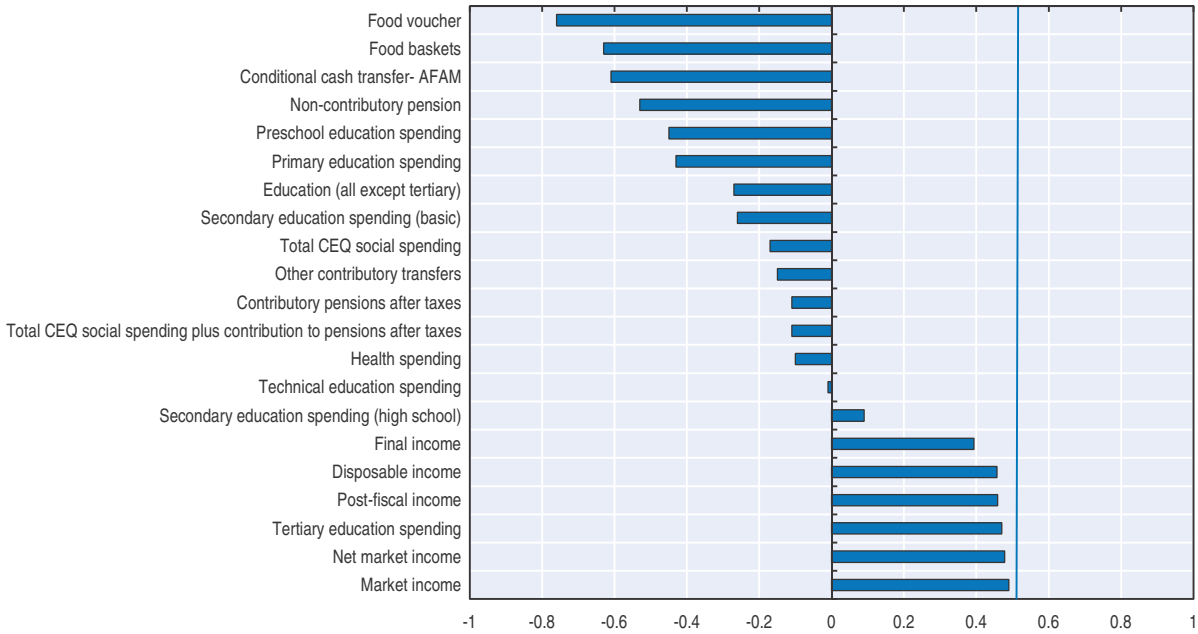
Figure 3.31. **Impact of social programmes on income redistribution in Uruguay**

Concentration Coefficient




*Note:* Blue line accounts for market income Gini.

*Source:* Bucheli, M. et al. (2013), "Social spending, taxes and income redistribution in Uruguay", *Working Papers*, No. 217, Tulane University, Department of Economics, New Orleans, LA.

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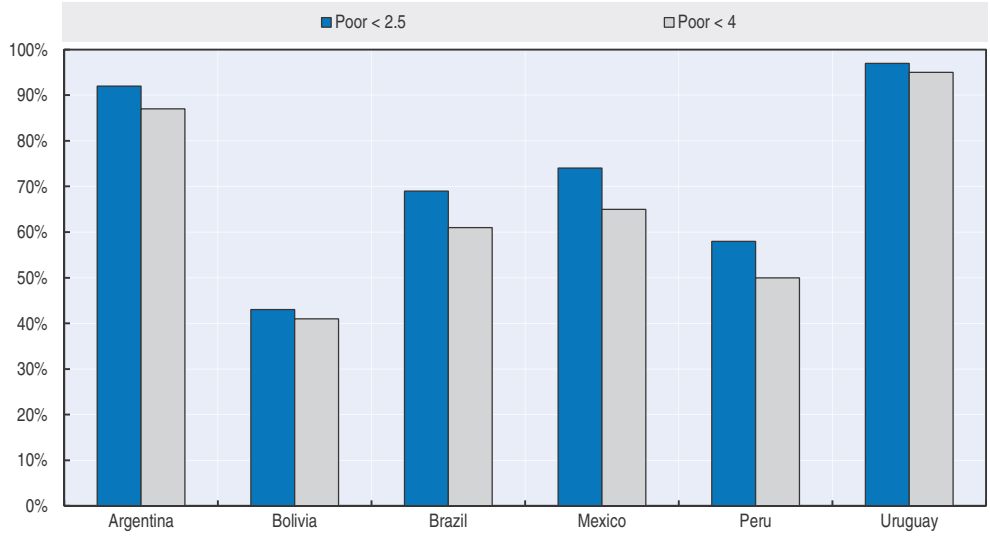
transfer programmes (TSU) and flagship cash transfer programme (AFAM) have one of the highest concentration coefficients in the region, thus the most progressive programmes in absolute terms. The only components of social spending that are not progressive in absolute terms are spending on high school and tertiary education. Tertiary education in Uruguay is almost neutral in relative terms, and is less progressive than it is in all five of the other Latin American countries studied. The concentration coefficient of tertiary education in Uruguay (0.47) is quite close to market income Gini (0.49), and is higher than the concentration coefficient of tertiary education in Brazil (0.46), Bolivia (0.37), Peru (0.31), Mexico (0.22) and Argentina (0.20) (Bucheli et al.). Tertiary education spending may present a slight concentration in non-poor sectors due to the high dropout rates discussed earlier in the chapter.

Uruguay's direct transfer programmes cover approximately 95% of its poor population. However, given the significant size of its middle class it is noticeable that most of the benefits are going to the non-poor segment once pensions are considered as part of individuals' market income. Nevertheless, Uruguay's direct transfers received by the extreme and moderate poor appear to be enough to move them out of extreme poverty (Bucheli et al., 2013). However, there are persistent extreme poverty levels in the economy; indicating that more efforts are needed. The amount transferred may have to be reviewed in order to determine if they are sufficient to eradicate extreme poverty. Also, the possibility of including additional components in the existing programmes that work closely with the families on different issues that restrict their movement towards a higher income group should be considered. One example of these types of components is in *Jovenes en Red*, which, as stated before, works closely with the beneficiaries on different socio-cultural issues to ensure their insertion in the job market.

Figure 3.32. **Coverage of direct transfers in selected Latin American countries**



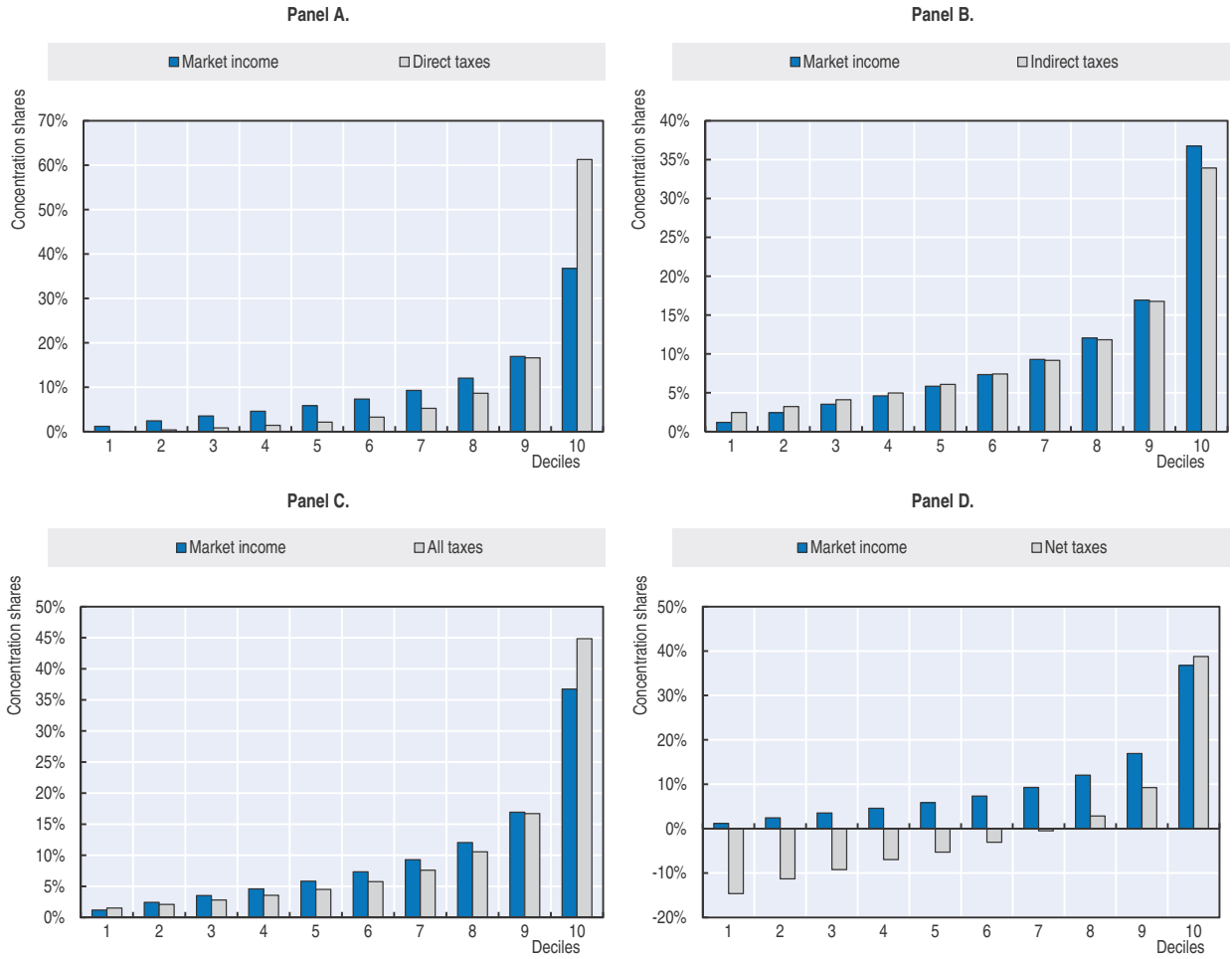

*Source:* Bucheli, M. et al. (2013), "Social spending, taxes and income redistribution in Uruguay", *Working Papers*, No. 217, Tulane University, Department of Economics, New Orleans, LA.

*StatLink* http://dx.doi.org/10.1787/888933078661

### *An overall progressive tax system coupled with effective social spending*

Direct transfers offset any negative impact taxes may have on inequality for the poorest tax payers. Indirect taxes can have a regressive effect (Figure 3.33, Panel B), yet once all taxes

Figure 3.33. **Effect of taxes and transfers on market income in Uruguay**




*Source:* Bucheli, M. et al. (2013), "Social spending, taxes and income redistribution in Uruguay", *Working Papers*, No. 217, Tulane University, Department of Economics, New Orleans, LA.

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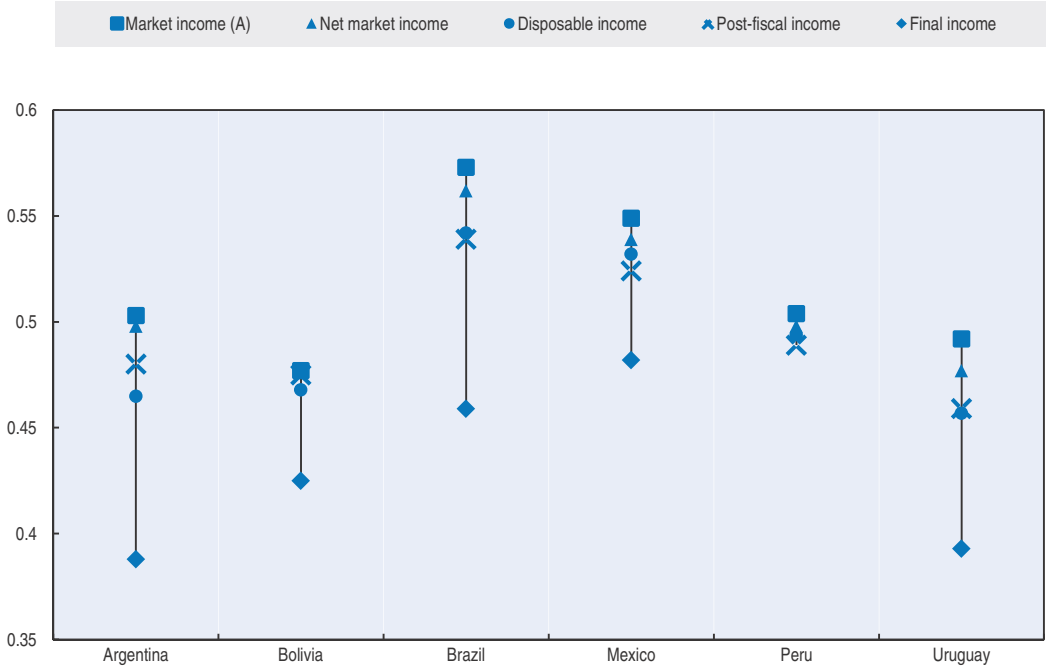
are considered the effect on income redistribution remains positive (Figure 3.33, Panel C). The progressivity of Uruguay's directs taxes are similar to the ones in Brazil and Peru.[10] Yet, the progressivity of the system may be over-estimated since the data base, National Household Service, fails to catch much information on the higher income population.

Taxes and direct transfers reduce the Gini coefficient by as much as 7.1% in Uruguay. In Bolivia, Mexico and Peru the reduction amounts to less than 3%, while in Brazil and Uruguay, the reduction is mainly due to the impact of direct transfers. Indirect taxes and subsidies have a slightly negative effect on Uruguay's income distribution; only reducing the Gini coefficient by 0.44%. This may be the result of a broader tax base, implemented mid-2007, which made indirect taxes less regressive than in most countries in the region (Figure 3.34). The major impact in inequality is due to in-kind transfers (health and education). Inequality declines substantially, 14% when comparing the Gini coefficient for market income to post-fiscal income (including taxes, direct transfers and indirect subsidies).

Figure 3.34. **Effect of taxes and transfers in Uruguay's income distribution**




*Source:* Bucheli, M. et al. (2013), "Social spending, taxes and income redistribution in Uruguay", *Working Papers*, No. 217, Tulane University, Department of Economics, New Orleans, LA.

*StatLink* http://dx.doi.org/10.1787/888933078699

### *Fiscal mobility generally lifts people out of poverty and reduces disposable income at the top*

Fiscal mobility is defined as the directional movement between the pre- and post-tax transfers among pre-defined income categories. A fiscal mobility matrix measures the proportion of individuals that move from a given income group (e.g. non-poor) before taxes and transfers to another income group (e.g. poor) after their income is changed by taxes and transfers. Note that taxes and transfers can cause individuals to move up or down the income categories (Lustig and Higgins, 2013).

Uruguay's taxes and direct transfers result in a significant decline in ultra-poverty levels.[11] After tax and transfers, 6.7% people living in ultra-poverty moved to the vulnerable segment of the population, as well as 13% of people living in extreme poverty. More than half of the individuals in ultra or extreme poverty were able to move to the next income bracket. Once in-kind transfers are considered 0.47%, 2.98% and 4.8% of people living in ultra, extreme and moderate poverty became middle class (2009).

As a result of the redistribution of income, almost 31% of the better-off segment of the population becomes middle class. The average income loss of those who moved up into the next income bracket is 17.3%. Nevertheless, the major concern should be that after taxes and transfers 0.9%, 2.7% and 1.9% of the population in extreme poverty, moderate poverty and non-poor drop, respectively, one income group towards increased levels of poverty.

Table 3.2. **Fiscal mobility matrix: Uruguay, 2009**

| Market income groups | Post-fiscal income groups | | | | | | Percentage of population | Mean income |
|---|---|---|---|---|---|---|---|---|
| | y < 1.25 | 1.25 <= y < 2.50 | 2.50 <= y < 4.00 | 4.00 <= y < 10.00 | 10.00 <= y < 50.00 | 50.00 <= y | | |
| **y < 1.25** | 13.9% | 52.1% | 27.2% | 6.7% | 0.0% | 0.0% | 1.3% | 431 |
| **1.25 <= y < 2.50** | 0.9% | 33.1% | 52.9% | 13.0% | 0.0% | 0.0% | 3.8% | 1 073 |
| **2.50 <= y < 4.00** | 0.0% | 2.7% | 56.4% | 40.5% | 0.4% | 0.0% | 6.5% | 1 854 |
| **4.00 <= y < 10.00** | 0.0% | 0.0% | 1.9% | 95.5% | 2.6% | 0.0% | 27.8% | 3 940 |
| **10.00 <= y < 50.00** | 0.0% | 0.0% | 0.0% | 6.3% | 93.6% | 0.0% | 53.8% | 12 128 |
| **50.00 <= y** | 0.0% | 0.0% | 0.0% | 0.0% | 30.9% | 69.1% | 6.8% | 47 107 |
| **Percent of population** | 0.2% | 2.1% | 6.5% | 33.1% | 53.3% | 4.7% | 100.0% | 10 999 |

*Source:* Bucheli, M. et al. (2013), "Social spending, taxes and income redistribution in Uruguay", *Working Papers*, No. 217, Tulane University, Department of Economics, New Orleans, LA.

## Conclusions

The decline in poverty and inequality is a cause for optimism in Uruguay, yet part of this achievement is explained by a reversion of poverty indicators to pre-crisis levels. Despite this improvement, market income inequality remains high. It is important that public policies target disadvantaged groups by re-orienting social spending to the most deprived sectors. Also, regional differences remain an important factor when understanding disparities in income, including access to education and health services, among others. Policies tackling the regional gap between Montevideo and other departments are key if Uruguay wants to capitalise on its positive economic momentum.

Disparity in the access and quality of education remains the single most important challenge for Uruguayan authorities in the years to come, especially with regards to secondary education. Appalling dropout and repetition rates, strong dependence of performance on socio-economic background, regional inequalities in access and low performance by international standards highlight the need for undertaking significant reforms in the sector in the future. Also, inequalities in labour and total income are persistent, but have been reduced due to the combined effects of social transfers and a reduced wage premium by educational attainment, among other factors. Youth unemployment remains an important issue for tackling labour inequalities. The strengthening of wage bargaining structures, together with structural factors such as the decreasing returns on education explains this trend, but it remains unclear whether this situation is sustainable in a context of low economic growth.

Uruguay does not yet have a looming expenditure problem, but as per capita incomes rise, there will be greater demands for social transfers and higher medical expenses. Higher spending (relative to GDP) has to be financed. Although tax revenue relative to GDP is higher than the regional average, there is room for it to rise further over time; however, this would have to be combined with improvements in the effectiveness and efficiency of expenditures. Furthermore, policies must analyse carefully how to finance these expenditures. Uruguay should ensure the progressivity of its tax system when considering a shift away from taxes on profits and a move towards taxes on personal incomes. Revenue from property and environmental taxes is also low at present, and improvement in this area should be considered as this will improve the progressivity in the system. A major challenge for Uruguay is the increase in levels of informality, which clearly undermines the tax base.

## Notes

1. The Poverty Gap Index, otherwise known as the Foster-Greer-Thorbecke or FGT(1) metric, is a per capita measure of the shortfall in the welfare of the poor from the poverty line, expressed as a ratio of the poverty line (World Bank Development Indicators).
2. For Uruguay, a decrease is observed in the range between USD 10 and USD 50 USD a day, mostly explained by a growth effect.
3. The measure of labour efficiency is related to a number of indicators: co-operation in labour-employer relations, flexibility of wage determination, rigidity of employment, hiring and firing practices, redundancy costs, reliance on professional management, brain drain and female labour force participation (WEF, 2013).
4. Ñopo and Bassi (2013) take secondary technical education as the reference basis.
5. In this study, all after-tax income is classified under one of five categories: i) labour income; ii) pensions; iii) social transfers; iv) imputed housing rents; and v) other income.
6. Concentration (equation 00), in this context, refers to the decomposition of Lerman and Yitzhaki (1985), and is a measure of how concentrated an income source is on the high-income population. It is defined as (equation 00), the product of the Gini coefficient of source *k* and the Gini correlation between source *k* and total income.
7. An individual decomposition for some quintiles that the growth in labour income is mostly explained by employment characteristics, such as occupation category and formality status. This is the case for the 2nd quintile, which experienced a 23% increase over the period. For the 50th percentile, in contrast, two-thirds of the labour income increase is explained by the change in returns, whereas in the 95th percentile returns had a negative effect.
8. The countries included in Commitment to Equity are: Argentina, Bolivia, Brazil, Mexico, Peru and Uruguay.
9. Market income is defined by the Commitment to Equity Project as the sum of gross pre-tax wage and salaries in the formal and informal sectors, the income from capital in the formal and informal sectors excluding capital gains and profits, self-consumption also known as production for own consumption, private transfers and retirement pensions from the contributory social security system.
10. For more detail on the tax systems in Brazil and Peru see Commitment to Equity Standards Indicators, 11 October 2013, *www.commitmenttoequity.org*.
11. Less than 1.25 PPP USD per day.

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*Chapter 4*

# Macroeconomic policies for sustaining growth and social inclusion in Uruguay

*This chapter discusses issues related to the macroeconomic framework and the institutional settings needed to consolidate recent gains in terms of economic growth and reduction in inequalities. After a brief discussion of the post-crisis recovery of the Uruguayan economy since 2002, it sets out the main challenges facing the economy and the appropriate policy directions necessary to address short, medium and longer-term issues. Particular attention is paid to opportunities and challenges linked to the materialisation of significant investments in the mining sector, as well as fiscal frameworks that could help reap the most benefits.*

## A decade of strong growth brings new challenges

Uruguay's recovery following the 2001-02 financial crisis has turned into the longest period of economic growth in decades. Consistent and stable macroeconomic policies and a favourable external environment have permitted brisk growth and the financing of social policies that reversed devastating effects on the social fabric of society. However, a number of new challenges have emerged, while structural issues in different areas have become more visible. This is in part a consequence of strong economic growth in recent years. Several bottlenecks also require determined policy action if growth and social progress are to continue at a similar pace.

This chapter explores macroeconomic policies and frameworks that could help to resolve some of the short-term challenges and provide the sustainable and stable macroeconomic conditions necessary to facilitate long-term progress. The chapter starts with a review of the post-crisis recovery period and subsequent economic expansion. Special attention is paid to the role of macroeconomic policies in terms of long-term sustainability and capacity to stabilise short-term economic fluctuations. The chapter then discusses alternatives for creating fiscal space, so as to finance some of the policy priorities identified in previous chapters. In particular, it analyses the current tax mix and discusses possible areas for raising more tax revenues. Furthermore, the chapter also explores institutional issues of fiscal policy that could help to improve efficiency of expenditures and macroeconomic management. Finally, the chapter provides a special focus on the mining sector – a potential source of public revenues, but one that could present macroeconomic challenges if not handled correctly.

## From post-crisis recovery to expansion

The financial and economic crisis of 2002, during which foreign creditors withdrew their deposits and the peso plunged, underlined the threat to macroeconomic stability and the Uruguay banking system of the high proportion of dollar-denominated public debt and of non-resident dollar-denominated deposits. No privately owned domestic bank survived and access to international financial markets was cut off for a period of time. Aid from the IMF and elsewhere was conditional on sustained primary surpluses and banking sector reforms. The memorandum of understanding signed with the IMF in early 2003 (IMF, 2013a) projected a primary surplus of 2.3% of GDP that year, and a fall in inflation to 27% by the end of the year in return for about USD 3 billion of loans, or more than three times the Uruguay quota (the loan amount was subsequently raised). Non-performing loans of the public bank (BROU) were to be transferred to another entity and private banks liquidated in an orderly fashion. Targets were set for the growth of the money supply, and a floating exchange rate regime was adopted. In addition, the government decided on a programme of steady reduction in the proportion of dollar-denominated public debt, and a lengthening of its maturity structure.

Already by 2004 the economy was expanding briskly and both inflation and unemployment were falling. Performance targets were met. Real GDP growth averaged 5.3% between 2003 and 2013, well above the estimated potential rate of about 4%. Primary surpluses of 3-4% of GDP were recorded until 2007, falling to 1-2% of GDP thereafter (Table 4.1). The public sector borrowing requirement remained in deficit throughout. Loans from the international financial institutions were repaid ahead of schedule,[1] and the domestic private banking sector was taken over by international banks. Despite favourable terms of trade, the external current balance went back into deficit in 2006, but it has been more than financed by inward investment flows. More disturbingly, consumer price inflation only once dipped below the BCU's target range of 4-6% (in 2005) and shows little signs of decelerating. During 2013, the year-on-year rate never fell below 8%, and generally moved between 8.5% and 9%.

Table 4.1. **The Uruguayan economy 1999-2013**

| Year | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Real GDP | -3.0 | -1.8 | -3.5 | -7.1 | 2.3 | 4.6 | 6.8 | 4.1 | 6.5 | 7.2 | 2.4 | 8.4 | 7.3 | 3.7 | 4.4 |
| Inflation, CPI | 5.7 | 4.8 | 4.4 | 14.0 | 19.4 | 9.2 | 4.7 | 6.4 | 8.1 | 7.9 | 7.1 | 6.7 | 8.1 | 8.1 | 8.6 |
| Unemployment* | 11.2 | 13.4 | 15.2 | 16.7 | 17.1 | 13.3 | 12.1 | 10.8 | 9.4 | 8.0 | 7.7 | 7.2 | 6.3 | 6.5 | 6.5 |
| Primary net lending | -1.5 | -1.2 | -0.9 | 0.2 | 3.0 | 3.8 | 4.0 | 3.7 | 3.6 | 1.4 | 1.2 | 1.9 | 2.0 | -0.2 | 0.5 |
| Net public debt | 26.0 | 30.1 | 36.9 | 62.6 | 79.1 | 74.4 | 61.7 | 55.7 | 52.9 | 42.0 | 50.6 | 38.3 | 38.4 | 40.7 | 37.2 |
| Public debt in local currency, % of total** | 10.0 | 8.4 | 17.8 | 4.4 | 7.8 | 12.0 | 15.1 | 21.0 | 32.2 | 31.9 | 35.7 | 44.7 | 52.1 | 57.4 | 59.8 |
| External debt | 19.7 | 23.2 | 24.9 | 56.9 | 72.9 | 67.0 | 53.8 | 47.3 | 46.8 | 34.8 | 39.9 | 30.8 | 28.0 | 30.0 | 28.5 |
| USD banking sector deposits, % of total*** | 85.5 | 87.3 | 89.0 | 90.9 | 90.5 | 90.2 | 87.0 | 84.3 | 81.5 | 78.0 | 80.4 | 76.7 | 73.8 | 73.7 | 73.8 |
| Current balance | -2.1 | -2.5 | -2.4 | 2.8 | -0.7 | 0.0 | 0.2 | -2.0 | -0.9 | -5.7 | -1.3 | -1.9 | -2.9 | -5.4 | -5.6 |
| Net inward foreign direct investment | 1.0 | 1.2 | 1.4 | 1.3 | 3.3 | 2.3 | 4.7 | 7.6 | 5.3 | 7.0 | 5.0 | 6.0 | 5.3 | 5.4 | 5.0 |
| Foreign reserves, USD billions*** | | | | | 2.1 | 2.5 | 3.1 | 3.1 | 4.1 | 6.3 | 8.0 | 7.7 | 10.3 | 13.6 | 16.3 |
| Foreign reserves, % of GDP | | | | | 17.2 | 18.3 | 17.7 | 15.8 | 17.6 | 20.8 | 26.4 | 19.9 | 21.8 | 27.1 | 29.2 |
| Peso exchange rate: per USD | 11.3 | 12.1 | 13.3 | 21.3 | 28.2 | 28.7 | 24.5 | 24.1 | 23.5 | 20.9 | 22.6 | 20.1 | 19.3 | 20.3 | 20.4 |
| M1 growth, end-year | 5.0 | -4.2 | -3.2 | 4.7 | 34.0 | 13.0 | 33.4 | 20.0 | 31.8 | 17.5 | 11.9 | 28.1 | 19.2 | 9.2 | 13.1 |
| Nominal GDP | 2.3 | 1.5 | 0.8 | 3.9 | 17.5 | 15.6 | 8.2 | 10.9 | 16.6 | 15.8 | 8.1 | 13.5 | 17.0 | 11.3 | 12.3 |

* Percentage of labour force.
** Central government.
*** End of period.
*Source:* IMF (2014), *World Economic Outlook Database*, International Monetary Fund, April 2014 Edition, Washington DC; BCU (2014), *Informe de Cuentas Nacionales 4to Trimestre 2013*, Montevideo and MEF (2014), *Economic indicators*, Ministerio de Economía y Finanzas, *www.mef.gub.uy/indicadores.php*.

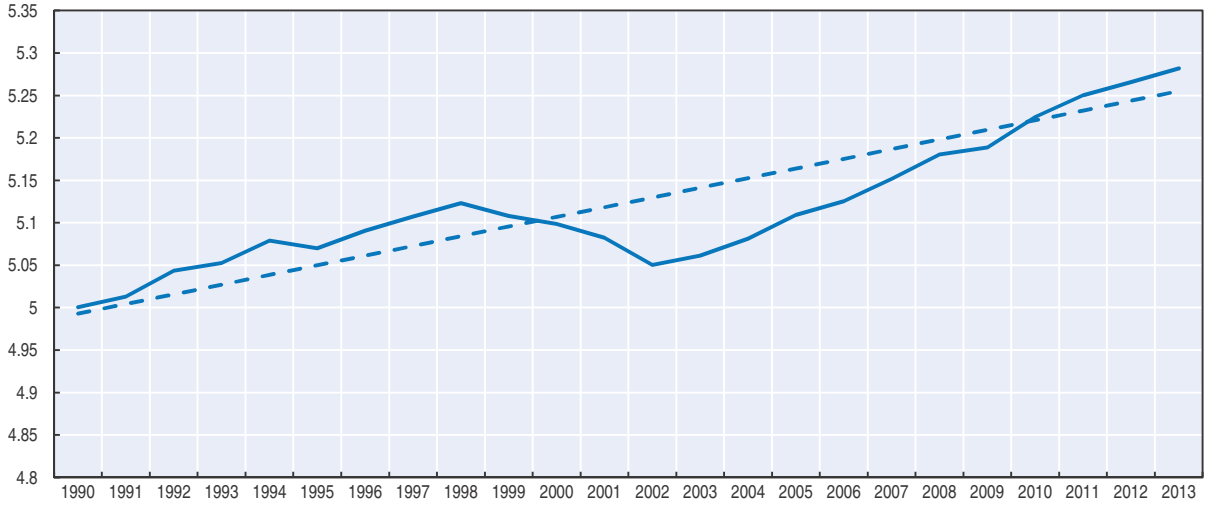
Prudent fiscal policies contributed to the success of the public debt management strategy, establishing a framework of stability and credibility. Between 2004 and 2013, the ratio of net debt to GDP for the non-financial public sector fell from 74.4% of GDP to half its size (Table 4.1). During this period, consistent efforts were made by the Ministry of Finance (MEF) Debt Management Unit to make Uruguay's peso-denominated medium- and long-term public debt attractive to domestic and foreign investors. As a result, the average time to maturity rose from 7.4 years to over 11 years, the amortisation schedule was smoothed, and the proportion falling due within one year fell by three-quarters. A pre-funding policy was introduced in the form of cash reserves, 2.6% of GDP, to cover debt service over the next two years to cope with unexpected fiscal shocks and external disturbances. As an additional measure in the event that political pressure was exerted to allocate these

reserves to other ends, contingent credit lines equivalent to around 4% of GDP were opened with multilateral institutions, including the *Corporación Andina de Fomento* (CAF), *Fondo Latinoamerico de Reservas* (FLAR), Inter-American Development Bank (IDB) and World Bank, to draw on should international capital markets be closed. The proportion of peso-denominated debt rose from 12% at end-2004 to around 60% at the end of 2013, while the share of fixed interest rate debt rose from 77% in 2004 to 95%, and the proportion of debt in the form of loans fell from 44% to 10% over the same period (MEF, 2013a). Foreign reserves were also built up from 17% of GDP at end-2004 to 29% by the end of 2013. The success of the debt-management strategy can be judged by the return of Uruguay's public debt to investment grade in 2012.

After the 2002 trough, real GDP per capita returned to its previous peak by 2006, and continued to expand briskly. A simple log-linear regression of real GDP per capita since 1990 (Figure 4.1) suggests that it had returned to potential by 2010, and has remained above potential since that year.[2] According to this simple estimate, the output gap would be between 2-3% above potential in 2013. It is never straightforward to measure the economic potential of an economy or the proximity of the economy to its potential level of output. However, given that inflation has remained high despite the appreciation of the peso in 2011 and 2012, that wages in both real and nominal terms have risen rapidly, and that unemployment remains well below the historical average, it seems clear that the Uruguayan economy was above potential in 2013. The latest Article IV consultation report by the IMF (2014a) and official estimates indicate a similar diagnosis. For example, the annual report on the budget by the MEF presents an output gap estimate of around 2% for 2013 (MEF, 2013b). The BCU also estimates that the output gap in Q2 2013 was close to these values.[3]

Figure 4.1. **GDP per capita 1990-2012**

(2005 constant prices, in logs)




*Note:* The trend is computed using an extended sample that includes the 2013-18 GDP per capita projections.
*Source:* IMF (2014c), *World Economic Outlook Database*, International Monetary Fund, April 2014 Edition, Washington DC.

StatLink http://dx.doi.org/10.1787/888933078718

### *A benign external environment facilitated strong economic growth*

There are several reasons for the recent strong performance. Primary products dominate Uruguay's goods exports and the primary sector accounts for around 10% of value added as of 2013, up from around 6.6% in 1997-99. Uruguay's two biggest trading partners are Brazil and China, whose economies were expanding rapidly until recently. In volume terms, Uruguay's goods exports rose at a 12% annual average rate between 2004 and 2012, and by 16% annually in dollar terms, generating large income gains in those sectors. Service export volume growth was less buoyant, but still positive, at least until the appreciation of the Uruguayan peso, and the Argentinian exchange rate and capital account restrictions impacted negatively on Uruguay's tourism trade. These restrictions and the slowdown in demand from other export markets led to a weaker expansion of exports during 2012 and 2013. The favourable export performance was offset by even more buoyant growth of import volumes of both goods and services, which rose by 2 to 3 percentage points faster than exports, reflecting dynamic domestic demand growth. As a consequence, the contribution of the foreign balance to growth in real terms has usually been negative in recent years (Table 4.2).

Table 4.2. **Recent economic developments**

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|
| | Annual percentage changes, volume, 2005 prices | | | | | | | |
| Private consumption | 6.5 | 7.1 | 9.1 | -1.5 | 12.8 | 9.8 | 5.5 | 5.3 |
| Government consumption | 2.1 | 4.7 | 9.3 | 5.2 | 3.1 | 3.8 | 4.6 | 4.2 |
| Gross fixed capital formation | 13.9 | 9.3 | 19.3 | -4.7 | 13.6 | 6.4 | 19.2 | 6.2 |
| Private investment | 14.6 | 6.4 | 18.7 | -9.0 | 20.4 | 11.0 | 22.2 | 5.0 |
| Government investment | 11.1 | 20.7 | 21.4 | 10.1 | -6.0 | -10.7 | 5.3 | 12.4 |
| Final domestic demand | 7.2 | 7.2 | 11.0 | -1.4 | 11.9 | 8.5 | 8.0 | 5.4 |
| Stockbuilding** | -0.2 | -0.3 | 1.2 | -0.7 | -0.9 | 1.2 | -0.3 | -0.4 |
| Total domestic demand | 7.0 | 6.9 | 12.1 | -2.1 | 10.9 | 9.7 | 7.7 | 5.0 |
| Exports of goods and services | 5.6 | 4.8 | 8.5 | 3.9 | 7.0 | 6.0 | 2.1 | 0.1 |
| Imports of goods and services | 15.7 | 5.9 | 24.4 | -9.2 | 14.9 | 13.2 | 14.0 | 2.8 |
| Foreign balance* | -2.8 | -0.4 | -5.1 | 4.6 | -2.7 | -2.7 | -4.4 | -1.1 |
| GDP | 4.1 | 6.5 | 7.2 | 2.4 | 8.4 | 7.3 | 3.7 | 4.4 |
| GDP deflator | 6.5 | 9.4 | 8.0 | 5.6 | 4.7 | 9.0 | 7.4 | 7.6 |
| Real effective exchange rate (2010=100) | 127.7 | 126 | 114.5 | 110.1 | 100.0 | 96.1 | 90.8 | 82.3 |

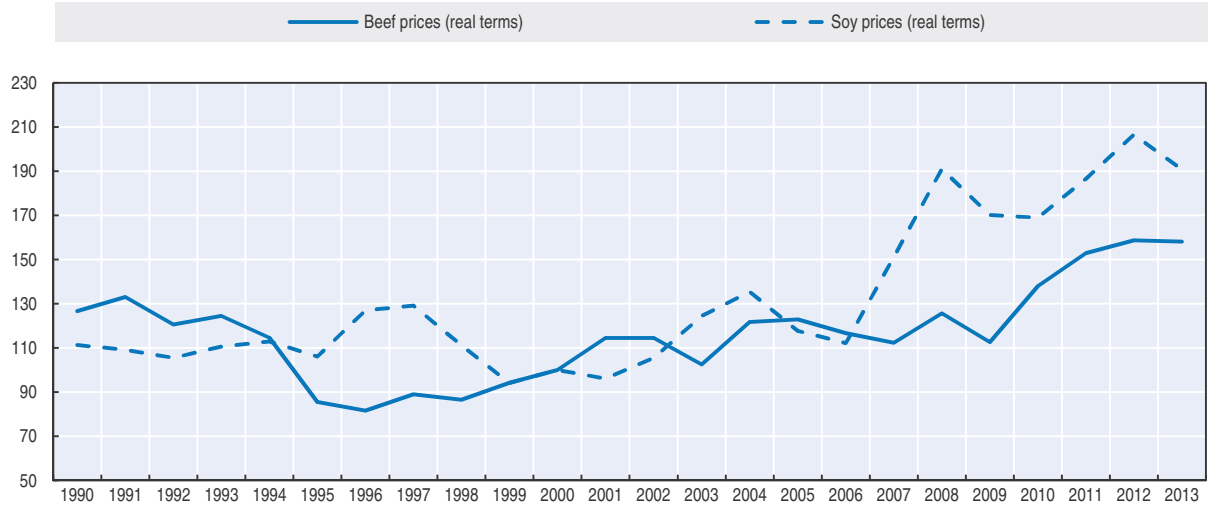
* Contribution to growth of GDP.
** Year on year.
*Source:* BCU (2014), *Informe de Cuentas Nacionales 4to Trimestre 2013*, Montevideo.

Beef prices in real terms have been firm for much of this century, and by 2013 were almost 20% above the peak of the early 1990s. In real terms, international soy prices have more than doubled since the turn of the century and were at record highs in 2012 and 2013 (Figure 4.2). Buoyant export prices for primary products and subdued import prices of manufactured goods offset rising prices of imported oil, but not enough to counterbalance the negative real foreign balance. In consequence, the current account has been in deficit since 2005, but was more than financed by inflows of foreign direct investment, putting upward pressure on the Uruguayan peso.

## Macroeconomic policies have stimulated growth

Primary fiscal surpluses have been recorded since 2002, but these have shrunk in size in recent years, from between 3% of GDP to 4% during 2004-07 towards 1-2% during 2008-11,

Figure 4.2. **Export prices of beef and soy beans (2000 = 100)**




*Source:* World Bank (2014), Global Economic Monitor (GEM) database April 2014, Washington DC, 2014.

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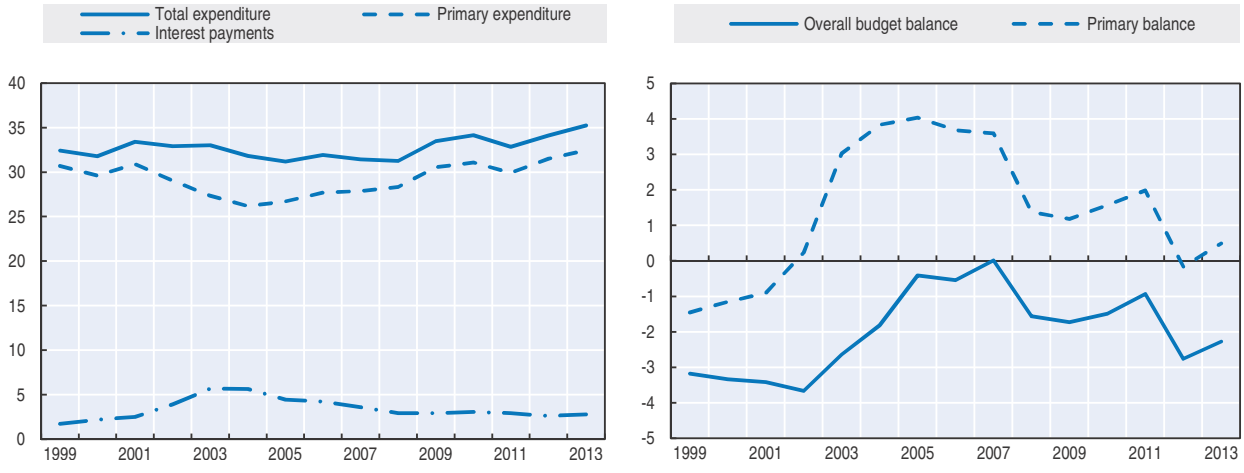
with a slight deterioration in 2012 and 2013 (Figure 4.3). Public expenditure has registered a fairly stable 30% of GDP since 2000, but it is noticeable that higher primary spending offset shrinking interest payments (Figure 4.3). In real terms, public primary spending has risen slightly faster than GDP since 2010, the year when the level of real output arguably returned to potential (Figure 4.4).

Figure 4.3. **Public expenditures and budget balance**

(% of nominal GDP)

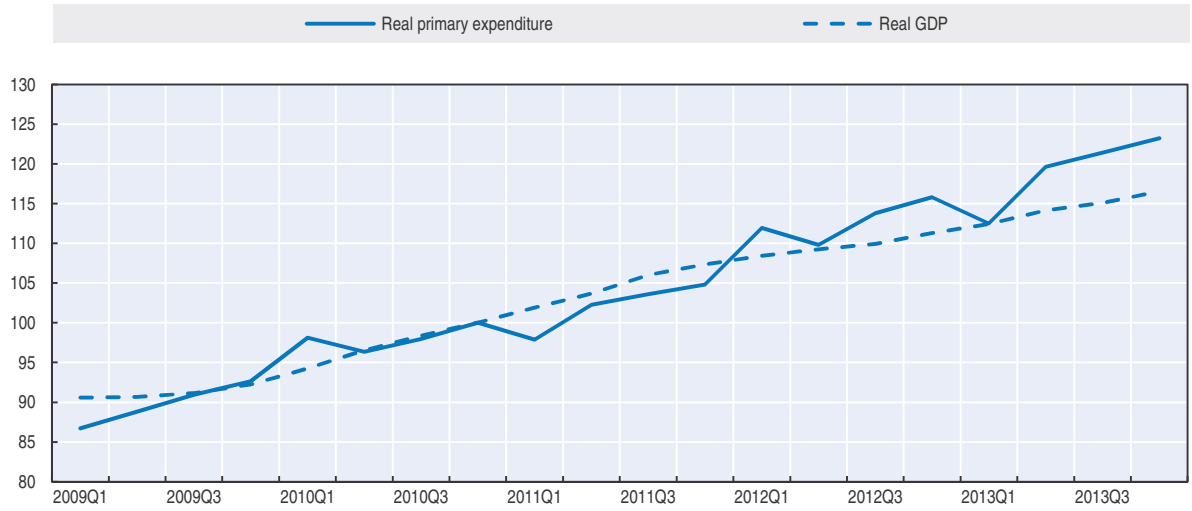



*Source:* Elaborated based on IMF (2014c), *World Economic Outlook Database*, International Monetary Fund, April 2014 Edition, Washington DC.

StatLink http://dx.doi.org/10.1787/888933078756

Public expenditure growth has been driven by components that are relatively difficult to reduce in nominal terms. Public expenditure grew by 4.9% in 2011 and accelerated to 6.1% in 2012, in real terms. While public investment declined in 2012 by 6.5% and interest payments grew by just 2.2%, the total wage bill of the non-financial public sector increased

Figure 4.4. **Evolution of central government primary spending versus GDP**
(4-q moving average, 2010 = 100)




*Source:* MEF (2014), *Economic indicators*, Ministerio de Economía y Finanzas, *www.mef.gub.uy/indicadores.php*.

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by 6.8% in 2012 – after a strong increase of 8.4% in 2011. Other current expenditures also grew by 9.3% in 2012, compared to 3.9% in 2011 (MEF, 2013b).

### *Ex-post fiscal policy has been slightly expansionary*

Ex-post estimates of structural fiscal balances show that fiscal support for the Uruguayan economy might have been somewhat overly strong in recent years. Pizzolon and Rasteletti (2013) present four different estimates of the size of the Uruguay structural fiscal balance.[4] Structural primary balances are calculated by adjusting revenues and primary spending for cyclical and other temporary factors. In the case of Uruguay, some revenue components are volatile, notably revenues from state-owned enterprises (SOEs) and social security receipts. The analysis uses two aggregated approaches and two disaggregated approaches to estimate the structural primary balance for the central government. Results are very similar irrespective of the approach adopted: the structurally adjusted balance has been in deficit since 2008 despite the booming economy. The estimated size of the structurally adjusted balance differs across the four approaches, but is typically of the order of 1-2% of GDP, a significant amount. Arguably, therefore, fiscal policy in recent years has been stimulating an economy already operating at or above capacity.[5]

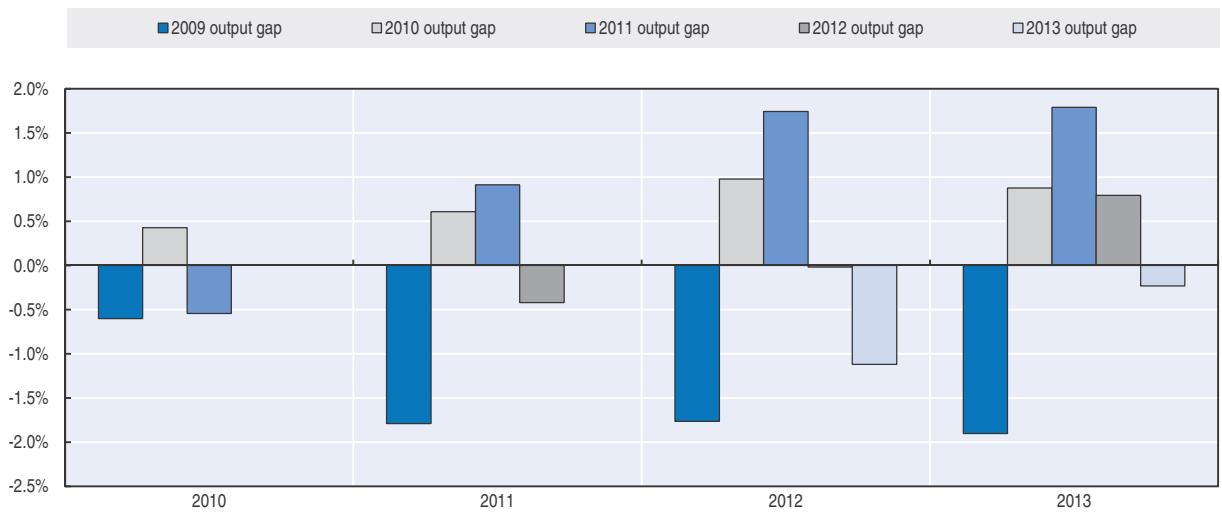
Official estimates lead towards a similar conclusion. Adjusting the primary surplus for one-offs as well as cyclical factors, the MEF estimates in the annual budget report show a decline in the structural primary fiscal surplus of 1.9 percentage points of GDP from 2009 to 2012. Although the official estimates of the structural primary balance all show a surplus for the 2009-12 period, they also indicate that fiscal policy has been stimulating the economy. In particular, the economy received a positive fiscal impulse of 0.7 percentage points of GDP in 2010, 0.4 percentage points in 2011 and 0.8 percentage points in 2012 (MEF, 2013b).

However, real-time uncertainty regarding economic conditions in Uruguay is high, making it difficult to conduct effective counter-cyclical fiscal policies. The relatively small

size of the economy, the importance of commodity exports and the important trade and financial linkages to Argentina and Brazil imply that historically economic activity has been subject to significant fluctuations. This is even a problem in OECD economies, where real-time estimates of the output gap often show a very different policy stance than ex-post estimates (Beetsma and Guiliodori, 2010; Cimadomo, 2012; Hughes Hallett, Kattai and Lewis, 2012). Furthermore, the profound collapse in GDP during the 2002 crisis created additional challenges for estimating potential output. This implies that there are often significant differences between the real-time estimates of the output gap – at the time when the annual revisions to the budget are approved – and following GDP data vintages. For example, using a simple Hodrick-Prescott filter with one-year ahead projections, by mid-2010, the estimated output gap for 2011 was slightly negative (-0.5% with respect to potential). One year later the estimated output gap was already above potential (around 1%), while the estimate using 2013 data indicates that output in 2011 was almost 2% above potential (Figure 4.5). Therefore, while from a perspective of 2010 it would have been counter-cyclical to have a slightly expansionary fiscal policy in 2011, this policy stance ex-post ended up being pro-cyclical. Revenue earmarking and indexation also contribute to this result. Although this does not imply that fiscal policy cannot help more in stabilising the economy, its effectiveness might be limited.

Figure 4.5. **Output gap estimates according to different data vintages**

(Deviations from trend GDP)




*Note:* HP-filtered annual real GDP series (in logs) with forecasts in July for current and next year using the median forecast of market participants published by the BCU.

*Source:* Elaborated based on BCU (2014), *Informe de Cuentas Nacionales 4to Trimestre 2013*, Montevideo.

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### *Monetary policy has not been able to reduce inflationary pressures*

The Central Bank of Uruguay (BCU) is mandated to carry out monetary, credit and exchange rate policies, and regulate and supervise all financial institutions. The exchange rate policy for several years now has been to let the peso float, with occasional interventions to reduce volatility. For example, in 2013, reserve requirements on certain types of capital inflows were raised to reduce upwards pressure on the peso.

Since 2007 inflation has remained consistently above the upper limit of the target zone and shows no early signs of coming within the current or planned target range. In September 2007, the BCU instituted an inflation targeting policy setting a range of 3-7%, which later changed to 4-6%. It recently announced a return to the 3-7% range for July 2014. The current target range is high relative to those of other central banks that have adopted inflation targeting, although targets or target ranges adopted by developing countries tend to be higher than those in advanced countries (Table 4.3). Inflation rates in 2012 in most of these countries with inflation targets were within target ranges, or below them. In early 2014, headline CPI inflation – as well as measures of core inflation – came close to 10% per annum. Consequently, according to the March 2014 report on inflation expectations, inflation for 2014 is expected to be 8.3%, while remaining above the upper limit of the revised target zone for the next two years (Figure 4.6).

Table 4.3. **Inflation targeting and outturns in selected countries**
(2012 or latest year)

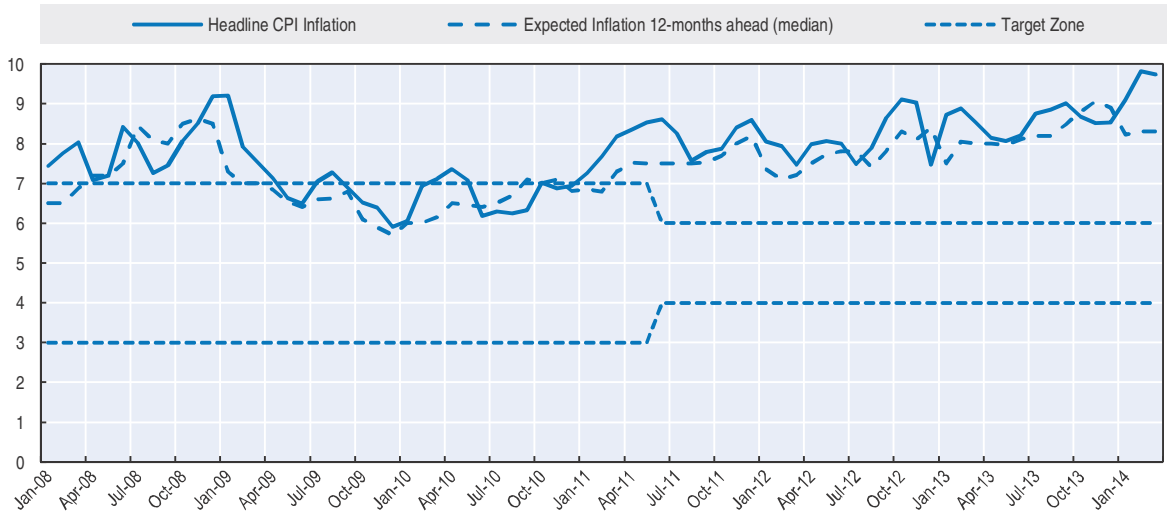
| Country | Target % | Latest outturn | Country | Target | Latest outturn |
|---|---|---|---|---|---|
| Brazil | 4.5 ± 2 | 5.4 | United States | 2 | 2.1 |
| Chile | 3 ± 1 | 3.0 | Eurozone | < 2 | 2.5 |
| Colombia | 2 - 4 | 3.2 | Japan | 1 - 2 | 0.0 |
| Guatemala | 5 ± 1 | 3.8 | Czech Republic | 2 ± 1 | 3.3 |
| Mexico | 3 ± 1 | 4.1 | Hungary | 3 | 5.7 |
| Peru | 1 - 3 | 3.7 | Iceland | 2.5 | 5.2 |
| **Uruguay** | **4 – 6** | **8.1** | Norway | 2.5 | 0.7 |
| Botswana | 3 - 6 | 7.5 | Poland | 2.5 ± 1 | 3.7 |
| Ghana | 8.5 ± 2 | 9.2 | Romania | 3 ± 1 | 3.3 |
| Indonesia | 5 ± 1 | 4.3 | Sweden | 2 | 0.9 |
| Jamaica | 6 - 8 | 7.3 | Switzerland | 0 - 2 | -0.7 |
| Nigeria | 10 | 12.2 | United Kingdom | 2 | 2.8 |
| Philippines | 4 ± 1 | 3.1 | Turkey | 5.5 | 8.9 |
| Thailand | 0.5 - 3 | 3.0 | Australia | 1 - 3 | 1.8 |
| South Africa | 3 - 6 | 5.7 | Canada | 1 - 3 | 1.5 |
| China | 4 | 2.7 | New Zealand | 1 - 3 | 1.1 |

*Source:* Warburton, P. and J. Davies (2012), "Inflation targeting: A child of our time?", *Central Banking Journal*, 21 February 2012; IMF (2014c), World Economic Outlook Database, International Monetary Fund, April 2014 Edition, Washington DC.

Monetary policy was relatively loose between 2010 and mid-2013. Until mid-2013, the BCU used the short-term interest rate as its main instrument, switching to a money supply growth target in July 2013. Empirical estimates show that the policy rate was significantly below levels consistent with Taylor rules either using benchmark values or directly estimating the coefficients on output and inflation gaps during most of the period Q1 2010-Q2 2013 (IMF, 2014b). The dilemma for the BCU in 2013 was that raising the policy rate high enough to constitute a credible anti-inflation move would likely exert additional, unwelcome upward pressure on the peso, regardless of costly sterilisation measures. This would make Uruguay debt less attractive to foreigners. The fact that external weakness is the result not only of an overvalued currency or an overheated domestic economy, but also of slowing growth in Uruguay's main trading partners, added to the dilemma facing the BCU.

Given the absence or thinness of normal financial channels, changes in the policy rate of BCU have little effect on real activity. Monetary policies feed through different channels to influence the real economy. In typical advanced economies, the merest hint that the

Figure 4.6. **CPI inflation and expectations**
(year-on-year rates, %)




*Source:* INE (2014), *Statistical information*, Instituto Nacional de Estadística, *www.ine.gub.uy/*.

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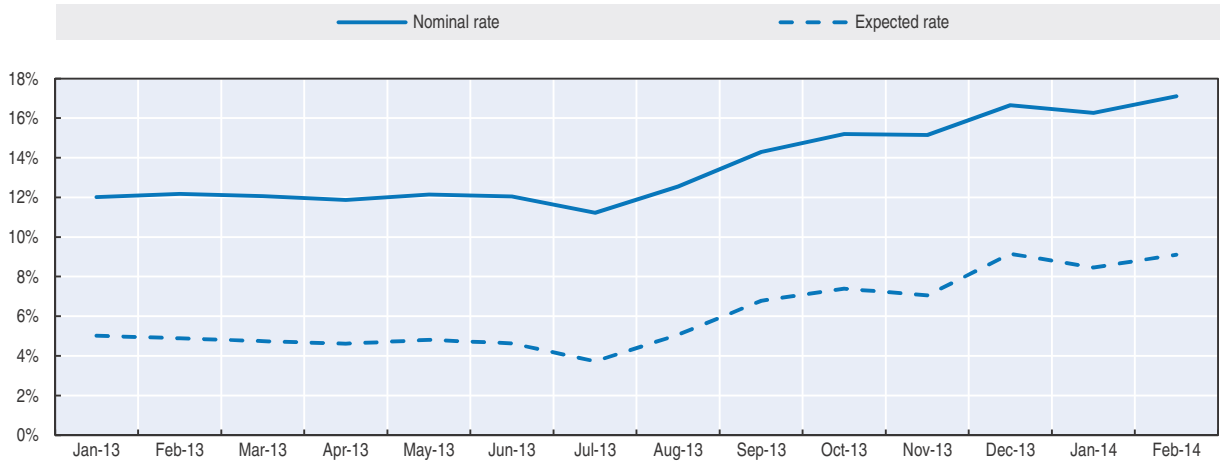
central bank is considering a shift in its policy rate or other instruments will precipitate a wave of changes in prices of and returns to financial assets across the board – from industrial bonds to consumer loans. These will have predictable and significant effects on the real economy with variable lags, as both households and companies are heavily exposed to the financial sector, and stock-market capitalisation typically accounts for a high percentage of GDP. In contrast, in Uruguay credit to the private sector at just over 20% of GDP is one of the lowest in Latin America, far lower than the OECD average of around 150%. The Bolsa de Valores de Montevideo lists only six equities with a market capitalisation of around 0.5% of GDP, and the stock of corporate bonds, including those of State-owned enterprises, accounts for less than 5% of the total. There is little interbank activity, and as pension funds, which hold 20% of all financial sector assets, can bid directly in the auctions for government securities, such securities tend to be held to maturity. Furthermore, the banking system is still highly dollarised. More than one third of total credit to the Uruguayan private sector is still denominated in foreign currency, while deposits in foreign currency in the banking system are above 75%. Policy rate changes do impact on the peso exchange rate though, and affect the real economy through this channel.

In part due to this weak transmission channel, the BCU announced by mid-2013 that it would revert to an earlier policy instrument – targeting the increase in the money supply (BCU, 2013). At the same time the target rate increased 3-7% and the policy horizon was extended from 18 to 24 months. Furthermore, authorities had the impression that high interest rates were facilitating carry trade strategies by international investors and that using the money supply as the target would introduce more volatility in the FX market. The central bank set a target of 12.5% to 13.0% annual growth for money supply (measured as M1+) for the third quarter of this year, a target which seems to have been achieved, and will gradually lower this target rate to 8% by Q2 2015. Simultaneously, the MEF announced the imposition of a 50% reserve requirement on local treasury bills and bonds purchased by non-residents, both in pesos and inflation indexed units, and the BCU raised an existing

40% requirement on its notes to 50%. These moves aimed to discourage dollar inflows into the economy, which had caused an appreciation of the Uruguayan peso, and seem to have been successful.

The monetary policy stance seems to have moved towards a more contractionary stance in the last quarter of 2013, but more guidance by the BCU is needed. The new monetary policy regime might make it harder to evaluate the policy stance for economic agents, which could potentially weaken the expectations channel. For example, market interest rates if used might give a noisy signal of the monetary policy stance, as liquidity issues, changes in the composition of clients, the reduced size of the market and other factors often cause large and erratic movements in rates. The nominal and expected real rates for banking credit towards large and medium-sized firms up to 365 days show a clear increase since September 2013 (Figure 4.7). However, ups and downs in rates are significant, even without changes in the targeted growth rate of the monetary aggregates. Similar problems apply to credit growth, which in addition is published with a significant lag. A successful implementation therefore will require more information and communication on behalf of the BCU regarding the transmission mechanisms of monetary policy, as well as its lags and impacts.

Figure 4.7. **Interest rates on commercial loans to large and medium-sized firms**
(Less than one year term)




*Note:* The expected interest rate is computed as the nominal rate minus the median expected inflation 12-months ahead.
*Source:* BCU (2014), *Informe de Cuentas Nacionales 4to Trimestre 2013*, Montevideo.

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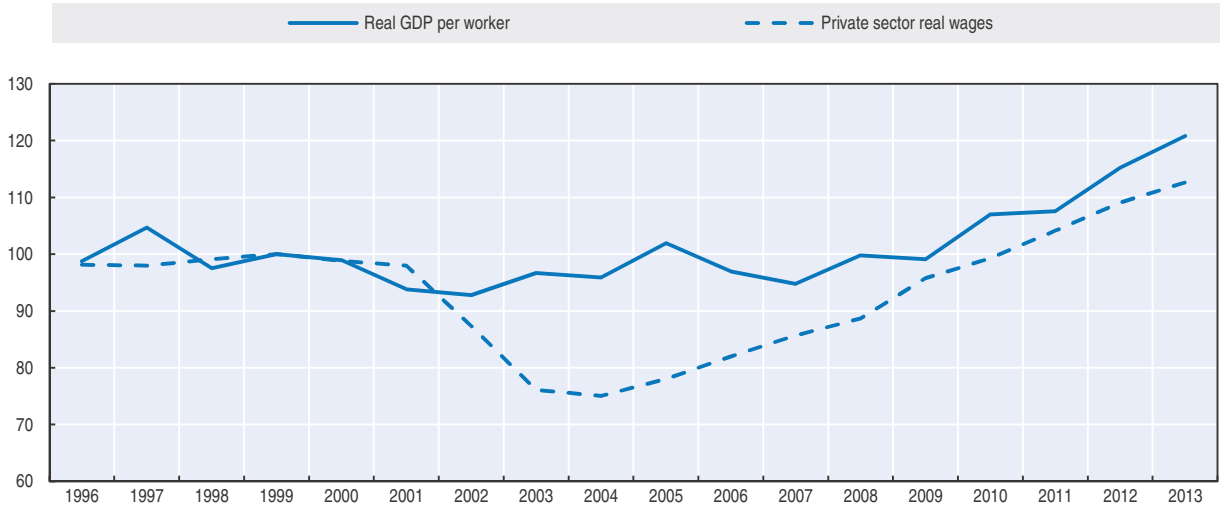
### *Wage growth has not yet stabilised*

Private sector wages have been growing fast in real terms since 2004, in line with labour productivity. In part, strong wage growth reflects a recovery from the collapse, especially from 2002 to 2003, when real wages in the private sector fell by more than 23%. During the period 2004-13, wages grew on average around 4.6% per annum in real terms, while labour productivity expanded by 2.6%. More recently, between 2010 and 2013, labour productivity expanded on average by 4.1% per annum and real wages grew by 4.3% (Figure 4.8). Public wages evolved slightly below private sector wages during this period,

Figure 4.8. **Evolution of labour productivity and private sector real wages**




*Source:* BCU (2014), *Informe de Cuentas Nacionales 4to Trimestre 2013*, Montevideo and INE (2014), *Statistical information*, Instituto Nacional de Estadística, *www.ine.gub.uy/*.

StatLink http://dx.doi.org/10.1787/888933078851

growing on average by 2.6% per annum between 2010 and 2013. Of course, such evolution at the aggregate level does not imply the absence of mismatches at the firm or sector level in terms of productivity and wages.

Unemployment edged up in 2013 and early 2014 from the very low levels recorded in 2012, but it remains low by historical standards, standing at 6.5% in Q4 2013. Wage negotiations are customarily based on indexation to backward-looking inflation modified by the bargaining power of employees and employers; an institutional feature that makes it difficult to reduce inflation towards the target range. Such a system represents a challenge to reducing inflation fast towards the target range. In spring 2013, the expectation was that wage settlements would be consistent with a deceleration of inflation, given that GDP growth was widely expected to moderate. In 2013, average nominal compensation per employee grew 11.8% in nominal terms (12.4% in the private sector) and compensation increased 3.3% higher in real terms (4.3% in the private sector and 1.5% in the public sector). Such numbers suggest that wage moderation is not yet seriously under way, at least in the private sector.

## Macroeconomic policy settings for the short term

Currently, the main priorities for macroeconomic policies in the short term are to reduce inflationary pressures, ensure a smooth convergence towards potential output and manage the risks to economic and financial stability associated with more headwinds and volatility from international markets. The appropriateness of short-term economic policies depends on correct assessment of a country's current position and its near-term evolution in terms of the economic cycle. The previous analysis shows that in the case of Uruguay there was no serious asset-price inflation episode; the banking system is sound, if rather small; growth was supported by buoyant exports but was not export-led; domestic demand continues to expand vigorously; public sector debt levels are comfortable, as is external debt; fiscal policy has been *ex post facto* expansionary in recent years and monetary policy

has been too accommodating. The natural result has been a somewhat overheating economy. Output is above potential, unemployment is low and inflation is high.

### *Expected moderated growth with risks tilted towards the downside but contained*

As of early 2014, growth was still robust but expected to moderate somewhat in the next two years. In March 2014, consensus forecasts show that on average growth is expected to moderate towards 3.4% in 2014 and 3.9% in 2015, while inflation is expected to be above 8% in 2014 and remain slightly above the upper limit of the target range of 7% at the end of 2015. The government is expecting even weaker growth (around 3% in 2014), according to MEF (2014a). In part, this slowdown is driven by less growth in Uruguay's main export markets. For example, while GDP growth in Argentina for 2014 was expected to be 2.4% as of March 2013, one year later the Argentinian economy was expected to shrink by -0.4% in 2014. Similarly, average growth forecasts for 2014 in Brazil went from 3.7% as of March 2013 to 1.8% in March 2014. However, domestic constraints to economic growth, associated with the bottlenecks identified in the previous chapters, also have a role in this moderation.

The baseline scenario would imply a soft landing for the Uruguayan economy, but it is not free of risks. As in the case of other emerging economies, Uruguay is exposed to the risks associated with the normalisation of monetary policy in the United States, such as higher financing costs and less appetite for emerging market assets. In particular, uncertainty regarding the pace and effects of this process might spur episodes of volatility in emerging market asset prices. A stronger than expected slowdown in China's growth could also have an impact on the Uruguayan economy via lower export prices and volumes. Finally, spillovers from Argentina and Brazil are another risk for the Uruguayan economy.

Uruguay is relatively well prepared to deal with volatility in international capital markets. Despite a sizeable current account deficit, FDI flows are expected to continue to provide a stable source of external financing.[6] Furthermore, the composition of public debt in terms of currency, maturity and interest rates has reduced significantly the risks to the public balance sheet. The large stock of foreign reserves and access to contingent credit lines with IFIs also reduce liquidity risks. Therefore, despite a relatively large gross debt as a share of GDP, net debt levels are significantly lower and would provide some cushion, depending on the nature of the shock. Fiscal sustainability has also improved, mainly due to the increase in potential GDP growth and lower interest rates paid, such that the current fiscal balance is not far from the balance needed to stabilise public debt at its current levels (IMF, 2014a; MEF, 2014a). Thus, in terms of fiscal policy at least automatic stabilisers could be allowed to act if needed, without jeopardising fiscal sustainability.

Regional negative shocks are likely, but vulnerabilities have been reduced. Although the depth of the 2002 recession resulted from a crisis in Argentina, the current economic situation is not comparable. The Uruguayan economy was already contracting in the three years before 2002, Argentinians had large dollar-denominated deposits in Uruguayan banks, which they withdrew, and Argentina was a very important trading partner for both goods and tourism. The importance of Argentina as an export market for Uruguay has fallen substantially; for goods the share of exports to Argentina fell from almost 18% in 2000 to around 5% as of 2013, although for tourism services it still represents a large share (slightly below 60% of total expenditure by tourists in the last four quarters until 2013 Q3, versus around 65% in 2000). While more macroeconomic problems in Argentina and a stronger appreciation vis-à-vis Argentina is likely to happen, the impact would be limited.

Furthermore, the Uruguayan economy is buoyant, arguably too much so, and its banking system is now much more resilient to withdrawals by foreign residents. The current size of Uruguay's foreign reserves and the much improved structure of its foreign debt mean that a loss of foreign investor confidence is both less likely to occur, and with less serious consequences if it does occur, than before. As long as domestic demand remains buoyant, import volumes are likely to grow more quickly than those of exports. Hence it is probable that the foreign balance will be a moderating force on Uruguay's GDP growth for a while, rather than sparking off a recession. Furthermore, a recent simulation exercise by Cabanillas et al. (2014) shows that an external shock similar to the 2001/2002 crisis would also have a much smaller impact on poverty and an insignificant effect on inequality.

A flexible exchange rate regime also provides a cushion for external shocks, but it might conflict with price stability objectives in the short term. In the case of a deterioration of the terms of trade due to weaker growth in China and other large emerging markets, the exchange rate would be the natural shock absorber, especially because such a shock could be rather permanent. While currency mismatches have been reduced and smoothing interventions by the central bank could avoid excess foreign exchange volatility, in the presence of relatively high inflation and expectations of inflation above target, the pass-through to domestic prices might be relatively high, generating dilemmas for the BCU.

International experience suggests that, given the wage bargaining institutional structure, inflation will not decelerate to the extent projected in the absence of a negative demand shock – either internally via significantly more restrictive fiscal and monetary policies, or externally via much weaker export earnings growth, loss of confidence by foreign investors or soaring imports. If the BCU were to succeed in implementing its announced restrictive monetary policy of cutting M1+ growth to single-digit rates, then the peso would more likely appreciate. Furthermore, the tradeables sector could suffer enough to dampen wage demands there, which could then spread to the rest of the economy. In such a case, the negative contribution from the foreign balance would reduce GDP growth below potential, and domestic demand growth would also presumably dampen.

### *Reducing inflationary pressures should be a short-term priority*

Inflation persistently above the target zone will result in less anchored expectations, potentially increasing the cost of macroeconomic adjustment. Inflation is currently expected to remain above the policy target range, according to the BCU's monthly survey, until the end of 2015. A gradual approach might therefore be a good strategy to spread the adjustment cost over time, but it also represents risks in case of insufficient policy action. Furthermore, given the relatively weak transmission of monetary policy towards inflation, other policy instruments should be used in a coherent way to facilitate a soft landing consistent with price stability without inducing a significant decline in economic activity.

If Uruguayan authorities are determined to reduce inflation to the target range of 3-7% in the short term, in the absence of a significant negative demand shock there seems little alternative but to implement macroeconomic policies that would slow growth. The recent measures adopted (mainly VAT tax reductions for some goods and administrated prices, as well as temporary agreements with retailers to freeze and reduce some prices in the CPI basket) might buy some time in reducing headline inflation, but will not reduce inflationary pressures. If the BCU succeeds in its objective of reducing M1+ growth to moderate single figures, interest rates will presumably rise at first and the peso would

appreciate. The tradeables sectors would suffer more than others initially because of the upward pressure on the peso. In a world with highly centralised wage bargaining, lower inflation could be achieved by agreeing to real wage increases lower than productivity gains for a while, on the understanding that employers would pass on wage moderation to lower prices rather than higher profits. This is unlikely in the actual somewhat fragmented wage-negotiation context in Uruguay. Bringing down M1+ growth to 8% by Q2 2015 is an ambitious target. M1+ has typically risen much faster than this since 2003, and faster than nominal GDP, although there has been some convergence in the past three years. Setting a target of 8% by mid-2015 implies one of two things: either that the BCU expects nominal GDP growth to slow down to a modest single-digit rate by this point, because real growth will have decelerated for other reasons and inflation will have been tamed; or that a significantly restrictive monetary policy (implying sharp increases in market interest rates and a stronger peso) will bring about such a slowdown in both real growth and inflation.

In the medium term, financial deepening will increase the effectiveness of monetary policy, but better communication is also needed. In this sense, the expected effects of the recently approved financial inclusion law would contribute to strengthening the channels of monetary policy. Levelling the playing field among commercial banks would help to bring down the cost of credit for households, thus also expanding the financial system. At the same time, a clearer communication with the public and markets by the central bank on its assessment and strategy for reducing inflation would strengthen the effectiveness of monetary policy, reducing ambiguity and increasing credibility.

In the current baseline scenario, a tighter fiscal policy stance could enable a smooth transition towards potential output and help in spreading the burden across most sectors of the economy, if appropriately designed. Some estimates show a relatively small effect of fiscal policy on inflation in Uruguay. For example, Tovar (2014) estimates that a one percentage point of GDP improvement in the central government's primary balance has an accumulated effect of reducing inflation by 0.45% in a year, using quarterly data from 2004 to 2012. The government has used this point estimate to argue that fiscal tightening would be an inadequate instrument to deal with inflation as it would require a tightening of around 4.5 percentage points of GDP to reduce inflation by just 2% (MEF, 2014a). However, due to the deep economic and financial crisis in 2002, it is difficult to have sufficiently long time series for these estimates to be reliable. For example, the same study finds that the point estimate is almost three times larger if the sample also includes the period 1999-2003. Furthermore, it also finds that large spending shocks contributed to inflation in recent years and that the primary fiscal balance has a significant effect on inflation expectations. More importantly, all these estimates do not take into account the interaction with monetary policy, as greater consistency and co-ordination between them would probably help increasing the overall effectiveness of macroeconomic policies.

Implementing tighter fiscal policy might be difficult to implement in 2014. With most expenditures already decided in the annual budget and the absence of a new budget in 2014 due to general elections in the last quarter, the main option is to manage discretionary expenditures, such that overall public expenditure expands less than GDP. However, these expenditures are mainly limited to infrastructure expenditures in the short-run, an area where significant bottlenecks would make any adjustment costly. Unless a combination of significantly negative shocks occurs that does not allow for automatic stabilisers to act, no additional fiscal tightening is likely to take place in 2014.

However, the incoming government should consider these issues in early 2015 and when designing its five-year budget law.

### *The wage bargaining system creates challenges for macroeconomic adjustment*

Collective wage bargaining schemes have undergone a significant transformation in Uruguay over the last decade, with implications for the evolution of productivity and income inequality. Since 2005, Uruguay has introduced several reforms on collective wage bargaining schemes, as the existing legislation on bargaining was limited. Before the end of the Vázquez administration, two main types of negotiations existed: one informal at the firm level and more formal negotiations at the sector level. Legislation introduced in 2008 reinforced wage bargaining councils and extended the coverage of agreements. The Ministry of Labour and Social Security (MTSS) co-ordinates the system, which comprises three main levels: a senior level, an economic sector level and an organisational body level. The administration in power in 2005 sought to strengthen wage councils within the private sector, through the legal institution of a Senior Tripartite Council (*Consejo Superior Tripartito*) and the National Rural Council (*Consejo Superior Rural*). These two bodies have performed a supervising role with regard to the wage bargaining councils (Mazzuchi, 2009). The government also encouraged social dialogue through the National Commitment for Employment, Income and Responsibility (*Compromiso Nacional para Empleo los Ingresos y las Responsabilidades*), which aimed to bring together employer and worker representatives with MTSS and MEF.

Collective bargaining coverage in Uruguay is relatively high. The share of workers covered by collective agreements depends on several factors: trade-union membership, the bargaining structure (e.g. multi-employer bargaining) and the density of employer associations. While the decline in collective bargaining coverage in countries such as Australia and New Zealand reflects the implementation of radical reforms on the collective bargaining framework, in others (e.g. Germany) this decline is explained by an increasing share of employees with non-standard contracts and a reduction in the participation of employer associations (Box 4.1). The reported collective bargaining coverage for Uruguay in 2007 (89% as a proportion of wage and salaried earners) remains considerably higher than that of most countries in the region, and is similar to OECD countries (Austria, Belgium and France are above 90%, while Germany is the exception at 48%) (Hayter and Stoevska, 2011). In general, there is a trend in most OECD countries towards a decreasing number of workers covered by collective agreements, and thus an increasing share of employees whose wage is fixed at the individual level (OECD, 2012a).

In the case of Uruguay, collective bargaining has had positive and negative implications. On the positive side, negotiations in the rural sector have become well established. The number of workers covered by collective agreements has increased since 2008, reaching almost 100%, and includes both rural and domestic workers (Mazzuchi, 2009). This reduces their income vulnerability. On the negative side, agreements continue to focus primarily on wages, in particular minimum wages, without always considering firm performance. Results-based remuneration systems, which have seen success in some OECD economies, could promote greater flexibility allowing contracts to contemplate different situations of firms within the same sector. The role of the public sector in wage negotiations has also come under scrutiny in recent years, given the perception among employers that the collective bargaining process was not balanced. Other issues such as training could also become part of the bargaining process.

### Box 4.1. **Wage bargaining in OECD countries**

Collective bargaining has become increasingly decentralised in several OECD countries and takes place at the firm/establishment level. This includes Canada, Japan, Korea, Poland, the United Kingdom and the United States. In contrast, in the European Union, the burden of economic imbalances has shifted towards labour markets given the limited capacity of governments to respond to shocks through external adjustments (e.g. exchange rate) or monetary policy. Centralised and co-ordinated collective bargaining systems have allowed for better responsiveness of wages to shocks. For example, in Austria, Denmark and Germany, wage negotiations in the export sector set the standard for other sectors.

Although a number of European countries have implemented central-level collective agreements with wage provisions, most OECD economies have decentralised collective agreements. This is explained by increasing international competition to which firms needed to react through firm-level arrangements, changes in the nature of firms' activities and the growing importance of non-price developments.

Decentralisation has taken place through derogation clauses, which allow for firm-level arrangements and the growing share of variable pay, negotiated at the firm level. Empirical evidence on the effect of decentralisation of wage bargaining on the labour share in gross national income has shown a detrimental effect on low-skilled workers in some OECD countries (OECD, 2012a). However, this effect cannot be completely isolated from the impact of external factors, in particular international competition, deregulation of product and service markets or certain labour market reforms.

As a result of the declining importance of collective bargaining institutions, legal protection for workers has gained importance in some OECD countries, in particular a legislated minimum wage. This is also the case in Uruguay. Such growing legislation is supposed to impact the evolution of the labour share. However, its net effect remains unclear. Evidence suggests that firms can react to a rise in the statutory minimum wage by increasing efficiency levels and productivity beyond the wage increase, therefore leading to a decline in the labour share.

*Source:* OECD (2012a), *OECD Employment Outlook 2012*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/empl_outlook-2012-en*.

The primacy of sector-level bargaining has certain limitations compared to higher level bargaining, as well as more decentralised structures. In sectors with little competitive pressure, such as non-tradeables, workers and employers can agree to pass the cost of higher wages onto the consumer. This seems to have been the case in recent negotiations in the beverage and construction sectors. Furthermore, at the sector level, negotiators do not internalise the effects on inflation and aggregate employment, as happens in highly centralised schemes. Finally, firm-level negotiation allows firm-specific issues to be taken into account, giving more flexibility to accommodate shocks.

The government has recently issued new guidelines to restrain the growth of real wages. Moderation in real wage growth is considered critical to safeguard competitiveness, curb overheating risks and control inflation (IMF, 2014a). In this capacity, the government has proposed to workers and firms to negotiate wages for three years, with two mechanisms for wage increase. The first option would be a correction for inflation plus a real adjustment based on GDP growth and sector performance.[7] A second option would be to have contracts without backward indexation. A number of safeguard clauses have also

been endorsed for renegotiation if sector performance changes substantially, as a mechanism to reduce real-wage rigidities. The recent guidelines put forward by the government for non-indexed wage adjustments would be an important step in the right direction.

## Macroeconomic policies over the medium term

The fiscal policies followed after the 2002 crisis were appropriate in the circumstances. They allowed demand to bounce back from the trough and supported it to a moderate extent while running primary surpluses sufficiently large to pay down debt to a supportable level. Improvements in fiscal sustainability have continued, in particular due to positive surprises in GDP growth, the appreciation of the peso and lower interest rates that were locked in through an excellent public debt management strategy. In this sense, fiscal targets in terms of net debt to GDP were met, but mainly because of these exogenous factors rather than primary balance targets being met. Furthermore, the emphasis on reducing public debt balance sheet risks and building a cushion of liquidity and conditional credit lines has greatly reduced risks associated to external shocks. However, as discussed above in recent years fiscal policy has been slightly pro-cyclical, at least ex-post. This is in part a consequence of the high volatility of the Uruguayan economy, which makes it difficult to evaluate correctly in real time its cyclical stance.

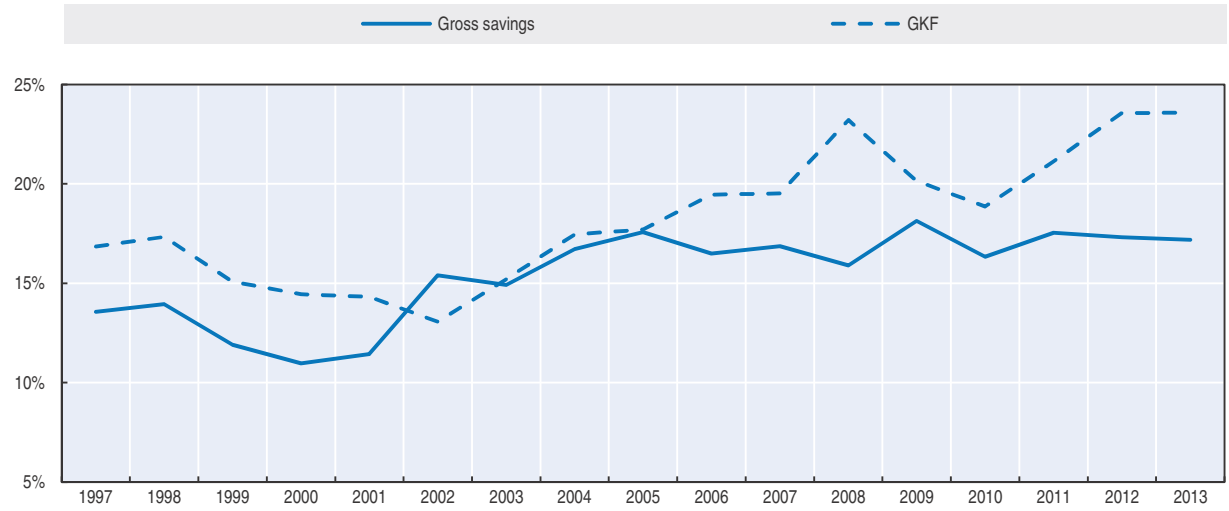
### *Fiscal rules could improve policy outcomes in Uruguay*

Fiscal rules could help Uruguay to strengthen further its fiscal sustainability and contribute to macroeconomic stability. Most OECD economies have fiscal rules with explicit targets for the budget balance, debt levels, caps to expenditure growth and revenue rules often determined by law or included in their constitutions and more than ten countries in Latin America have some type of fiscal responsibility law, although they differ in terms of objectives, institutional implementation and policy targets (OECD/IDB, 2014). The evidence for OECD countries shows that numerical fiscal rules help to foster fiscal discipline (Guichard et al, 2007). Furthermore, fiscal rules also require the definition of potential escape clauses and the budgetary procedures compatible with the implementation of the rule.

In the case of Uruguay, a fiscal rule that includes a medium-term target to reduce liabilities would be useful. Despite its relatively low levels of net debt to GDP, gross debt levels are still at around 60% of GDP. As a significant part of assets (reserves held by the BCU with sterilised interventions) have a quasi-fiscal cost and IFIs are beginning to provide more contingent credit lines, it might be convenient to focus on reducing liabilities. This would also reduce political pressures to spend foreign exchange reserves. Furthermore, domestic savings at around 15% of GDP remain low and might constrain growth in the event of tighter international financing conditions. The recent increase in investment has been driven primarily by an increase in foreign direct investment (FDI) (Figure 4.9).[8] In theory, the level of domestic savings at a certain point in time is irrelevant for investment decisions in an open economy with continuous access to international capital markets. However, the empirical evidence shows that successful growth acceleration episodes have been associated with high domestic savings (World Bank, 2008). Domestic savings are also low given the age structure and stock of net foreign assets of the Uruguayan economy. Uruguay does not as yet have a looming pension problem, and pensions are mostly defined-contribution type, but as per capita incomes rise there will be more demands for

social transfers and higher health expenses. For example, the inclusion of retirees in the new health system (FONASA) will represent a permanent increase in expenditure of almost 1% of GDP.

Figure 4.9. **Domestic savings and gross capital formation**
(as % of GDP)




*Source:* BCU (2014), *Informe de Cuentas Nacionales 4to Trimestre 2013*, Montevideo.

StatLink http://dx.doi.org/10.1787/888933078870

Fiscal targets that take into account the influence of the business cycle on fiscal accounts could help reduce the pro-cyclical bias in fiscal policy. There have been some advances in analytical terms in this direction. The current administration has been trying to use the five-year budget law as a medium-term fiscal policy tool. For example, in 2012 the government began publishing structural budget estimates and extending its economic analysis in the annual budget report. Despite measurement problems, targeting the structural fiscal balance can be a useful way to reduce spending pressures out of extra-ordinary revenue windfalls due to the business cycle. In particular, given the potential importance of revenues from mining taxes in the medium term, this issue is relevant to lock in the potential benefits from this opportunity and reduce pressures on the economy that could come from excessive expenditures.

This type of rule has proven successful in OECD countries, in order to reduce the deficit bias and reduce net liabilities. As Uruguay is setting up a similar framework to Chile for dealing with future mining revenues, it could consider also an overall structural balance rule. In general, these rules can be combined with a debt target or a multi-annual ceiling on expenditure growth, which has been implemented in several OECD countries such as Sweden and the Netherlands (OECD, 2010). Alternatively, if predicting iron ore prices and quantity results is too challenging, Uruguay could set a structural target for its non-mining fiscal accounts as for example Norway does, or concentrate on a multi-annual expenditure growth ceiling combined with a debt target. A notional compensation account, such as the Swiss or German debt brakes, avoids slippage due to systematic underperformance by accumulating deviations from target in a notional account and could help build credibility. If the accumulated deviations reach a pre-established threshold, it triggers an additional adjustment over a defined timeframe (OECD, 2012b). This can be complemented by

appropriate escape clauses that trigger deviations from the rule, such that some margin for discretional fiscal policy exists to deal with severe but rare events. If this is done in a transparent way, it can help increase also the credibility of the rule (Ter-Minassian, 2010).

The analysis in the previous chapters points towards several policy priorities that will require a sustained increase in financial resources. They will therefore need a stable and permanent source of financing. One way achieving this is to reallocate funds from other programmes and projects. However, severe budget rigidities often imply that such a process is easier to implement gradually at the margin. Although the share of rigid expenditures (wages, pensions and interest payments) has decreased in recent years, at around 56% of total expenditures it is still relatively high (World Bank, 2013). In this sense, a fiscal rule that caps expenditure growth, except the expenditures that require an increase, combined with an overall budget balance target, either structural or the observed balance, could be a useful way to create this additional fiscal space. An example of a country that has used such a rule successfully is Peru, where a cap on current expenditure growth combined with a budget deficit limit and improvements in the fiscal policy framework allowed for a significant increase in public infrastructure investments during 2006-10, while reducing debt levels and the fiscal deficit (Carranza, Daude and Melguizo, 2014).

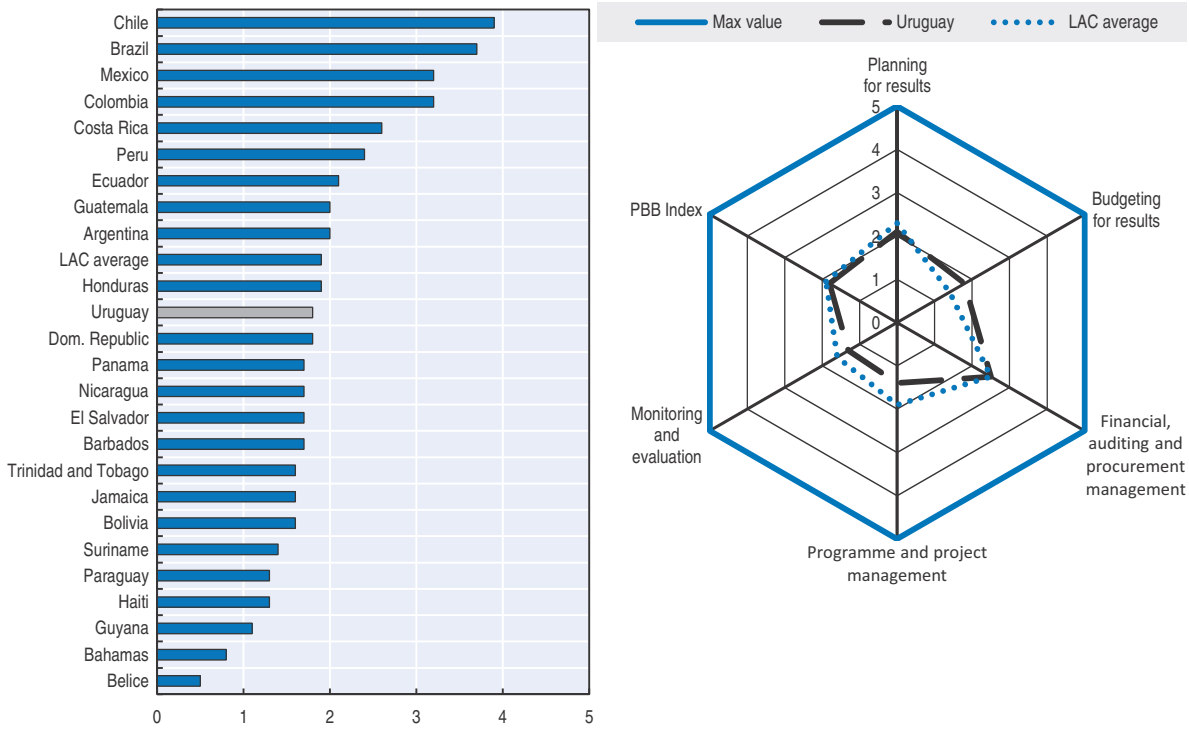
### *Further improvements in the budget process and institutions could strengthen fiscal outcomes*

Stronger fiscal institutions have proven a useful tool for making fiscal policy more transparent, sustainable and less pro-cyclical. In particular, performance-based budgeting, medium-term budget frameworks and advisory technical bodies can deliver more efficient public policies, raise the quality of expenditures and increase accountability (OECD, 2007a).

Uruguay has recently made progress by gradually including performance-based instruments into its budget and policy-making process. For example, the five-year budget law 2010-15 presents an effort to use the budget as the main tool of policy planning. The budget was structured around 17 programmatic areas with clear objectives and targets. At the same time, a set of performance indicators was subsequently included in each annual report to parliament. Furthermore, a performance evaluation process of several priority programmes (DID) has been put in place to facilitate adjustments and improvements agreed between the budget agency *Oficina de Planeamiento y Presupuesto* (OPP) and the corresponding agencies in charge of each programme. These efforts have been supported also by capacity building and training. These actions mark an improvement regarding some of the main challenges identified previously for an effective implementation for performance-based budgeting in Uruguay (García López and García Moreno, 2010; Figure 4.10). However, there are still challenges in terms of using performance-based tools to improve public policies in Uruguay. For example, external audits would help strengthening the monitoring and evaluation phases (Siegenthaler and Zanetti, 2012).

The recent creation in 2010 of a national public investment framework as well as administrative reforms that enhance strategic planning across line ministries could be strengthened with a medium-term fiscal policy framework. These changes aim to increase the coherence and transparency of public policies and facilitate co-ordination across different agencies. A medium-term framework exists in most OECD economies. These frameworks generally include estimates of revenues and expenditures, and sometimes also ceilings or target for expenditures over a three to five year rolling window. Therefore, they help to indicate the priorities and directions of policies and anticipate funding

Figure 4.10. **Public Management for Results Index (2010)**




*Note:* Index ranges from 0 to 5, measuring the degree of advancement in the implementation of performance-based public management along five dimensions: planning for results; budgeting for results; financial, auditing's and procurement management; programme and project management; monitoring and evaluation.

*Source:* García López, R. and M. García Moreno (2010), *La gestión para resultados en el desarrollo: avances y desafíos en América Latina y el Caribe*, Inter-American Development Bank, Washington, DC.

StatLink http://dx.doi.org/10.1787/888933078889

changes (OECD, 2009a). Furthermore, the public procurement system could also be strengthened. For example, Uruguay lags behind most countries in LAC in terms of including environmental sustainability criteria into its public procurement system (OECD/IDB, 2014).

Fiscal councils that have a technical and advisory role, rather than a legal or binding responsibility in allocating financial resources, can be helpful in providing key estimates and parameters, such as the output gap, potential output, long-term key commodity prices or revenue elasticity. If mining production takes off and begins to produce significant fiscal revenue, these issues might soon become highly relevant in Uruguay, (see below). In recent years, many OECD countries have set-up advisory independent fiscal councils to strengthen their fiscal frameworks. While the empirical evidence is still limited, some studies show that these institutions reduce forecasting bias and help countries comply with numeric fiscal rules (Hagemann, 2011; Frankel, 2011). An institution that could potentially fulfil some of these tasks is the recently created Centre for Fiscal Studies (CEF). However, human and financial resources allocated to the CEF would need to be increased significantly to achieve these results. The CEF could also provide information to policy makers and the general public regarding long-term trends such as ageing and their impacts on health expenditures and pensions.

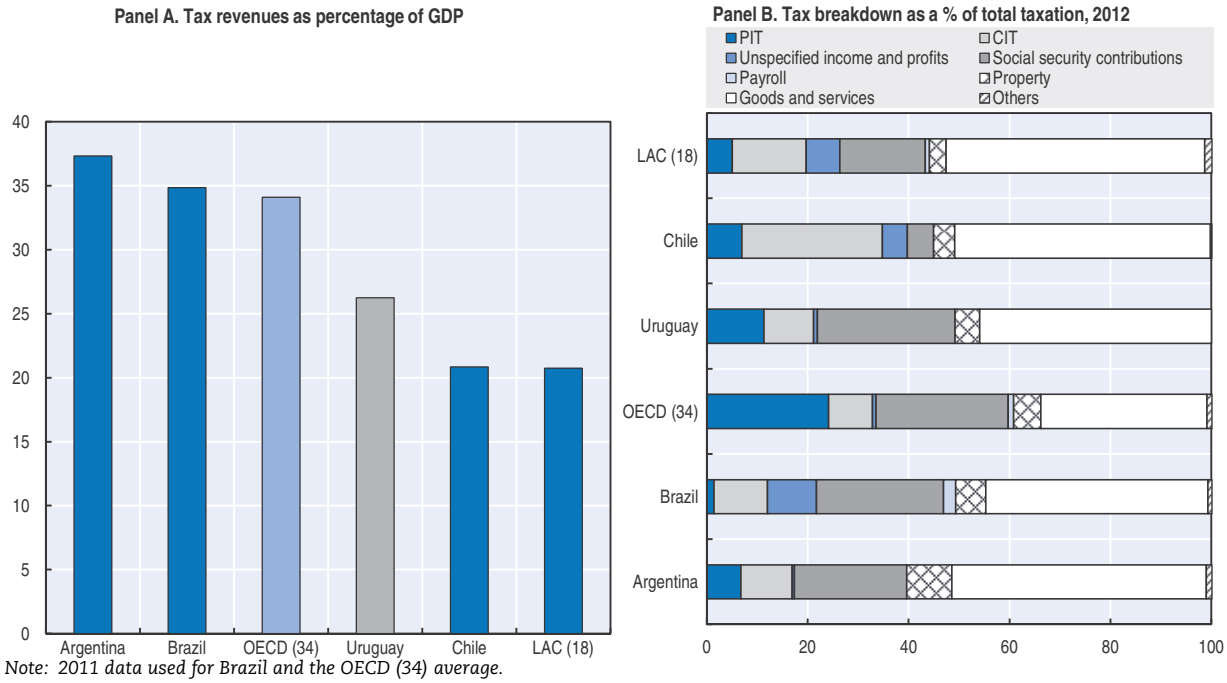
The recent institutional reform of the tax administration (DGI) indicates that Uruguay can transform its fiscal institutions in this direction. In 2005, the DGI underwent an

important reform that improved the technical competences of the tax administration, created incentives for better enforcement, eliminated important conflicts of interest, and increased the transparency of the administration. This has allowed the implementation of complex policy changes, such as the introduction of the personal income tax in 2007, in a smooth and efficient manner. Efficiency gains can also be seen in the significant reduction in tax evasion that took place after the reform. For example, estimates show that VAT evasion went from 39% of the tax base in 2000 to 13% in 2012 (DGI, 2013a).

### *There is room to increase tax revenues, whilst still paying attention to the tax mix*

Tax revenues in 2012 amounted to 26.3% of GDP, above the Latin American average of 20.7%, but below the OECD average of 34.1%. Compared with other countries in the southern cone, Uruguay's tax revenues as a share of GDP lie in between Chile (21%), and Argentina (37%) and Brazil (35%) (Figure 4.11). Furthermore, econometric analyses that take into account structural characteristics, such as the level of development, the economic structure and the degree of openness of the economy, indicate that Uruguay's tax burden is close to the expected level (Daude, Gutiérrez and Melguizo, 2013).

Figure 4.11. **Comparative tax revenue statistics for 2012**




*Note: 2011 data used for Brazil and the OECD (34) average.*

*Source:* OECD (2014), *Revenue Statistics in Latin America 2014*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264207943-en-fr*.

StatLink http://dx.doi.org/10.1787/888933078908

In terms of the composition of taxes, taxation on goods and services, mainly VAT and excise taxes, represents the main share of revenues at around 46% for Uruguay, compared to an average of 51.3% for Latin America and around one-third of total revenues in the OECD. Uruguay is currently implementing an interesting proposal to make VAT more progressive in the form of "personalised" VAT (Box 4.2). Social security contributions also represent a significant share of the tax intake in Uruguay (27.3%), close to the OECD average as well as that of Argentina and Brazil.[9] Uruguay also presents an interesting case in terms

of the income tax pillar. While overall income taxes represent almost 22% of total revenues in Uruguay, slightly below the Latin American average of 26.4%, the relative share of personal income tax (PIT) is relatively high (11.3% of total revenues). Meanwhile, tax revenues from corporate income taxes (CIT) represent a slightly lower share (9.8%) compared to Latin America (14.6%). However, the share of personal income taxes is less than half that of OECD economies (24.1%), while the CIT share is almost the same (Figure 4.11).

### Box 4.2. **Uruguay's personalised VAT system**

Despite its relative attractiveness from an efficiency viewpoint and its ease of administration, VAT is frequently a regressive tax. Governments have therefore implemented a variety of schemes to reduce its effect on the most vulnerable populations. Subsidies include differentiated tax rates, exclusion of goods and services from the tax base, or a combination of both. However, their universal character makes them poorly targeted interventions. In Uruguay, the upper quintile of households (top 20%) in terms of income distribution accounts for more than half of the total amount of VAT exemptions (Barreix, Bés and Roca, 2012).

To increase VAT progressivity and promote financial inclusion, the Uruguayan Parliament approved a modification to the tax regime in May 2012. Law 18.190 introduced a differential reduction in the VAT rate under specific conditions. A 2% reduction in the VAT rate takes place when purchases are paid through electronic payment systems (i.e. credit card, debit cards); and total exemption from VAT is applicable when purchases are made with debit cards from the conditional cash transfer programme, Uruguay Social, or the family allowance programme (AFAM-BPS). Additional exemptions may also apply if beneficiaries of the above-mentioned social programmes make purchases using debit cards from either social programme as a payment method. The recently approved law for financial inclusion has extended this VAT reduction for all payments with debit or credit cards.

Tax credits have also been established to promote the installation of equipment required for the implementation of personalised VAT. All businesses that use electronic payment equipment (i.e. point of sale, chip and pin) receive a tax credit up to the amount of the user fees payable to the processing company. In addition, stores receive an additional tax credit for investments made on the required electronic payment equipment and software updates (from January 2012 to June 2013), if the store's equipment is programmed to work with family allowance and Uruguay Social debit cards. Businesses also receive a tax credit equivalent to 18.03% of the total purchase with the reduction on the VAT rate. If the businesses fall under any simplified regime, the tax credit is limited to the payment processing company.

All taxes distort behaviour to some extent. For some taxes (e.g. on energy, tobacco, alcohol), distortion is the main objective, but all taxes distort the incentives to work, invest, save or consume. Tax policy must also often balance conflicting effects in terms of equity and efficiency. Given that tax revenue is necessary to finance the production of public goods and the achievement of social goals, optimal taxes are those that have the least distortionary impact for a given level of revenue. Research indicates that property taxes are the least distorting, but also among the hardest to manage at a national level, as well as being politically unpopular. Taxes on consumption are favoured above those on income

from work, with taxes on capital and corporations to be avoided or set at low average levels. High marginal rates on all kinds of taxes are the most distorting (OECD, 2009b).

In the case of Uruguay there are several potential options to raise more revenue that could be explored further. However, negotiating the right balance between efficiency, equity and sustainability is crucial. Therefore, the alternatives presented next require further analysis in terms of their efficiency, equity and environmental dimensions. In some cases, tax policy changes can bring improvement in all these dimensions. For example, some petrol-based fuels are exempt from VAT – they are however taxed with a specific excise tax (IMESI). This exemption amounts to a loss of revenue of around 0.4% of GDP in 2012. Furthermore, the exemption is regressive as wealthier households spend a larger share of their income on fuels than the poor (DGI, 2013b).

Eliminating VAT exemptions that amount to almost 3% of GDP in 2012 is a potential source of additional revenue. This revenue could in part be allocated towards reducing the basic rate or increasing coverage of the refund under personalised VAT. In this regard, Uruguay should also consider limiting the type of goods and services subject to exemption under this scheme. At the moment, Uruguay has an exemption for all goods and services purchased by those who meet the selection criteria, whereas other countries have a limited selection of goods and services exempted. For example, Japan has two tiers of exemptions. The first tier is a general exemption to all taxpayers applicable to loans and land ownership transfers, transfers of financial assets, and interest paid on loans and by public and private bonds, among others. The second tier targets exemptions on medical expenses, social services for households, educational services and housing to those who received benefits from the government. While overall the VAT exemptions are progressive, some of the big items benefit mainly the better-off household. For example, the VAT exemption on education expenditures (fees and tuition), which amounts to almost 0.3% of GDP in 2012, benefits mainly the upper deciles of the income distribution.

Over time more revenue would be expected from personal income tax (PIT). As the economy grows and productivity increases it would be natural for real wages to increase. Currently, just around 14% of taxpayers pay the PIT (IDB, 2013). This percentage is among the highest in Latin America, but significantly below OECD economies. This is because the minimum exemption level is relatively high at around 130% of average per capita household income, compared to 30% in most OECD economies. Reducing this nominal minimum would increase the tax intake, but would also be politically difficult. However, it would be important to adjust the exemption threshold by less than the growth of nominal wages – and potentially CPI inflation for a period of time – to facilitate an increase in the tax intake over time. Furthermore, the marginal PIT rate of 30% on top incomes is low compared with the OECD average of 41.7%, so there may be room for moderate increases. These measures would also raise the automatic stabiliser impact of tax revenues. Alternatively, the government could evaluate eliminating some exemptions and increasing the rate on non-labour rents, which are currently taxed at a general rate of 10%.

Taxation of land-related rents could be increased. According to land sales records published by the Ministry of Agriculture, Cattle and Fishing (MGAP), the average price of land has multiplied by a factor of around 11.5 between 2003 and 2013 in constant USD. In addition to the changes in investments to increase productivity and efficiency of land use discussed in Chapter 2, this increase in the value of land has triggered a debate on how much and by which instruments the associated rents should be taxed. The ICIR, a property

tax on large units (more than 2 000 ha) suitable for cattle breeding or agriculture, was created in 2012 to address this issue was declared unconstitutional the following year. It was substituted by some modifications to the property tax regime by eliminating a tax exemption that was in place since 2001 for units that have assets above around USD 1.5 million. They are subject to a 1.5% tax rate that can be reduced by up to a 50% for owners with assets below USD 3.75 million. Furthermore, some progressivity was introduced by having additional rates adding 0.7% to 1.5% in some cases. These rates are relatively high for international standards. One alternative that could be considered is to eliminate all exemptions and maybe lower the rates. Furthermore, another property tax, the *impuesto de primaria* – earmarked to finance specific expenditures related to primary education – could be broadened; however, this would require administrative reforms. For example, it would be more efficient if the national tax administration (DGI) were to handle this tax instead of the National Administration of Public Education (ANEP). In addition, eliminating earmarks to primary education would allow more flexibility to allocate these expenditures to other priorities (even within primary education).

A potentially more significant source of revenue is related to changing the corporate income tax (CIT) regime for the primary sector and modifying its VAT regime. Currently, many producers – with less than 1 250 ha of land and annual income around USD 500 thousand – can opt between contributing based on a simplified presumptive tax base (IMEBA) and the general CIT (IRAE). While this simplified regime in the past had some rationale due to a relatively low capacity of the tax administration and high administrative enforcement costs, these conditions have changed significantly. The DGI has become a sophisticated, modern and strong tax administration and new technologies are reducing monitoring costs significantly. Therefore, the government could consider the potential benefits of normalising the situation, leaving the simplified regime for the really small producers only. At the same time, the primary sector enjoys a series of VAT exemptions that could be revised. Currently, the "*IVA en suspensión*" regime exempts many sales of primary products from paying VAT, while producers can still claim VAT credit. Even if the exemptions on the sales side were to be maintained, the exemptions on inputs and other deductions – although they amount to just 0.2% of GDP in 2012 – create an opportunity for tax evasion and increase the administration cost of the tax system. Furthermore, many exemptions (e.g. fertilizers) might have negative environmental effects, such that the exemption actually encourages producers to use them in excess.

Overall environmentally related tax (ERT) revenues are also relatively low in Uruguay. Estimations show that ERT represented around 1% of GDP in 2009 and close to 4% of total tax revenues, down from around 8% in 2000. This is almost half of the average tax intake (1.7% of GDP) in OECD countries (IDB, 2013). The government could explore which tax expenditures are the most harmful and a potential source of revenue, as well as considering using more green-growth friendly taxes. A starting point is to evaluate the current taxes and subsidies and produce an annual report on their environmental impact, similar for example to the annual tax expenditure report produced by DGI, which includes an analysis on the distributional impact of VAT exemptions.

The relatively low share of CIT is mainly due to generous tax exemptions rather than low tax rates. Tax incentives for investment under the investment promotion law, as well as the creation of free zones, have been widely used in recent times to stimulate private investment. Uruguay's exemptions are among the most generous in the region. For example, CIT tax expenditures represent around 65% of the effective CIT tax intake,

compared with just 16% in Chile, where the investment rate between 2004 and 2012 was almost 3 percentage points of GDP above that of Uruguay. Furthermore, Uruguay's tax incentives represent between 42% and 113% of the value of the firm, compared with just 2% in the case of Chile (IDB, 2013). While these incentives have likely contributed to increasing the investment ratio, they are not costless and may also create some deadweight loss. If the problem is that high tax rates act as a disincentive to investment, it would be more efficient to consider a tax reform that simplifies the tax code and reduces the burden on investment. This would allow the focusing of incentives on activities and investments that present more additionality, and increase fiscal revenues to finance public goods and services.

Tax exemptions linked to different incentive schemes amount to around 3.2% of GDP (MEF, 2013c). Uruguay should consider conducting a careful cost-benefit analysis of the different schemes. Often, other factors beyond tax incentives have been found to be key drivers of domestic and foreign direct investment. For example, if insufficient investments in human capital or infrastructure constrain economic growth or productive upgrading, it might make sense to phase out or directly eliminate some exemptions to increase the budget available to finance these investments.

Relatively high levels of tax morale in Uruguay create good conditions for making fiscal policy more effective, however this also requires maintaining high levels of transparency and increasing the quality of expenditures. According to opinion polls, over 70% of people consider tax fraud unjustifiable under any circumstances compared to an average of 52% for Latin America (Figure 4.12). This percentage is also high by OECD standards and reflects the high levels of trust presented by Uruguay. As a result, tax evasion is relatively low and has declined due to improvements in tax administration and enforcement (Gómez Sabaini and Jiménez, 2012). Nevertheless, key services have experienced problems relating to quality in terms of objective indicators, educational achievement, PISA scores, or perceptions regarding crime and insecurity. For example, a recent study shows that in several dimensions Uruguay ranks average in LAC in terms of public expenditure efficiency. Therefore, there is also ample room for improvement in the use of existing resources (Afonso, Romero and Monsalve, 2013).

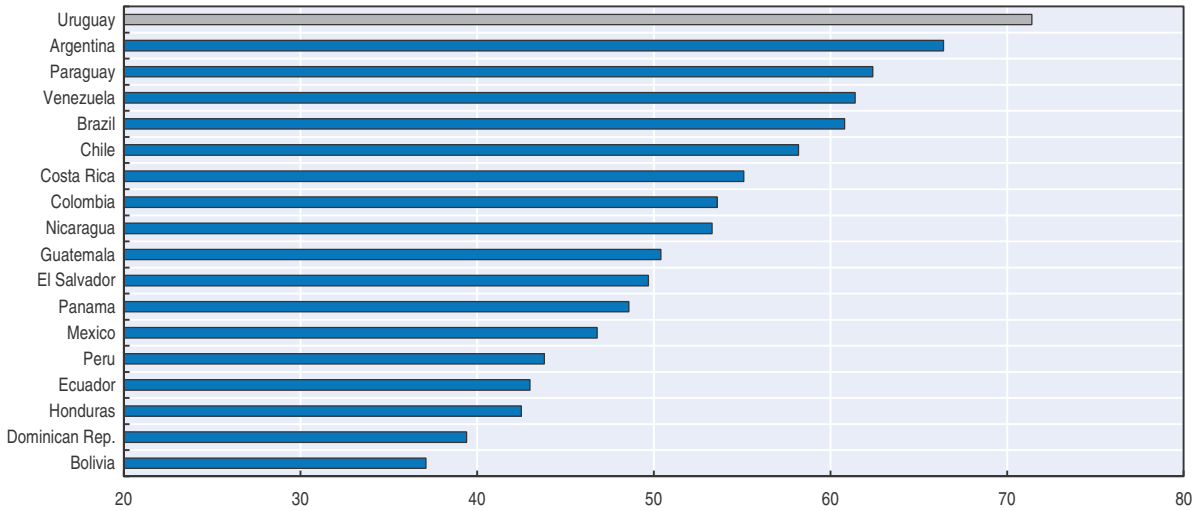
### *Making the most out of non-renewable resources in Uruguay*

Recent discoveries of iron ore deposits in Uruguay might transform the productive landscape, as well as the fiscal situation of the country. In particular, a major iron ore mining project about 250 km from Montevideo and the coast is under discussion. The ore body of the "Valentines" project, to be developed and operated by the Dubai-based Zamin group, is estimated to contain up to 5 billion tonnes of high-grade magnetite ore. According to the company's website, initial production will be 18 million metric tonnes per year, rising to 36 million. A 250 km-long pipeline will be required to transport the ore in the form of a slurry to a new deep water port, with the water returned to the mine for reuse. The project would be the largest logistical and industrial undertaking in Uruguayan history, because of the investment required to build the deep water port.

Initially, the mine was planned to become operational in 2015, but environmental objections and lack of a suitable regulatory framework created delays. A new mining law was passed in September 2013, *Ley Minería de Gran Porte* (Open-pit Mining Law), and negotiations between the government and Zamin started in early 2014. The law permits mining companies to deduct a large share of construction and development costs from

Figure 4.12. **Tax morale in Latin America in 2011**

(Percentage of respondents who do not justify tax evasion under any circumstances)




*Source:* Authors' calculations based on Latinobarómetro (2011), *Latinobarómetro* (database), Latinobarómetro Corporation, *www.latinobarometro.org*.

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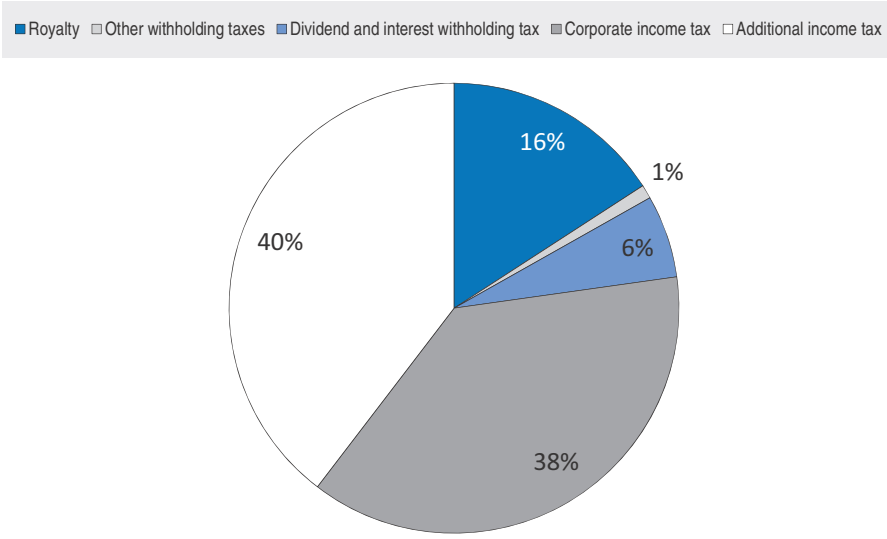
taxable income, so the fiscal benefits may be low in the early years. Mining companies must also deposit funds in a special account to ensure compliance with the environmental requirement that the sites be suitable for other uses after the end of mining operations.

At USD 120 per tonne, the MEF estimated the value of production in the first phase at around USD 2 billion or 4% of Uruguay GDP. The International Monetary Fund (IMF) forecast government revenues at USD 26.3 billion over the 27 years of project production life, most of which will be derived from royalties, income tax and additional income tax (Figure 4.13). However, revenues could be lower, as experts expect to see iron ore prices run below, but close to, USD 100 in the medium term (Box 4.3).

Common sense suggests that the economy of a country with large reserves and the production of low-cost natural resources is bound to profit from them; however, historical experience and resulting theories indicate that this need not always be the case. Some countries have failed to develop economically despite access to profitable natural resources, while other economies have been apparently harmed by the discovery and development of low-cost natural resources, either through "Dutch disease" or political economy problems related to the spending and allocation of resources. Other negative effects can stem from adverse terms-of-trade developments, price volatility that discourages investment and spending sprees during price booms.

A prevailing hypothesis is that the availability of fiscal revenue from resources lowers incentives to collect general taxes from the rest of the economy. Furthermore, governments less reliant on general taxes are prone to be less accountable, responsive and efficient. Moreover, fiscal dependence on resource revenues increases fiscal risks, as these revenues are volatile and, importantly, finite. Hence, policy makers need to plan ahead to make up for fiscal revenues from resources that will be depleted over time. Indeed, the availability of fiscal revenues from natural resources has had a displacement effect on general tax revenues of about 20%; that is, for every 1% of GDP in resource revenues, general tax revenues decline by 0.2% of GDP (IDB, 2013).

Figure 4.13. **Government revenue forecast from Valentine Mining Project**




*Note:* Forecast assumed iron ore price at USD 120 per tonne and a production life of 27 years.
*Source:* IMF (2001), *Uruguay: 2001 Article IV Consultation and First Review under the Stand-By Arrangement*, *IMF Country Report* No. 01/46, Washington, DC, *www.imf.org/external/pubs/ft/scr/2001/cr0146.pdf*.

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As in other commodity-rich countries, Uruguay is adapting its fiscal regime to ensure positive effects from natural resources development. A variety of tax and non-tax instruments are available to obtain revenues from the non-renewable sector (Box 4.4). They can be divided among rent-based taxes,[10] profit-based taxes and royalties, output-based royalties and state equity. The mix of instruments applied varies greatly across countries in Latin America. While some countries continue to maintain traditional systems of royalties and income taxes that score poorly in terms of neutrality and stability, others have moved to tax profits or net income. These systems may be more efficient and stable, and have allowed some countries to increase effective tax rates as prices have risen (IDB, 2013).

Most Latin American countries apply a combination of royalties and income tax. Corporate income tax has a different tax rate in Chile, Peru and Venezuela for some specific sectors in the mining industry. In general, governments tend to apply a tax on dividends, except for oil and gas industries. Royalties are used in all the regions' countries, except in Mexico for the gold sector. Windfall taxes are applied in Mexico for the oil sector when oil prices exceed a certain threshold. The revenues are used for the stabilisation fund.

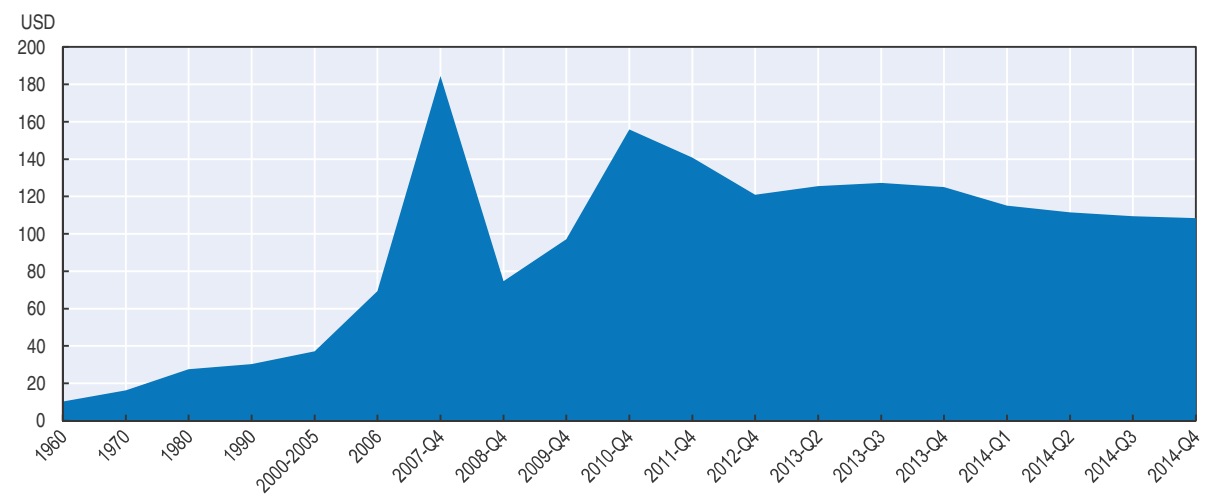
### *Overview of the mining sector's tax regime*

In 2013, the parliament approved the *Ley de Minería de Gran Porte* (MGP), designed to provide a clear policy framework for the mining industry. The drafting of the law involved a multi-party commission with the participation of the entire political spectrum. It focused on different areas from environmental and social considerations to tax treatment, governance and the institutional framework. The discussion emphasised issues related to the capital-intensive nature of the mining sector, the prospects for diversification, integration to global value chains and the implementation of local development policies.

### Box 4.3. **Historical evolution of iron ore prices**

The investment phase of the Valentines project will have a far from non-negligible impact on GDP, while its operation will create employment, and taxes and other levies on profits could result in a sizeable increase in public revenue. Much depends on the market price of the iron ore, of course. Until the first oil shock, f.o.b. prices for iron ore mined in one country (e.g. Brazil, Australia) and smelted in another (e.g. Europe, Japan) averaged around USD 15 per tonne for long term contracts, then typically around USD 30 per tonne until 2004. In each period, contract prices remained relatively stable in dollar terms. They climbed steeply after 2004 because of strong demand from China. Since December 2008, the reference international price has been the China spot import price. It peaked at nearly USD 190 in early 2011. Since then, it has been volatile, averaging around USD 120 per tonne (Figure 4.14).

Figure 4.14. **Iron ore prices – historical and forecasts**




*Note:* From 2013 Q3 to 2014 Q4 prices correspond to International Monetary Fund (IMF) forecast prices for primary commodities.
*Source:* For historical prices: Mongabay (2014), "Iron Ore CFr Spot", *www.mongabay.com/commodities/prices/chart-iron_ore.php*, San Francisco. For forecast prices IMF (2014), Primary Commodities Prices Database, International Monetary Fund, Washington DC, 2014

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The slowdown in Chinese and Indian GDP may put further downward pressure on spot prices in the near future. In the longer term, as the structure of Chinese GDP moves from infrastructure and construction investment towards services, demand will likely grow more slowly. However, the size of the Chinese economy at this point will be such that year-to-year increases in demand in absolute terms will still be very substantial. The consensus of experts is that iron ore prices are unlikely to sink back to the USD 30-40 range over the medium term, but that prices lower than USD 100 are possible. Zamin appears to assume long-term prices of around USD 90 per tonne.

The mining law was timely, as the industry had experienced considerable change in recent years. Exploration of resources began in the 1980s with programmes including the *Inventario Minero Nacional, Prospección de Uranio and the Evaluación de Esquistos Bituminosos*. The 1990s saw the entry of private actors into gold and iron exploration. Since the 2000s, increasing demand for metals and the surge in commodity prices have motivated the exploration of new sites and attracted new investment to the sector.

### Box 4.4. **Fiscal instruments for non-renewable resources**

**Rent-based taxes**

- **Brown tax:** This is levied as a constant percentage of the annual net cash flow (difference between total revenue and total cost) of a resource project with cash payments made to private investors in years of negative cash flow.
- **Resource rent tax:** Negative net cash flows are accumulated at a threshold rate and offset against future profit. When this balance turns positive it becomes taxable at the rate of the resource rent tax.
- **Excess profits tax:** The government collects a percentage of a project's net cash flow when the investment payback ratio (the R-factor) exceeds one. The R-factor is the ratio of cumulative receipts over cumulative costs. **No excess profit tax in the R-factor form has been applied to the mining sector.**

**Profit-based taxes and royalties**

- **Corporate income tax:** This is an important part of the fiscal regime for all countries. A higher tax rate may be applied to mineral companies within the standard corporate income regime, and may be designed to vary with taxable income (e.g. Botswana).
- **Profit-based royalty:** The government collects a percentage of a project profit, typically based in some measure of accounting profit. This differs from an income tax in that is levied on a given project rather than the corporation.

**Output-based royalties**

- **Ad valorem royalty:** Government collects a percentage of a project's value of production.
- **Graduated price windfall tax:** Government collects a percentage of a project's production value with the tax rate on a sliding scale based on price (i.e. a higher tax rate is trigger by a higher commodity price).
- **Specific royalty:** Government collects a charge per physical unit of production.

**State equity**

- **Paid equity:** Government becomes a joint venture partner in the project. Paid equity on commercial terms is analogous to a Brown Tax, where the tax rate is equal to the share of equity participation.
- **Carried interest:** Government acquires an equity share in the project from the production proceeds including interest charge. Carried interest is analogous to a resource rent tax, where the tax rate is equal to the equity share and the threshold rate of return is equal to the interest rate on the carry.

*Source:* Based on Daniel, P., M. Keen and C. McPherson (eds.) (2010), *The Taxation of Petroleum and Minerals: Principles, Problems and Practice*, International Monetary Fund (IMF)/Routledge, New York.

### *Tax regime for MGP*

The new mining law defines a project as MGP if it involves an operations area above 400 ha, or if the investment or turnover (domestic and exports) surpasses USD 115 million. By decomposing the revenue between production costs, "normal" return to capital and extraordinary rents, the tax regime aims to calibrate the effective tax rate to the fluctuations of commodity prices. The law created a two-tier royalty rate, 5% in the first five years of production and 8% in subsequent years that will ensure the government a revenue flow during the project's production years. As royalties add to production costs, it

may lead to the premature shutdown of production, as a mine becomes most costly to operate particularly towards the end of production life. An alternative would be to use an accelerated depreciation scheme that allows the company to recoup investment before paying taxes, combined with a modest single royalty rate (IMF, 2014b).

The applicable income tax for the mining sector is the same corporate income tax (CIT) applied to businesses in Uruguay. The 25% CIT rate is close to the international average for mining sector companies. Furthermore, the new law established an additional CIT, designed to introduce progressivity in the overall tax system, since less profitable projects will have a lower tax burden. This additional CIT varies accordingly to a project's profitability; if the contract with the mining company includes a fiscal stability clause the additional corporate income tax will be a flat rate of 2% over the operational net income. The profitability of the mining will be audited by the government, which has to provide a reference price used to estimate operational income of the mining project. Furthermore, some improvements can be made to reduce the potential impact of deductions in the tax base. Examples include, ring-fencing the tax base by mine area (to include contiguous mine areas) for IRAE and additional IRAE purposes, and introducing thin-capitalisation and limits on deductibility of interest for tax purposes (IMF, 2014b).

Creating institutions that maximise transparency and technical accuracy to determine the reference price is key to successful implementation of the tax regime. Many countries use reference prices to validate mining project revenues, and for accumulation and withdrawal rules. This requires assumptions about the long-term sustainable commodity prices and associated revenues. However, due to differences in forecasting methodologies and transparency, many countries have established specialised commissions to provide these price forecasts for the underlying asset. In the case of Uruguay, this issue is important as the law states that the mining operational income should not be lower than that obtained when using the reference price established by the government (Articles 104 and 108).

Establishing a formal body responsible for providing the reference price is one option. Most countries that set a reference value for commodity prices establish a council responsible for the development and implementation of a methodology to reach these forecasts. Such councils generally include academics, the private sector and other external representatives. For example, the Chilean fiscal rule relies on estimates from a consultative commission of experts, who provide their estimates. Then, according to a pre-established rule, these estimates are aggregated to obtain the reference price.

### *Managing resource rents in Uruguay*

According to the new law, natural resource revenues will be split between a direct income transfer to the government's budget (30%) and the recently created Intergenerational Investment Sovereign Fund (FSII) (70%). The resources used in the annual budget are earmarked: 60% must be invested in productive projects, 30% in a regional development fund, 5% in education projects in the rural area, and 5% to strengthen the technical capabilities of institutions responsible for implementation of the new law. These projects will be chosen by the executive branch of the government, and then presented to Parliament for approval as part of the budget. Natural resource revenues will not be used directly to smooth out cyclical changes in public revenues or to help pay down public debt, as in the cases of Chile or Colombia (OECD, 2013).

As discussed above, a way to reduce excessive expenditure and pro-cyclicality would be to implement a fiscal rule to smooth overall fiscal balances and expenditures, as this might have important consequences in terms of the real exchange rate, leading potentially to a Dutch disease problem. Furthermore, it is not clear that the institutions that would receive the 30% of the revenues would have the capacity to allocate these funds on an annual basis to projects with the highest social return in their area.

Some parts of the current legislation make the sovereign fund vulnerable to external spending pressures. In addition to the 30% allocation of mining resources to budget appropriations, Article 53 of the Law stipulates that the sovereign fund can devote resources to three types of projects (R&D, technologies in public education and climate change) for a total amount equivalent to the real return on investment of the fund. Therefore, while the capital of the fund cannot be tapped, whenever there are positive returns these could in principle be spent.

A strategy or methodology to determine the amount of additional transfers has to be set by the executive branch of the government. Best practices indicate that it should take into consideration the long-term expected returns of the fund, adjusting the projected transfers to present and future economic conditions, as well as to the fund's investment strategy, which may include the reinvestment of some or all the interest gained. Eventually, if the size of the fund is consistently expanding, the additional allocation to budget appropriations should be revised. For example, Norway is considering the possibility of revising the transfer to the public budget from its sovereign fund, but only once its size has risen considerably as a result of increases in oil prices.

The current legislation allows for the executive branch to propose projects to the sovereign wealth fund (SWF), which would then submit them to parliament. The article in its current form does not clearly establish whether the resources will be allocated to projects already approved by parliament, or new projects to be determined by the SWF. Also, existing governance may create some overlapping among institutions responsible for the evaluation and presentation of these projects in the executive branch and the SWF council. In its present form, the SWF will have the need to develop technical capabilities for project evaluation and management, instead of using the existing capabilities of the executive branch. However, it would be more efficient and transparent for the executive branch to evaluate the projects in which the additional transfer will be invested. In addition, criteria to select these projects should be established. For example, the length and disbursement calendar should be significantly related to the fund's return on investment. An alternative option used by other countries is to allocate these additional funds to the general budget.

The framework for Uruguay SWF's asset allocation is relatively risk-prone compared to other funds. According to the MGP, the fund will be able to invest in a number of instruments, including investment funds, with three main constraints: Uruguayan domestic currency issuers (up to 50% of SWF assets), equity (up to 30% of assets) and no more than 15% of the fund assets on the same issuer (Article 51). Although SWFs are increasingly investing in equity instruments (mainly public), most funds prefer to maintain a conservative approach, given the inherent higher risk of the investment. As an example, the Chilean Economic Stabilisation Fund invests more than 75% of its assets in sovereign debt, with only 7.5% of assets devoted to equity. In general, the longer a fund's investment horizon, the longer its capacity to take on investment risks. As a relatively young and

short-horizon fund (the Valentine project is expected to run 27 years), the scope for exposure to risky assets for Uruguay's SWF should be low, at least in the beginning. In addition, the law does not specify a minimum investment cap on foreign assets. Avoiding risks of Dutch disease by investing abroad and controlling the repatriation of windfall revenues is common practice today, and the fund regulations could stress this point, as well as the maturities of targeted financial instruments.

The sovereign fund mechanisms that guarantee its compliance with the predefined rules and regulations can be improved. The establishment of Uruguay's sovereign fund involves the definition of two bodies: the management committee and the administrator entity. The management committee comprises the Ministers of Economics and Finance, Industry, Housing and Environment, Agriculture and the OPP Director (Article 48). It is charged with defining the investment strategy and assessing the performance of the fund. The current management committee involves a broad range of public representatives, but does not involve the participation of private sector or external advisors, an increasingly standard practice in sovereign funds. Operational independence should also be embedded in the rules and procedures for appointment and removal of members of the governing body (Al Hassan et al., 2013). At present, the law does not specify a procedure for this purpose. However, the administrator entity is responsible for implementing the investment strategy defined by the management committee. The administrator entity of the fund, in its current configuration, is established within Uruguay's Central Bank, following the example of Botswana, Chile and Norway. In other countries, the administrator entity is set up within the Ministry of Finance or as a separate legal body. Regardless of the governance framework, management of the fund should be conducted on an independent basis to minimise political influence (Das et al., 2009). The fund regulations will need clear enforcement mechanisms for this purpose. Similarly, the role of the supervisory body, in the form of an external or internal auditor (Article 67), should be further described in the fund regulations.

## Conclusions

Uruguay recovered swiftly from the profound financial and economic crisis of the early 2000s, aided by a favourable international environment, but also by sound macroeconomic policies. This created the fiscal space to finance social programmes to aid recovery from the crisis and reduce social vulnerabilities. However, the external environment is becoming less benign and a slowdown towards potential is underway. While this is a welcome development in an economy that has been above potential since 2010, macroeconomic policies in the short term should aim to increase the probability of a soft landing, thereby avoiding overheating. Reducing inflation and anchoring inflation expectations is a priority that should be addressed not only by monetary policy, but also by fiscal policies and wage negotiations.

A stronger fiscal policy framework that reduces excessive expenditures during good times would help the Uruguayan economy to stabilise in the short term, and regain room for manoeuvre in case a negative shock materialises. In this sense, strengthening and building fiscal institutions have proven their worth in similar situations for OECD economies.

Higher future expenditures can be financed through more tax revenues, but reforms have to carefully balance equity, efficiency and environmental considerations. Ageing,

more demand for public goods, and a higher quality of those currently supplied, will put pressure on public finances in the medium term. While tax revenues are relatively high already in Uruguay, there is some room to increase them. High tax morale, a strong tax administration, and the successful experience of the 2007 tax reform indicate that Uruguay is well positioned to produce such a reform.

For Uruguay to make the most out of the opportunity that future iron ore mining represents, it has to manage carefully the potential additional revenues. Low domestic savings might pose a risk to the sustainability of the current expansion, as this has been based partially on FDI and easy access to foreign savings. Furthermore, while Uruguay has made an excellent job of managing the risk profile of its net liabilities, the mining revenues could be used in part to reduce these vulnerabilities. Overall, the framework for the mining sector is sensible, but some adjustments to the sovereign wealth fund would increase its transparency, as well as its contribution to stability and long-term sustainability.

## *Notes*

1. In March 2006, Uruguay prepaid all interest and principal to the IMF corresponding to 2006. Finally, by the end of 2006, Uruguay ended its programme with the IMF by paying the total amount of its outstanding debt with the Fund (Jiménez and Lorenzo, 2010).
2. Estimates of potential GDP are subject to error. It could be argued that the fall in GDP between 1999 and 2002 was so steep that potential was permanently lowered by the collapse in investment. It could equally be argued that the depth of the trough biases the trend line downward.
3. According to the presentation of the President of the central bank on 19 November: *www.bcu.gub.uy/NoticiasArchivosAdjuntos/foro%20economico%20acde%202013/ACDE%202013.pdf*.
4. The structural balance would be recorded in the absence of temporary factors, such as cyclical influences on tax revenues and unemployment compensation, or one-off factors such as privatisation sales.
5. The authors also analyse the impact of misaligned exchange rates on interest payments, given the importance of dollar-denominated public debt. They conclude that the impact was large only in crisis periods, and is becoming less so because of the rising proportion of peso-denominated debt.
6. For example, according to a survey of Ministry of Industry, Energy and Mining, FDI commitments by firms in logistics, energy, mining and other sectors for the period 2013-20 would amount to at least USD 20 billion (MEF, 2014b).
7. It is important to bear in mind that even within narrowly defined sectors productivity differences among firms tend to be very large (Casacuberta and Gandelman, 2009).
8. Unfortunately, there is little information regarding the breakdown within the private sector between household and corporate savings.
9. In contrast, the pension system in Chile is completely fully funded, while Uruguay has a mixed system with a significant pay-as-you-go pillar. This is also the case in many OECD countries, as well as Argentina and Brazil, where the pay-as-you-go component is dominant. Contributions to private pension funds are not considered tax revenue under the OECD definition.
10. The net present value of the tax divided by the pre-tax net present value of the project; also known as the "average effective tax rate".

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