#### Document of The World Bank

FOR OFFICIAL USE ONLY

Report No. 94529-CL

#### INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

#### PROGRAM DOCUMENT FOR A PROPOSED LOAN

#### IN THE AMOUNT OF US\$100 MILLION TO

#### THE REPUBLIC OF CHILE

#### FOR THE

#### SOCIAL INCLUSION FOR SHARED PROSPERITY

#### DEVELOPMENT POLICY FINANCING

October 20, 2015

Equitable Growth, Finance and Institutions Practice Group Bolivia, Chile, Ecuador, Peru, and Venezuela Country Management Unit Latin America and the Caribbean Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

#### **CHILE - GOVERNMENT FISCAL YEAR**

January 1 – December 31

**CURRENCY EQUIVALENTS** (Exchange Rate Effective September 28, 2015)

Currency Unit = Chilean Peso (CLP) CLP 1.00 = US\$0.0015 US\$1.00 = CLP 685.83 Weights and Measures: Metric System

### ABBREVIATION AND ACRONYMS

CASEN	National Socioeconomic Survey (Encuesta de Caracterización Socioeconómica
CEPAL	<i>Nacional)</i> Economic Commission for Latin America and the Caribbean ( <i>Comisión Económica para</i>
	América Latina y el Caribe)
CHCC	Social Protection System for Early Childhood (Chile Crece Contigo)
CPS	Country Partnership Strategy
CRUCH	Council of Rectors of Chilean Universities (Consejo de Rectores de las Universidades
	Chilenas)
DIPRES	Budget Office(Dirección de Presupuestos)
DPF	Development Policy Financing
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GoC	Government of Chile
IEF	Ethical Family Income (Ingreso Ético Familiar)
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
MDS	Ministry of Social Development (Ministerio de Desarrollo Social)
MINEDUC	Ministry of Education (Ministerio de Educación)
OECD	Organisation for Economic Co-operation and Development
OPHDI	Oxford Poverty & Human Development Initiative
PACE	Effective Access to Higher Education Program (Programa de Acompañamiento y Acceso
	Efectivo a la Educación Superior)
PDG	Government Program (Programa de Gobierno)
PDO	Program Development Objective
PFM	Public Financial Management
PISA	Program for International Student Assessment
PSIA	Poverty and Social Impact Assessment
SEP	Preferential School Subsidy (Subvención Escolar Preferencial)
SIMCE	Education Quality Measurement System (Sistema de Medición de Calidad de la
	Educación)
SIIS	Integrated System of Social Information (Sistema Integrado de Información Social)
SISP	Social Inclusion for Shared Prosperity

Regional Vice President:	Jorge Familiar
EFI Practice Group Vice President:	Jan Walliser
Country Director:	Alberto Rodríguez
Poverty and Equity Global Practice Senior Director:	Ana Revenga
Practice Manager:	Oscar Calvo-González
Task Team Leader:	Carlos Rodríguez-Castelán
Co-Task Team Leader:	Alan Fuchs
Co-Task Team Leader:	Javier Botero

#### **REPUBLIC OF CHILE**

#### SOCIAL INCLUSION FOR SHARED PROSPERITY DEVELOPMENT POLICY FINANCING

#### **TABLE OF CONTENTS**

SUM	IMARY OF PROPOSED LOAN AND PROGRAM	1
1.	INTRODUCTION	2
2.	COUNTRY CONTEXT	
	RECENT ECONOMIC DEVELOPMENTS	
	MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY	7
	POVERTY, INEQUALITY, AND SHARED PROSPERITY	8
3.	THE GOVERNMENT PROGRAM	
4.	PROPOSED OPERATION	
	LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION	12
	PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS	
	LINK TO CPS AND OTHER BANK OPERATIONS	23
	CONSULTATIONS, COLLABORATION WITH OTHER DEVELOPMENT PARTNI	
5.	OTHER DESIGN AND APPRAISAL ISSUES	24
	POVERTY AND SOCIAL IMPACT	24
	ENVIRONMENTAL ASPECTS	
	PFM, DISBURSEMENT AND AUDITING ASPECTS	25
	MONITORING AND EVALUATION	27
6.	SUMMARY OF RISKS AND MITIGATION	28
ANN	VEX 1. POLICY AND RESULTS MATRIX	30
	NEX 2. LETTER OF DEVELOPMENT POLICY	
ANN	NEX 3. FUND RELATIONS ANNEX	38
ANN	<b>VEX 4. CHILE SELECTED MACROECONOMIC INDICATORS</b>	41
ANN	NEX 5. SECTORAL BACKGROUND: EDUCATION AND SOCIAL PROTECTION	42
ANN	NEX 6. POVERTY AND SOCIAL IMPACTS ASSESSMENT	48

The Chile Social Inclusion for Shared Prosperity DPF was prepared by an IBRD team consisting of Carlos Rodríguez-Castelán (TTL, GPVDR), Alan Fuchs (co-TTL, GPVDR), Javier Botero (co-TTL, GEDDR), Giselle Del Carmen (GPVDR), Tania Valeria Diaz-Bazan (GPVDR), Jessica Terry (GPVDR), Veronica Silva (GSPDR), Mariana Montiel (LEGLE), Rong Qian (GMFDR), Julio Velasco (GMFDR), Alonso Sanchez (GEDDR), Javier Zuleta (GWADR), Maria Virginia Hormazabal (WFALN), Patricia Hoyes (GGODR), Lourdes Rodriguez-Chamussy (GPVDR), Karem Edwards (GPVDR), Nora Lustig (Tulane University), Tobias Pfutze (FIU), Christopher Neilson (NYU), and Miguel Szekely (ITESM). The team is grateful for overall guidance provided by Louise Cord (GPVDR), Oscar Calvo-González (GPVDR), Reema Nayar (GEDDR), Alma Kanani (LCROS), Margaret Grosh (GSPDR), Jamele Rigolini (LCC6C), Pedro Rodríguez (LCC6C), Carlos Silva-Jauregui (GPVDR) and María Dolores Arribas-Baños (GPVDR). The team gratefully acknowledges the excellent collaboration of the Chilean authorities, as well as the support and guidance of peer reviewers Wendy Cunningham (LCC1C), Francisco Marmolejo (GEDDR), Harry Patrinos (GEDDR), and Peter Siegenthaler (GMFDR). The team is grateful for the valuable comments received from the Regional Office of the Chile Economist in LAC, especially from Augusto de la Torre, Daniel Lederman and Maria Marta Ferreyra.

## SUMMARY OF PROPOSED LOAN AND PROGRAM REPUBLIC OF CHILE SOCIAL INCLUSION FOR SHARED PROSPERITY DEVELOPMENT POLICY FINANCING

Borrower:	Republic of Chile
Implementing Agency:	Ministry of Finance, Budget Office
Financing Data:	IBRD variable spread loan for US\$100 million
Operation Type:	Stand-alone single-tranche development policy loan (DPF).
Operation Pillars and Program Development Objective (PDO):	The Program Development Objective of the DPF is to support the efforts of the Government of Chile to: (i) promote equal opportunities in education; (ii) improve the conditions to enhance the quality of tertiary education; and (iii) strengthen institutions for poverty measurement and enhance targeting mechanisms of social programs.
	<ul> <li><i>Pillar 1: Promoting equal opportunities in education</i></li> <li>(a) Number of students who receive the Preferential School Subsidy (SEP).</li> <li>[<i>Baseline 2015</i> = 1,250,383] / <i>Target 2016</i> [1,630,726]</li> <li>(b) Number of students in secondary school incorporated in the PACE program.</li> <li>[<i>Baseline 2015</i> = 7,614] / <i>Target 2016</i> [57,000]</li> <li>(c) Number of full scholarship recipients that belong to the five lowest income deciles enrolled in their first year of tertiary education. [<i>Baseline 2015</i> = 2,479] / <i>Target 2016</i> [30,000]</li> </ul>
Result Indicators:	<i>Pillar 2: Improve the conditions to enhance the quality of tertiary education</i> (d) Number of students enrolled in state universities included in the Convenio Marco. [ <i>Baseline 2015</i> = 0] / <i>Target 2016</i> [180,000]
	<i>Pillar 3: Strengthen institutions for poverty measurement and enhance targeting mechanisms of social programs</i>
	(e) Release of monetary and multidimensional poverty indicators based on the new methodology and its corresponding microdata with the release of the 2013 and 2015 household survey (CASEN). [ <i>Baseline 2015</i> = 0] / <i>Target 2016</i> [1] (f) Number of social programs and subsidies whose eligible beneficiaries are determined by the new targeting system. [ <i>Baseline 2015</i> = 0] / <i>Target 2016</i> [10]
Overall Risk Rating:	Low
Operation ID:	P154213

# IBRD PROGRAM DOCUMENT FOR A PROPOSED LOAN TO THE REPUBLIC OF CHILE FOR A SOCIAL INCLUSION FOR SHARED PROSPERITY DEVELOPMENT POLICY FINANCING

## 1. INTRODUCTION

1. The Social Inclusion for Shared Prosperity (SISP) Development Policy Financing (DPF) operation (the SISP DPF) supports the Chilean Government's program of promoting equity and social inclusion through specific actions to improve the access and quality of education and of strengthening institutions for poverty measurement and targeting of social programs. The proposed US\$100 million DPF is a stand-alone single tranche operation supporting development policies to promote equity and social inclusion in Chile. The policy program of the operation is consistent with the FY11–FY16 Chile Country Partnership Strategy (CPS), in particular with the pillar of job creation and improving equity. It supports policies grouped into three main pillars: (1) promoting equal opportunities in education; (2) improving the conditions to enhance the quality of tertiary education; and (3) strengthening institutions for poverty measurement and enhancing targeting mechanisms of social programs.

2. Chile's strong economic performance supported by targeted social spending has contributed to significant poverty reduction and shared prosperity over the past decade. Over the last two decades Chile has sustained high growth rates and increased public social spending primarily focused on those in the bottom of the income distribution. These two factors together have contributed to substantial intra-generational economic mobility by means of a strong decline in poverty rates in recent years. Between 2006 and 2013, extreme poverty fell by 8.1 percentage points to 4.5 percent, whereas moderate poverty decreased by 14.7 percentage points to 14.4 percent. In terms of sharing the benefits of economic prosperity, from 2009 to 2013, Chile's less well-off households benefitted more from growth than the average person. In particular, real income per capita of the bottom 40 percent grew at 5.6 percent, while the mean growth rate was 4.1 percent.

3. **However, over the same period, income inequality has been persistent.** The levels of income inequality in Chile have remained essentially constant over recent years, with only a slight reduction in the Gini coefficient between 2006 and 2013 (0.51 to 0.50). The average income of the richest 20 percent of Chileans was nearly 11.5 times that of the poorest 20 percent in 2013, a small change from the ratio of 11.7 times in 2006.<sup>1</sup> These changes are at odds with the regional trends.<sup>2</sup> In Latin America and the Caribbean (LAC) as a whole, inequality, as measured by the Gini coefficient, fell from 0.54 to 0.51 in the same period.

4. Two of the main structural factors that may explain the observed levels of income inequality in Chile are low inter-generational mobility and limited opportunities for vulnerable groups to participate in productive activities. The Government of Chile (GoC) is

<sup>&</sup>lt;sup>1</sup> The Gini coefficient and 20:20 ratio reported do not include transfers and subsidies. With the latter the Gini coefficient slightly improves from 0.499 in 2006 to 0.491 in 2013. Similarly, the 20:20 ratio changes from 10 in 2006 to 8.8 in 2013.

<sup>&</sup>lt;sup>2</sup> CASEN 2006 and 2013.

conscious of these structural issues and the government's 2014–2018 Program (PDG) '*Chile de Todos*' emphasizes the importance of reducing inequality and implementing reforms for a more integrated society with equal opportunities for all. In fact, in 2008 an advisory council (*Consejo Asesor Presidencial Trabajo y Equidad*) commissioned by President Bachelet during her first term in office (2006–2010), identified Chile's main challenges in equity and defined specific goals to improve inclusion, equality of opportunities, social mobility and vulnerability. The PDG focuses on three key reforms: (a) education; (b) tax reform, and (c) a new Constitution. Education is the government's top priority, and the PDG includes policy areas under a wide-ranging economic program, specifically, to promote equity and social inclusion. The government has defined a comprehensive program of policy reforms in education, fiscal policy, social protection and institutions for poverty measurement.

5. The SISP DPF is fully consistent with the World Bank's goals to eradicate extreme poverty and promote shared prosperity. Equity-driven policies, such as the ones supported by this operation, are expected to enhance the country's capacity to grow in a sustained and inclusive manner. The country stands at a crucial moment to engage in education and social protection reforms to increase human capital and be better equipped to sustain and expand productivity while protecting social gains of the last decade. With an increasing dependency ratio, expanding opportunities for more productive participation, particularly of those in the bottom of the income distribution and other typically excluded groups, is essential to unlock their inherent economic potential by means of higher productivity, thus spurring on growth.

# 2. COUNTRY CONTEXT

# 2.1 RECENT ECONOMIC DEVELOPMENTS

6. **Over the last years, Chile continued to consolidate its position as one of LAC's strong performers.** Chile has enjoyed sustained economic growth for the past 20 years, 4.6 percent on average, higher than LAC countries' average of 3.2 percent over the same period. Chile also withstood well the global financial crisis in 2009 and experienced a fast recovery in 2010–12, driven by domestic demand and capital investment. A solid macroeconomic policy framework, underpinned by prudent fiscal and monetary policies, a sound banking system, and the presence of large fiscal buffers, facilitated an effective policy response to shocks. Chile's monetary policy has successfully contributed to macroeconomic stability by keeping the inflation rate below the target, while the flexible exchange rate policy has been effectively employed as a shock absorber. In addition, job creation has been strong over the last years, with the unemployment rate continuously decreasing, currently at 6.1 percent in March 2015, one of the lowest levels on record.

7. **The largest sectors by GDP in Chile are business services, mining, personal services, manufacturing, wholesale and retail trade, and construction.** Even though the mining sector is one of the main pillars of the Chilean economy in terms of exports, it employs only 4 percent of the country's workers. Personal services, wholesale and retail trade and tourism are the sectors that employ the highest proportion of workers. Over the past 25 years, commerce, tourism and financial services were the sectors that grew the most.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Castex and Sepulveda, 2014

8. Economic activity started to decelerate in 2012, slowing faster and deeper than expected to 1.9 percent in 2014 (Table 1). The deceleration was triggered by the end of major investment project cycles in the mining sector, and was deepened by the faster-than-expected slowdown of China's economy, and the end of cycle of high copper prices. Private consumption growth dropped from 5.9 percent in 2013 to 2.2 percent in 2014. However, seasonally adjusted economic growth increased from 0.4 percent in the third quarter of 2014 to 1.0 percent in the first quarter of 2015, due mainly to a moderate reversal in the deceleration of investments.

9. The current account deficit is closing and remains financed mainly by foreign direct investment. The current account deficit increased from US\$9.6 billion to US\$10.1 billion between 2012 and 2013 (or 3.7 percent of GDP). It declined to 1.2 percent of GDP in 2014, due largely to the contraction in imports stemming from weaker domestic demand. Exports stagnated over the period, with copper exports decreasing 5.4 percent from 2013 to 2014 chiefly due to the decline in prices. But the imports contraction more than compensated for the stagnation in exports. Imports contracted 9 percent between 2013 and 2014 as a result of weakened domestic demand in the face of a significant real exchange rate depreciation. Overall, terms of trade remained stable in the first quarter of 2015.

10. In this context, the Central Bank eased monetary policy. It reduced the policy rate eight times from 5 percent in October 2013 to 3 percent in October 2014, and kept at that level since then. Inflation remained moderate in 2013, but accelerated to beyond the 2 to 4 percent target band since April 2014, reaching a peak of 5.7 percent on an annualized basis in October 2014. The upsurge is linked to increases in prices of tradable goods, which in turn was fueled by nominal depreciation – prices of non-tradable goods have remained relatively stable. Inflation gradually decreased since then to 4.0 on an annualized basis as of May 2015, in the context of a deceleration of the exchange rate depreciation and low oil prices. Moreover, inflation expectations remain well anchored. The Chilean Peso depreciated 15.2 percent in 2014 (year on year), which was the first line of response to the external shock and safeguarded reserves. International reserves have fluctuated at around US\$40.4 billion throughout 2014, but slightly decreased in the first months of 2015 reaching US\$38.2 billion in June 2015 (or 7.7 months of imports).

11. **The banking system continues to be sound**. Capital levels are above regulatory limits, it has a diversified external funding base, and the liquidity position remains stable. The commercial non-performing loan ratio has been stable at 1.65 percent in July 2015.<sup>4</sup> Lending rates are at low levels, close to the lowest in the last 10 years, partly as a consequence of expansionary monetary policies overseas and in Chile. However, despite the low cost, consumption and commercial debt is growing slowly, at 0.5 and 3 percent annual growth respectively in August 2015, consistent with the overall situation in the domestic economy. Corporate debt has grown faster than GDP, driven by dynamic local banking credit and external financing through bonds but is still consistent with Chile's per capita income.

12. **Chile's fiscal deficit has widened since 2013.** The fiscal balance turned from a surplus of 1.3 percent of GDP in 2011 into a deficit of 1.6 percent of GDP in 2014 due mainly to lower tax revenues resulting from weak domestic demand and lower copper-related revenues. At the same time, public expenditures increased in response to reconstruction efforts after the fires in

<sup>&</sup>lt;sup>4</sup> Superintendencia de Bancos e Instituciones Financieras de Chile (SBIF)

Valparaiso (estimated at US\$1.1 billion), the capitalization of the state-owned copper mining company and higher public investment, among others.

								Projected	
	2010	2011	2012	2013	2014	2015	2016	2017	2018
GDP growth	5.8	5.8	5.5	4.2	1.9	2.5	3.1	3.3	3.3
Unemployment Rate	8.2	7.2	6.5	6.0	6.3				
Inflation, consumer prices (%, yoy, end of year)	3.0	4.4	1.5	3.0	4.6	3.5	3.1	3.0	3.0
Fiscal accounts, percent of GDP, unless othe	rwise ind	licated							
Central government									
Revenues	21.5	22.7	22.2	21.0	20.7	20.7	22.0	23.0	23.3
Tax revenues	15.8	17.4	17.6	16.7	16.7	17.3	18.6	19.5	19.7
Expenditures	22.0	21.4	21.6	21.6	22.4	23.7	24.0	24.2	24.2
Primary	17.6	16.8	17.1	17.3	17.9	18.2	18.2	18.2	18.2
Interest payments	0.5	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.9
Capital expenditure	3.9	4.1	3.9	3.7	3.9	4.9	5.0	5.2	5.2
Overall fiscal balance	-0.5	1.3	0.6	-0.6	-1.6	-3.0	-2.0	-1.2	-0.9
Primary balance	0.0	1.8	1.2	0.0	-1.0	-2.4	-1.2	-0.4	-0.1
Structural fiscal balance	-2.1	-1.0	-0.4	-0.6	-0.6	-1.1			
Net Central Government Debt	-7.8	-7.7	-7.0	-5.0	-3.6	-0.7	1.5	2.6	3.5
Gross debt*	8.6	11.1	12.0	12.8	15.1	18.2	19.7	20.2	20.3
External	1.7	2.3	2.3	2.0	2.7	3.3	3.3	3.3	3.3
Domestic	6.9	8.9	9.8	10.9	12.4	14.9	16.4	16.9	17.1
Assets	16.4	18.9	19.0	17.8	19.1	18.8	18.3	17.6	16.9
Balance of payment, percent of GDP, unless	othe rwis	e indicate	d						
Current account balance	1.7	-1.2	-3.6	-3.7	-1.2	-0.1	-0.5	-0.9	-1.1
Trade balance	7.3	4.4	0.9	0.7	3.0	4.0	3.6	3.2	3.0
Merchandise exports	32.6	32.5	29.3	27.6	29.3	29.2	29.5	29.4	29.3
of which: cooper	18.9	17.8	15.8	14.5	14.7	13.9	14.0	14.0	13.9
Merchandise imports	25.3	28.1	28.4	27.0	26.3	25.2	26.0	26.2	26.3
Service balance	-0.9	-1.2	-1.0	-1.2	-1.5	-1.3	-1.4	-1.4	-1.4
Net factor income	-6.7	-5.6	-4.2	-3.9	-3.4	-3.5	-3.5	-3.4	-3.3
Net current transfers	2.0	1.1	0.8	0.8	0.7	0.7	0.7	0.7	0.6
FDI, net inflows	2.8	1.2	3.0	3.2	3.9	3.0	3.1	3.1	3.1
Gross Reserves (in US\$ billion, eop)	27.9	42.0	41.6	41.1	40.4	37.2	37.4	38.2	39.1
External debt, total (US\$ billion)	84.5	98.4	117.6	130.7	146.4	151.3	161.2	172.4	183.4
External debt, total (% of GDP)	39.1	39.6	45.0	46.8	56.8	60.8	64.8	67.0	67.7
Other memo items									
GDP (nominal US\$ billion)	217.5	251.0	265.1	276.8	258.2	248.8	248.8	257.2	270.9
GDP (nominal, local currency billion)	110,999	121,319	129,028	137,029	147,185	156,748	166,779	177,604	189,050

#### Table 1. Chile – Key Economic Indicators 2010–2018

Source: Central Bank of Chile, DIPRES, International Monetary Fund (IMF) and World Bank staff

calculations.\*Gross debt does not include debt by public enterprises.

*Note:* Expenditure projections include budget allocation to fund the components of the Inclusion Law.

13. The government enacted a comprehensive tax reform in September 2014 which is expected to generate additional tax revenues amounting to around 3 percent of GDP. At 20 percent of GDP, Chile's tax burden is relatively low by Organization for Economic Co-operation and Development (OECD) countries level (34.7 percent).<sup>5</sup> The main objective of the tax reform is to finance long-term expenditure commitments, including those due to the education reform. As shown in Table 2 expenditures are expected to increase by around 2 percent of GDP from 2014 to 2018 reflecting the estimated cost of the education reforms already approved. This would help to close the structural fiscal deficit. As shown in Table 2 the government expects to increase tax

<sup>&</sup>lt;sup>5</sup> OECD 2015 <u>http://www.oecd.org/ctp/tax-policy/revenue-statistics-ratio-change-latest-years.htm</u>

revenues through the tax reform by 0.6 percent of GDP in 2015, 1.9 percent in 2016, 2.8 percent in 2017 and reach a cumulative 3 percent of GDP increase by 2018. The government plans to increase the corporate income tax rate gradually from 20 percent to 25 or 27 percent, depending on the chosen regime by 2018.<sup>6</sup> In addition, the government plans to lowers the personal income tax rate to 35 percent from the current 40 percent. Other elements of the reform include the introduction of property taxes, excise taxes on sugary beverages, alcoholic beverages, tobacco, and green taxes.

							Proj	ected	
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Overall fiscal balance	-0.5	1.3	0.6	-0.6	-1.6	-3.0	-2.0	-1.2	-0.9
Primary balance	0.0	1.8	1.2	0.0	-1.0	-2.4	-1.2	-0.4	-0.1
Structural fiscal balance	-2.1	-1.0	-0.4	-0.6	-0.6	-1.1			
Revenues and grants	21.5	22.7	22.2	21.0	20.7	20.7	22.0	23.0	23.3
Tax revenues	15.8	17.4	17.6	16.7	16.7	17.3	18.6	19.5	19.7
Income tax	6.4	7.4	7.3	6.6	6.3	8.9	9.7	10.4	10.6
Value added tax	7.6	7.9	8.1	8.1	8.3	6.5	6.8	7.0	7.0
Excise tax	1.3	1.4	1.5	1.5	1.5	1.4	1.6	1.6	1.6
Other taxes	0.5	0.7	0.7	0.5	0.6	0.5	0.5	0.5	0.5
Social contributions	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Grants	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Other revenues	4.3	3.9	3.2	2.8	2.5	2.4	2.4	2.4	2.4
CODELCO revenues	2.7	2.3	1.5	1.0	0.9	0.4	0.5	0.6	0.6
Income on assets	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other taxes on domestic transactions	1.1	1.2	1.2	1.3	1.2	1.4	1.4	1.3	1.3
Total expenditures	22.0	21.4	21.6	21.6	22.4	23.7	24.0	24.2	24.2
Expenses	18.0	17.3	17.7	18.0	18.5	18.8	19.0	19.0	19.1
Wages and salaries	4.2	4.1	4.2	4.3	4.4	4.5	4.4	4.4	4.4
Goods and services	2.1	2.2	2.1	2.0	2.2	2.2	2.2	2.2	2.2
Interest payments	0.5	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.9
Subsidies and grants	6.7	6.3	6.7	7.0	7.3	7.4	7.5	7.6	7.7
Pensions	4.5	4.2	4.2	4.1	4.0	4.0	4.0	4.0	3.9
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net acquisition of nonfinancial assets	3.9	4.1	4.0	3.6	3.8	4.9	5.0	5.2	5.2
Capital investments	2.1	2.1	2.1	2.0	2.0	2.5	2.7	2.8	2.8
Capital transfers	1.8	1.9	1.8	1.7	1.9	2.4	2.3	2.4	2.4
Other memo items									
Education expenditure (% of GDP)	4.0	3.9	4.1	4.3	4.3				
Safety net (% of GDP)	6.8	6.4	6.4	6.1	6.1				

#### Table 2. Chile – Summary Fiscal Accounts of the Central Government (In percent of GDP)

Source: DIPRES and World Bank staff calculations.

<sup>&</sup>lt;sup>6</sup> The taxpayer chooses between a fully-integrated system in which the tax base is all the accrued income (25 percent tax rate), and a semi-integrated system in which the tax is the distributed income (27 percent but only 65 percent of the paid tax can be deducted from personal taxes).

## 2.2 MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

14. **Chile is expected to maintain stable growth and a sound macroeconomic framework.** GDP growth is expected to increase gradually from 1.9 percent in 2014 to 3.3 percent in 2018 supported by a recovery of domestic demand and lower energy prices that would offset partially the negative impact of lower copper prices. Domestic demand will be supported by an increase in fiscal spending as a result of the government's structural reform agenda. However, copper prices are expected to remain subdued, which may continue to hinder investments in the sector.

15. **Despite increasing expenditures, macroeconomic balances are expected to remain solid**. In September 2014 the government announced a US\$500 million plan to boost economic activity through additional public investments, including the construction of subsidized housing. As part of a US\$4 billion plan to capitalize the copper state enterprise during 2014–2018, the government allowed this company to retain US\$200 million of its 2013 profits, reducing central government revenues. Implementing a countercyclical fiscal policy, the government proposed an expansionary budget for 2015, with a 9.8 percent increase in spending and a 27.5 percent increase in public investment. Nonetheless, with revenues increasing from the tax reform, the deficit is projected to gradually decrease from 3.0 percent of GDP in 2015, or 1.1 percent of GDP of structural fiscal deficit, to a structural fiscal balance by 2018. Furthermore, the Chilean Government has the track record of adjusting spending to accommodate unexpected higher spending or lower revenues to fulfill its fiscal rule.<sup>7</sup> Net Central Government debt, currently negative, is expected to increase only slightly.

16. **Inflation is expected to ease.** Inflation is expected to fall to within the Central Bank target of 2 to 4 percent in 2015. The likelihood of further exchange rate depreciation is low, since the current account should come into balance and oil prices are expected to remain at low levels.

17. The main economic risks derive from Chile's vulnerability to external shocks and a potential delayed recovery of private expectations. Low oil prices will benefit Chile–as oil imports represent about 5 percent points of GDP. Nonetheless, there are some challenges in the external environment. Chile's economic performance could be affected negatively by a further reduction in copper prices, especially if China's growth decelerates faster than expected. As Chile is well integrated into international capital markets, it is also exposed to the risk of either a rapid reduction of capital inflows or an increase in the cost of capital, which could be triggered by an increase in policy rates in the United States. With regard to domestic demand, the projected economic recovery could be delayed if private expectations do not recover as predicted.

18. The debt sustainability analysis suggests that Chile's public debt position is resilient to a range of simulated negative shocks. Chile's total external debt—including Foreign Direct Investment (FDI) related debt—is expected to remain close to 50 percent of GDP through 2019.

<sup>&</sup>lt;sup>7</sup> Since 2001 Chile put in place the structural balance rule. The rule defined the structural balance as the central government balance evaluated at potential output and the long-term copper price, both set with inputs from committees of independent experts. Having started formally in 2001, the structural balance policy in Chile attempts to transfer the medium-term fiscal outlook into the country's budgetary process. For that to happen, it must estimate the fiscal income that would be obtained net of the impact of the economic cycle and copper prices so that the expenditures are compatible with this level of income. Once the structural long term income is determined, a target must be chosen. The current Government aims to reach a structural fiscal balance of 0 percent of GDP by 2018.

When applying a standardized stress test of a 30 percent real depreciation, external debt would increase to about 70 percent of GDP up to 2019. Gross public debt will increase only slightly (reaching about 20 percent of GDP in the medium term) to finance deficits resulting from the current slowdown, but remains at low levels. Chile has the highest sovereign debt rating of any LAC country—and all ratings have a stable outlook.

19. Notwithstanding the economic risks to the near-term outlook, Chile's macroeconomic policy framework is deemed adequate for the purposes of this operation. The macroeconomic framework will support economic growth expected to reach 2.5 percent this year, increasing to above 3 percent in the medium term. Medium-term fiscal policy is expected to remain prudent with the fiscal deficit projected to decline steadily and the structural fiscal deficit to balance over the medium term. The public sector's debt-to-GDP ratio is expected to remain low over the medium term. The current account deficit is expected to stabilize around 1 percent of GDP in 2015, largely financed through FDI (Table 3).

							Proje	cted	
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Financing requirement	-3.6	28.7	3.6	14.3	14.7	15.8	13.3	12.0	11.3
Current account deficit	-3.8	3.1	9.6	10.1	3.0	2.9	4.7	5.6	6.8
Net debt repayment	-9.3	-11.1	-8.1	-6.8	-6.2	-5.0	-8.7	-10.2	-11.5
Other capital outflows	9.5	36.7	2.1	11.0	17.9	17.9	17.3	16.7	16.1
Financing sources	-3.6	28.7	3.6	14.3	14.7	15.8	13.3	12.0	11.3
Capital grand	-6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FDI and portfolio investment(net)	-0.4	14.5	3.9	14.0	13.6	13.6	13.2	12.8	12.3
Changes in reserves	3.0	14.2	-0.4	0.3	1.1	2.2	0.0	-0.7	-1.0
IMF credit (net)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financing gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

 Table 3. Balance of Payments Financing Requirements and Sources (In billion US\$)

Source: Central Bank of Chile, IMF and World Bank staff calculations.

Note: This does not include FDI related debt.

## 2.3 POVERTY, INEQUALITY, AND SHARED PROSPERITY

20. Economic growth and well-targeted social protection policies have contributed to poverty reduction and shared prosperity. Income poverty fell from 29.1 percent in 2006 to 14.4 percent in 2013. Similarly, the extreme income poverty headcount fell from 12.6 percent to 4.5 percent in the same period. Particularly, the declines in poverty rates and the observed higher growth rates of incomes of those in the bottom 40 of the income distribution can be explained mostly by an increase in labor incomes and public transfers.<sup>8</sup>

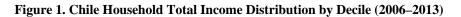
21. In order to sustain gains in intra-generational mobility, Chile aims to expand the number of individuals registered on its Social Protection System to include the vulnerable and the middle class.<sup>9</sup> In 2012 *Chile Solidario* (a social protection program for families and

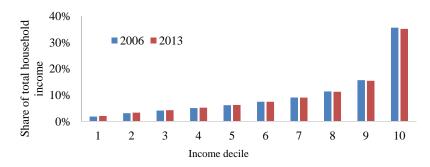
<sup>&</sup>lt;sup>8</sup> LAC Equity Lab, World Bank 2015. Using the US\$4 a day poverty line, public transfers contributed to over half (54 percent) of the poverty reduction observed between 2003 and 2011.

<sup>&</sup>lt;sup>9</sup> For further detail on the Chilean Social Protection System please refer to Annex 5.

individuals living in extreme poverty) was replaced partly by the program Ethical Family Income (IEF) that seeks to benefit 170,000 families living in extreme poverty. The IEF program provides cash transfers and social and work-related support services. Other government programs include a minimum old age pension for individuals from the lowest socioeconomic levels (the 60 percent most vulnerable) and unemployment insurance partially funded by the government. By expanding the coverage of individuals in its Social Protection System, the government aims to move away from a system that targets only the poor, to a more inclusive one that aims at broader eligibility, excluding only those in the highest income deciles that will provide Chileans with various social protection schemes to cover eventual needs.

22. Even though Chile performed well on intra-generational mobility, the trends show only a modest reduction of income inequality. The country's remaining high levels of inequality are one of the government's main concerns. In 2013, the highest income quintile accounted for half of the total income, whereas the bottom quintile accounted for only 5.7 percent (figure 1). The persistence of household income inequality in Chile is explained largely by the persistence of labor income inequality, which in turn reflects an unequal distribution of skills. Over 20 percent of individuals from the bottom quintile are unskilled – those with less than primary education – relative to only 4 percent in the top quintile.<sup>10</sup> In 2013, the poorest quintile had only 4 percent of total labor income whereas the richest quintile had 52.7 percent.<sup>11</sup> Moreover, significant regional disparities still prevail in Chile.<sup>12</sup>





Source: Ministry of Social Development based on CASEN 2006 and 2013.

# 23. The country also faces important challenges with regard to inter-generational mobility. Parents' education and occupation are the circumstances that explain most of the

<sup>&</sup>lt;sup>10</sup> World Bank staff calculations using CASEN 2013. These numbers only include prime aged workers, ages 18-65.

<sup>&</sup>lt;sup>11</sup> http://observatorio.ministeriodesarrollosocial.gob.cl/documentos/Casen2013\_Evolucion\_Distibucion\_Ingresos.pdf

<sup>&</sup>lt;sup>12</sup> Considering extreme and moderate poverty at regional levels reveals a significant gap—but a gap that has been slowly closing over time. For instance, using the old poverty measurement methodology, in 1990 there was a difference of 10.4 percentage points between the region with the highest extreme poverty level, Araucania, and the region with the lowest level, Tarapaca. In 2011, extreme poverty rates for all the regions were below 4.5 percent and the differences between regions dropped as well, with all regions falling within a range of 2.9 percentage points. Moderate poverty rates have behaved similarly but the differences across regions remain considerable. For example, the moderate poverty rate in Araucania is over 10 percentage points higher than that in Magallanes.

inequality in access to quality education.<sup>13</sup> Although coverage of primary education is universal and coverage of secondary education is above 90 percent in Chile, enrollment rates in pre-school and tertiary education are lower, particularly for children and young adults in lower socioeconomic groups. There is evidence of higher concentration of incomplete schooling in the lowest income quintiles. For example, enrollment rates in tertiary education were 74 percent in 2011, with 91 percent for the highest decile, but only 27 percent for the lowest decile.<sup>14</sup> Moreover, quality of education, as measured by the 2012 Program for International Student Assessment (PISA) scores, places Chile among the lowest ranking OECD countries, especially in Mathematics and Science, and with large differences in performance based on gender and socioeconomic status.<sup>15</sup>

24. Restricted school choice driven by high costs of education and current admission policies in mandatory levels of education are factors that explain the country's modest performance in inter-generational mobility.<sup>16</sup> In 1981 Chile introduced a voucher system to finance public education in mandatory levels of schooling. As a consequence, private schools were divided into subsidized schools that participated in the voucher program and unsubsidized schools. Voucher (subsidized) private schools were allowed to select students and could be either not for profit, mostly catholic schools, or for-profit schools. According to official statistics, in 2013 approximately 84 percent of private subsidized schools were for-profit.<sup>17</sup> The current co-payment system in Chile allows private subsidized schools to charge families a tuition fee on top of a public voucher, which introduces competition between these modality of schools but excludes students from lower socioeconomic backgrounds. Studies indicate that the voucher program led to increased sorting in Chile, as children from more-advantaged backgrounds concentrate in the same schools of higher quality (private or subsidized private schools with higher co-payment fees), from which children from less-privileged families are excluded due to higher prices.<sup>18</sup> Nonetheless, school quality, as measured by test scores, is very heterogeneous within school groups, as in some cases private subsidized schools perform worse than public schools (figure 2).<sup>19</sup> Similarly, the current admission policies give schools strong incentives to select children from higher socioeconomic backgrounds and with better academic performance.<sup>20</sup> All these factors together translate into higher mean lifetime earnings for those of high socioeconomic background perpetuating inter-generational inequality.

<sup>&</sup>lt;sup>13</sup> More than 23 percent of the difference in student performance can be attributed to their socio-economic status, against an average for OECD countries of only 15 percent. See World Bank (2014). "Social Gains in the Balance - A Fiscal Policy Challenge for Latin America and the Caribbean" LAC Poverty and Labor Brief (February), World Bank, Washington, DC.

<sup>&</sup>lt;sup>14</sup> OECD Education at a Glance Chile 2014

<sup>&</sup>lt;sup>15</sup>The 2012 PISA results indicate that in most countries boys outperformed girls in Mathematics (11 points difference on average); however, Chile had that largest gap, with a difference of 25 points.

<sup>&</sup>lt;sup>16</sup> For further detail on the Chilean Education System please refer to Annex 5.

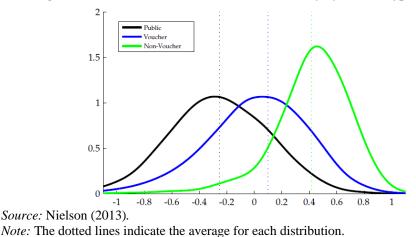
<sup>&</sup>lt;sup>17</sup> Ministry of Education.

<sup>&</sup>lt;sup>18</sup> Hsieh and Urquiola (2006); Contreras, Bustos and Sepulveda (2007); MacLeod and Urquiola (2009); Valenzuela and Allende (2012).

<sup>&</sup>lt;sup>19</sup> Also, after controlling for socioeconomic and school characteristics, for-profit schools do not necessarily perform better than public schools (also if selection is taken into account), see for instance Urzua (2015).

<sup>&</sup>lt;sup>20</sup> Bravo and Quintanilla (2001); Bravo, Contreras and Sanhueza (1999); Contreras (2011); McEwan and Carnoy (2000); Urzua (2015); Valenzuela, Bellei and de los Ríos (2013); Valin (2011).

Figure 2. Distribution of Estimated School Quality by School Type in 2007



25. **Chile's low public spending on tertiary education is a factor that explains segregation at this level.** Among OECD countries, Chile is the country where university students have to finance most of their schooling (76 percent vs. 31 percent for the OECD average).<sup>21</sup> This suggests that the average Chilean household faces a heavy financial burden if they want their children to pursue a tertiary degree.

### 3. THE GOVERNMENT PROGRAM

26. The PDG 2014–2018 "*Chile de Todos*" recognizes the importance of reducing inequality and implementing structural reforms for a more socially integrated society with equal opportunities for all. The PDG focuses on three key reforms: (a) education; (b) tax reform, and (c) a new Constitution. The PDG's strategic policy reforms that aim to address explicitly Chile's structural bottlenecks for equity include strategies under the citizens' rights policy area and education reform.

27. The PDG's strategies under the citizens' rights policy area focus on improving poverty measurement and enhancing its Social Protection System. The PDG strategic policy area on citizens' rights emphasizes the need to improve monetary poverty measurement and incorporate a multi-dimensional measure for better policy design and monitoring. Similarly, it highlights the importance of enhancing and expanding the current targeting mechanisms for social programs and utilizing the information available more efficiently to feedback policy design.

28. **Chile's education reform aims to guarantee equal opportunity to access quality and well-financed education at all levels.** For primary and secondary education (both mandatory levels of schooling) the recently approved Inclusion Law consists of four main components: (a) improving quality by increasing public spending per pupil; (b) promoting social integration by means of regulating selection; (c) eliminating co-payments for students attending educational institutions that receive public funds to further improve access to quality schooling for all, and (d) prohibiting profit in schools that receive state contributions. For tertiary education, the goal is to provide full scholarships to students from the seven lowest income deciles (approximately 50

<sup>&</sup>lt;sup>21</sup> OECD Education at a Glance Chile 2014.

percent of current students) by 2018, to improve quality assurance through a new accreditation system and create a network of public tertiary technical education institutions (CFT). Similarly, it contemplates implementation of the Effective Access to Higher Education Program (PACE) that includes mentoring activities for upper secondary students and remedial courses for tertiary education students in their first years. It also aims to improve the quality of its teachers by implementing an improved and rigorous curriculum for teaching careers.

29. Although the education reform has been subject to a comprehensive consultation process with a wide array of stakeholders, potential risks may limit its overall objective of greater equitable access to quality education. These risks are associated with two main external factors. First, different degrees of market failures in other relevant markets that are key to the successful implementation of the reform. Lack of information about school quality as well as limited transport infrastructure to connect students with potentially-distant schools may not allow poor students to take full advantage of the reform (which will in principle permit students to choose their own school). Second, effects from behavioral responses of households, schools and tertiary education institutions. These effects include the uncertainty in the process of implementation of the Inclusion Law regarding how much it will improve the quality of education. The potential exists for student migration to schools of unknown or even lesser quality. However recent evidence from the first year of implementation shows that this risk has not materialized. To mitigate these risks the government has proposed a gradual implementation of the reform to assure adequate monitoring and evaluation to feedback useful information into policy design.<sup>22</sup>

## 4. PROPOSED OPERATION

## 4.1 LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

30. The PDO of the proposed Social Inclusion for Shared Prosperity Development Policy Loan (SISP DPF) is to support: (a) promoting equal opportunities in education; (b) improving the conditions to enhance the quality of tertiary education; and (c) strengthening institutions for poverty measurement and enhancing targeting mechanisms of social programs. The PDO and its pillars are closely linked with the strategic priorities set by the PDG 2014–2018, specifically in the areas of education and social policy, which reflect critical needs for promoting inclusion and shared prosperity.

31. The proposed single tranche US\$100 million SISP DPF is structured around three pillars that recognize the central role of equitable access to quality education for mobility across generations and the importance of poverty measurement and social programs for sustaining the gains in poverty reduction (see Box 1 for more detail on the analytical framework used for this operation). The pillars are: (a) Promoting Equal Opportunities in Education; (b) Improving the Conditions to Enhance the Quality of Tertiary Education; and (c) Strengthening Institutions for Poverty Measurement and Enhancing Targeting Mechanisms of Social Programs. The balance towards equitable access to quality education in the SISP DPF reflects the development and sequencing of the government's reform program. The proposed operation is

 $<sup>^{22}</sup>$  For further details on consultations, poverty and social impacts, monitoring and evaluation, and summary of risks and mitigation, please refer to sections 5 and 6 of this document.

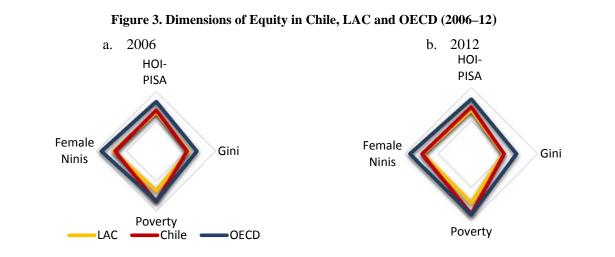
expected to be the first of several operations that support the sequencing of the government's reform program for social inclusion.

#### **Box 1. Analytical Framework**

The analytical framework used in this operation is based on the key notion that equity is a necessary condition to sustain a robust process of inclusive growth. While economic growth *per se* is empirically associated with poverty reduction (Kraay, et al. 2013), equity-driven policies enhance the capacity of all groups in society to actively contribute to the growth process, making growth more inclusive and sustainable over time

For a society to become more equitable, progress in achieving higher levels of intra-generational mobility, inter-generational mobility, and agency is critical. The first implies having the means to move out of poverty and eventually move into the middle class by achieving economic security through enhancing households' income-generation capacity. Equality of opportunity implies that individuals' initial circumstances and background characteristics do not limit the set of opportunities available to them. An equitable society allocates resources and opportunities such that no group is limited in their advancements and achievements due to certain characteristics out of their control, such as place of birth, family's economic status, race or gender. Finally, *agency* empowers citizens by providing them with voice, autonomy and means to effectively pursue their goals.

**Despite Chile's substantial upward income mobility and poverty reduction, challenges remain in terms of equality of opportunities and agency.** Figure 3 displays Chile's progress in equity relative to LAC and OECD averages between 2006 and 2012. Four indicators are included: (a) poverty rates using the US\$4 US poverty line as a proxy of intra-generational mobility; (b) the Gini coefficient to represent inequality of outcomes; (c) the Human Opportunity Index and PISA results as a manifestation of inter-generational dimension, and; (d) female youth that does not work or study (Female *Ninis*) as a proxy for both agency and inter-generational mobility. The values represent the country's relative position, in a strictly positive sense with respect to the maximum of every indicator. Values towards the ends of the diamond represent greater equity in that specific indicator. Chile has outperformed LAC in terms of intra-generational mobility (that is, reduction of monetary poverty), but shows a less dynamic progress in inter-generational mobility due to its average-quality education, especially when compared to OECD countries. Moreover, Chile's rates of Female *Ninis* are closer to the LAC average than that of the OECD countries.



Source: OECD 2012 PISA results. Poverty data comes from PovCalnet World Bank 2011. For the Gini coefficient and female youth that doesn't work or go to school (*ninis*) LAC Equity Lab and OECD data were used. Note: The values represent the country's relative position, in a strictly positive sense with respect to the maximum of every indicator. Values towards the ends of the diamond represent greater equity in that specific indicator. Thus, the Gini coefficient, Poverty rates and Percentage of Female Ninis are subtracted by 1 to allow comparability. PISA 2012 scores are reported for Math proficiency level 2. Proficiency level 2 is considered the minimum necessary to successfully apply the material, while the average for students in the OECD is proficiency level 3. Data for Chile is for 2011, excluding PISA results. Ninis for LAC and Chile are reported for ages 15–24; for OECD, the age group is 15–19. Even though this doesn't allow for strict comparability it provides a general overview of the indicator.

## 4.2 PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

32. The SISP DPF's three pillars and the proposed prior actions are described below. The Policy and Results Matrix, and results indicators are presented in Annex 1.

#### **Pillar 1: Promoting Equal Opportunities in Education**

33. The government's PDG 2014–2018 aims to improve access to high-quality education as a mean of ensuring social inclusion. The government's program focuses on fostering the development of human capital and generating a society where an individual's opportunities are less dependent on the socioeconomic status of their parents. Even though certain segregation in education is inevitable whenever individuals have the ability to pay for better schools, the goal is to provide equal access to high-quality education for all. Thus, the government aims to provide incentives for students to stay in publicly funded schools through better teacher quality, resources, and monitoring.

#### **Promote Social Integration**

34. The government seeks to eliminate current levels of socioeconomic segregation that characterizes Chile's educational system. In 1981, Chile transferred the administration of public schools from the central government to municipalities and introduced a flat per-student voucher (based on attendance) to any school, private or public. In 1993, the Co-payment Law (*Financiamiento Compartido*) allowed schools to charge fees in addition to the voucher. As a result, some former private schools converted into subsidized private schools, and by 2013 about 94 percent of schools (public and private) received these subsidies (figure 4).<sup>23</sup> This model has resulted in a duality in Chile's educational system. Students in subsidized private schools are from a higher socioeconomic status and on average perform better academically than students in public schools. Nevertheless, school performance is very heterogeneous within school groups.

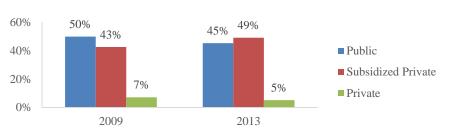


Figure 4. School Types in Chile

*Source:* Ministry of Education. *Note:* Approximately 84 percent of private subsidized schools are for-profit.

# 35. In order to reduce socioeconomic segregation in schools, the government introduced the Preferential School Subsidy Law (SEP) as part of a broader Educational Reform in 2008.

<sup>&</sup>lt;sup>23</sup> For further details on the Chilean Education system please refer to Annex 5.

The SEP established a new, targeted voucher that would give significantly more public funds to schools for each eligible student enrolled. Eligibility was set aside for approximately the poorest 40 percent of the population.<sup>24</sup> To receive these funds, schools were required to provide a diagnostic and plan on how the additional funds were to be used (*Plan de Mejoramiento Educativo*); this requirement discouraged some schools and thus resulted in relatively low take-up of the SEP. Nonetheless, the SEP effectively eliminated tuition fees for the most vulnerable students at most voucher schools. Studies indicate the 2008 reform increased test scores for the bottom 40 percent and reduced inequality in educational achievement. Nearly a third of the effect is due to families being able to choose better schools that were previously considered too expensive, while the rest is due to improvements in quality of existing schools in response to the policy.<sup>25</sup> These results suggest that targeted vouchers for the poorest students raised school competition by minimizing the role of prices in restricting the choices of poor families and encouraging schools to endogenously enhance their quality.

36. **In 2008 the government also prohibited the selection of students into primary schools that received public subsidies**. Nevertheless, some studies estimate that about half of primary schools continue implementing selection mechanisms based on socioeconomic status and student performance, mostly due to the high administrative cost to effectively supervise the practices of more than 13,000 schools. The government is thus allocating more resources to ensure that schools are complying with the new regulations.

**Prior Action 1:** The government of Chile has enacted the Inclusion Law to improve social integration and expand schooling options for all students within the mandatory levels of schooling (primary and secondary education). (Inclusion Law No. 20845 published June 2015).

37. The main objective of the new Inclusion Law is to eliminate segregation of students from different socioeconomic levels and advance towards a more culturally integrated- and higher-quality education system. The law defines four main objectives, to: (a) regulate the admission process; (b) eliminate co-payments; (c) eliminate profits in establishments that receive State funding, and (d) improve quality by increasing public resources for education. The Inclusion Law applies to pre-school education and the mandatory levels of schooling (primary and secondary). Private subsidized schools will have the alternative of transitioning from a subsidized scheme to a fully private, to a non-profit or to a public one. If a private subsidized school were to convert into a fully private school it would not be required to comply with the Inclusion Law.

38. The Inclusion Law introduces a transparent and centralized regulated admission process for any school receiving public funding. It stipulates that schools cannot apply student selection mechanisms that generate arbitrary discrimination on the basis of socioeconomic, ethnic, cultural or religious characteristics. The new selection process aims to promote social integration

<sup>24</sup> In order to be eligible, students must either belong to the lowest 33 percent of the income distribution according to the Government targeting instrument *Ficha de Protección Social*; or belong to the social program for the poor Chile *Solidario*; or students' parents must show that they are poor, of very low education or part of the lowest socioeconomic group in the public health system.

<sup>&</sup>lt;sup>25</sup> Nielson 2013

that generates better learning outcomes for all.<sup>26</sup> It will effectively give parents greater school choice and potentially foster an efficient competitive market for education. The admission process will function as follows. First, parents will report the ranking of school preferences for their children to a centralized selection platform managed by the Ministry of Education (MINEDUC). Then, the MINEDUC will share the list of candidates to each school. Next, all students will be automatically enrolled in the schools where demand is less or equal to supply of places. However, for schools where demand is higher than supply a random selection will be applied by the school which then informs the MINEDUC of the results. Next, the MINEDUC will apply an algorithm that focuses on the parents' preferences to determine the final list of students that will be enrolled in each school. Finally, the centralized selection platform will inform the school assignment to each student based on the reported ranking. External factors such as school distance and direct costs related to transport costs may continue to restrict mobility of poor and vulnerable students to better schools even though they will now be free to select their preferred school.

39. The full implementation of the centralized admission platform is expected to take place over the next four years. During the first year, the platform will be rolled out to one of Chile's regions with less than 300,000 inhabitants and applied only to first grade level provided by the school.<sup>27</sup> In the second year, the selection system will be applied to all grades for pre-school, primary and secondary education in this same region, and the new selection mechanism also will be rolled out into four regions with less than 1 million inhabitants and applied to the first grade. During the third year, the platform will be expanded to all grades in the aforementioned regions with less than 1 million inhabitants, and will be implemented nationwide for the first grade. Finally, in the fourth year, the system will be expanded to all regions and all school grades in pre-school, primary and secondary education. The Inclusion Law also allows for a maximum delay of one year to start the roll out of the selection process.

40. **The Inclusion Law will gradually remove co-payments and increase public resources provided to subsidized institutions.** In order to achieve greater equity, the government is giving private subsidized schools the option to continue receiving state funds if they progressively eliminate co-payments. The government will increase subsidies directed to finance quality of education to provide incentives for the majority of schools to eliminate fees permanently. This will be funded through additional resources collected by the recently approved tax reform that is estimated to increase tax revenues by 3 percentage points of GDP. In addition, not for profit schools that choose to eliminate co-payments will be given a gratuity grant. The government will also expand the Preferential School Subsidy (SEP) to cover 80 percent of poor children enrolled in schools without co-payments.

41. The government's Inclusion Law also ends profits in schools that receive government subsidies within the mandatory levels of schooling (primary and secondary education). Approximately 84 percent of private subsidized schools have the legal status that allows them to be for-profit institutions. If these establishments decide to continue receiving public financing they must become non-profit schools. The objective of eliminating profits in the mandatory school

<sup>&</sup>lt;sup>26</sup> MacLeod and Urquiola (2012) indicate that if schools are able to select students based on ability there is an "anti-lemons" effect where competition leads to segregation by parental income, increased transmission of income inequality, and lower student effort. In contrast, if schools cannot handpick students on ability then a competitive market for education is efficient and incentivizes entry by high productivity schools.

<sup>&</sup>lt;sup>27</sup> This could be pre-kinder, first grade or 7<sup>th</sup> grade depending on the type of school.

levels of primary and secondary education is to redirect these resources for improvements in the quality of education. The potential closing of private subsidized schools due to the elimination of profit may negatively impact students currently attending those schools, as they may have to migrate to other available schooling opportunities: private schools, non-profit subsidized private schools or public schools. Nevertheless, since the public school system is currently operating under capacity it has the ability to absorb the excess demand of students. In addition, the law also establishes the possibility for the government to purchase when necessary subsidized private schools in case owners of schools decide to close them. Moreover, supply-side interventions supported by the Education Reform aim to improve the quality of public education thereby raising students' performance in public schools and may, therefore, serve as a potential mitigation mechanism. Some of these interventions, defined as part of the overall reform process, include improving the quality of teachers by making the teacher track more attractive, as well as implementing an improved and rigorous curriculum for teaching careers.<sup>28</sup> In addition, the Education Reform expects to increase the funding available to improve the quality of infrastructure in public schools.

### Expanding Opportunities for Vulnerable Socioeconomic Groups

42. **Even though enrollment in tertiary education has increased, large gaps remain across income groups.** Between 2005 and 2012, enrollment in tertiary education increased from 48 percent to 74 percent. In 2011, enrollment was 91 percent for the highest decile of the population, but only 27 percent for the lowest one. This is partly due to the high cost of tertiary education, the student financing system and the admission process at this level.<sup>29</sup>

43. **Chile's student loan and scholarship system is one of the factors leading to inequity and high levels of debt.** In 2013, 53 percent of students that enrolled in tertiary education received some sort of student aid from the government to pay tuition.<sup>30</sup> Moreover, the number of students receiving aid increased by 86 percent between 2009 and 2013. Nonetheless, the system remains extremely expensive, with resulting student debt burdens that are considerably above international standards. While the debt to annual income ratio for graduates in Chile stands at 174 percent, the equivalent rate for similar countries is below 100.<sup>31</sup> Though it could be argued that this still leaves them with a positive return on their investment, recent analyses show that many borrowers are reaching payment levels which will outweigh the monetary benefits from obtaining a university degree.<sup>32</sup>

**Prior Action 2:** The government has created the Program for PACE to support the transition of highly vulnerable students from upper secondary education to tertiary education. (Ministerial Resolution 680, January 29 2015, & the 2015 Public Sector Budget Law Partida 09, Chapter 01, Program

<sup>&</sup>lt;sup>28</sup> Improving teacher equality includes gradually increasing exam-based entry requirements into university education degrees, establishing a tiered teacher-path system with five levels based on performance and experience, considerably increasing salaries, strengthening a mentoring and induction program for new teachers, and providing teachers greater time to prepare, plan and collaborate outside of official classroom time.

<sup>&</sup>lt;sup>29</sup> OECD Education at a Glance Chile 2014

<sup>&</sup>lt;sup>30</sup> División de Educación Superior, Ministerio de Educación Chile 2014.

<sup>&</sup>lt;sup>31</sup> World Bank 2011, CAE report. Data for Colombia come from the ICETEX (2010). Chile, *Futuro Laboral*, 2009-2010; for other countries data comes from Alex Usher, "*Patrones de Deuda Globales*", Canadian Higher Education Report Series (2005): 14. <sup>32</sup> Urzúa and González-Velosa (2015).

03, Subtítulo 24, Item 03, Asignación 905 "Programa de Acompañamiento y Acceso Efectivo a la Educación Superior", Ministry of Education)

44. The government created the Program for PACE to address unequal access to tertiary education and incentivize students' performance. It seeks to accompany young individuals from upper secondary school in academic and vocational fields. These actions influence two important dimensions of equity: equality of opportunities and agency. The goal is to prepare and comprehensively support student enrollment in tertiary education. Once enrolled in one of the careers of their choice, students are offered further support to ensure their permanence and completion of tertiary education. This includes, depending on the academic program, activities to bring student's academic level onto an equal plane during their first years of tertiary education. During a pilot phase in 2014, the program was implemented in 69 schools in five different regions along with five participating universities, benefitting a total of 7,614 students. This program will contribute to equitable access, retention and timely graduation of tertiary education.

**Prior Action 3:** The government has expanded scholarships for students that belong to the seven lowest income deciles to promote equitable access for tertiary education. (2015 Public Sector Budget Law 2015 Partida 09, Chapter 01, Program 30, Subtítulo 24, Item 03, Asignación 200 "Becas de Educación Superior", Ministry of Education; Decree 97 that establishes the scholarship program in 2013)

45. The government's target is to provide full funding for tertiary education to undergraduate students from the seven lowest income deciles (approximately 50 percent of current students) by 2018. The government aims to directly subsidize institutions in order to defray the cost for students attending. This subsidy may be exercised at any tertiary education institution that is accredited, strictly abides by the rules that do not allow the existence of for-profit, and develops programs to strengthen and support vulnerable students, among other conditions. Given the current high costs of tertiary education, the expansion of resources at this level is thus a significant milestone to increase access and graduation in tertiary education and strengthen equity at this level.

# Pillar 2: Improving the Conditions to Enhance the Quality of Tertiary Education

**Prior Action 4:** The government of Chile has provided resources to state universities for institutional strengthening, research and innovation, teacher development and outreach activities to improve the conditions to enhance quality of tertiary education (2015 Public Sector Budget Law 2015 Partida 09, Chapter 01, Program 30, Subtitulo 24, Item 03, Asignación 807 "Convenio Marco Universidades Estatales", Ministry of Education January 2015)

46. Chile has the smallest share of public expenditure allocated to tertiary education of all OECD countries and more than twice the average OECD private expenditure (76 percent vs. 31 percent).<sup>33</sup> The country's dependence on household expenditure for funding tertiary education indicates that the largest share of tertiary education funding comes from tuition fees and ultimately results in a heavy financial burden for families. As part of a comprehensive reform for tertiary education, the government wants to increase public investments at this level, particularly for institutional strengthening, research and innovation, teacher development and outreach

<sup>&</sup>lt;sup>33</sup> OECD Education at a Glance Chile 2014.

activities. By doing so, it aims to improve the quality of public education and thus increase the availability of a skilled workforce.

47. The government recognizes that the country is still behind with respect to most developed nations in quality of tertiary education, as measured by the effectiveness of its quality assurance framework, and is therefore reforming and strengthening the quality assurance system at this level. Although Chile has had an accreditation system for tertiary education since 1990, several diagnoses have shown<sup>34,35</sup> that it requires a deep reform in three aspects: (a) assurance of compliance of quality standards by all institutions; (b) institutional arrangements to guarantee effectiveness of the system, and (c) permanent supervision of the system. The government will establish a new accreditation system with a compulsory minimum entrance level based on quality standards for programs and institutions with the corresponding new institutional arrangements.

# **Pillar 3: Strengthening Institutions for Poverty Measurement and Enhancing Targeting Mechanisms of Social Programs**

## Strengthening Institutions for Poverty Measurement

48. The government's long-term objective is to enhance the transparency and quality of information to identify, characterize and monitor poverty and other social welfare indicators of equity effectively. Implementing poverty measurement methodologies, for both monetary poverty and the Multidimensional Poverty Index (MPI) solidifies the capacity to diagnose and tackle the country's key challenge of high inequality and promoting prosperity for all. These methodologies complement each other and allow for tailoring policies towards specific needs.

**Prior Action 5:** The Government of Chile has enhanced the measurement and monitoring of poverty by implementing and releasing: (a) a revised official methodology for measuring monetary poverty, and (b) launching and implementing an official Multidimensional Poverty Index (MPI). (2015 Public Sector Budget Law Partida 21, Chapter 09, Program 01, Subtítulo 24, Item 03, Asignación 330 "Encuesta CASEN", Ministry of Social Development, and Oficio No. 888 from Ministry of Social Development (MDS) to the President of the Special Mixed Committee of Budgeting of the Borrower's Congress to inform the release of the new methodology, March 30, 2015)

49. The government has enhanced the credibility and consistency of the official poverty measurements following revisions to the methodology implemented in the 1990s. In 2014, the government issued an updated national official methodology for the measurement of monetary poverty, creating institutional arrangements for improving its quality, transparency, and replicability. The design and introduction of this new methodology is the result of an important effort of many actors, including the Foundation for Poverty Alleviation (*Fundación para la Superación de la Pobreza*), the Commission for Poverty Measurement (*Comisión para la Medición de la Pobreza*) convened by former President Piñera and ratified by current President Bachelet, the Inter-institutional Technical Commission, the Economic Commission for Latin America and the CASEN 2013 Experts' Panel, under the leadership of the Ministry of Social

<sup>&</sup>lt;sup>34</sup> OECD Reviews of National Policies for Education: Quality Assurance in Higher Education in Chile 2013

<sup>&</sup>lt;sup>35</sup> World Bank 2013 Document, CHILE: Política de educación superior: Aseguramiento de la calidad y arancel de referencia

Development. At the same time, the government introduced a Multidimensional Poverty Index (MPI) that will complement the monetary poverty estimate providing a richer set of tools for characterizing poverty, inequality and deprivation.

50. The main changes incorporated into the methodology for estimating monetary poverty are: (a) an update of the poverty line attained by updating food and non-food and services' baskets. Also, the extreme poverty line was redefined to be relative to (that is, two thirds) the poverty line; (b) the introduction of equivalence scales-poverty and extreme poverty lines are adjusted to household size; (c) the new poverty line is no longer adjusted by national accounts in order to avoid bias introduction, and (d) the expansion of imputed rents—the traditional methodology only imputed rents to dwellings in which actual owners inhabited whereas the new methodology also imputes rents of dwellings that were donated or given only for inhabitance and not for selling the property. Overall, the new income poverty methodology takes into account international best practices in terms of poverty measurement, Chile's current level of development as well as Chile's societal preferences and highest standards.

51. Recognizing that poverty is multidimensional and that many households' poverty levels also depend on a number of deprivations that affect their wellbeing, the government implemented the use of the MPI for policy design and monitoring. Multidimensional poverty measures deprivations on different dimensions that directly affect a household's overall wellbeing. It assesses broader social and health-related aspects of poverty that directly affect households' welfare. The MPI shows aspects in which the less well-off are deprived and helps to reveal the interconnections among those deprivations. It can be used to identify the poorest regions for geographic targeting, to monitor the effectiveness of programs over time, to identify in which indicators individuals are most deprived and finally to complement other measures such as inequality and income poverty. In addition, it allows obtaining a measure of deprivation that may be associated to a longer or more prevalent period of time, as assets (such as dwelling, health, education, among others) tend to fluctuate less often than monetary income. These applications will allow design of policies and assign resources more effectively.

52. The government's official MPI considers deprivations in four main dimensions: education, health, social security and work, and dwelling. Each of these dimensions is considered equally important, and thus, the same weight is allocated to each. As in other official multidimensional poverty measurements, indicators are defined for each dimension, and for each of these a cutoff is set. When a particular household or one or more of its members falls below the cutoff, then the household is considered deprived in that particular indicator. Within each dimension, every indicator has the same relative weight. The OPHI and other government ministries contributed to the design and validation of the methodology. This measurement of multidimensional poverty, both alone and together with monetary poverty, enriches the processes of assessment, design and evaluation of social policies for vulnerable populations.

## **Improving Targeting Mechanisms for Social Programs**

**Prior Action 6:** The government has designed a new allocation model for benefits and social services to improve targeting for social programs. (Oficio No. 1244 of March 30, 2015 from MDS to the President of the Special Mixed Committee of Budgeting of the Borrower's Congress describing the effect of the new allocation model in the improvement of the targeting of social programs, 2015 Public

Sector Budget Law Partida 21, Chapter 01, Program 01, Subtítulo 24, Item 03, Asignación 241 "Sistema de Apoyo a la Selección de Beneficios Sociales" Ministry of Social Development).

53. The government is committed to enhancing targeting mechanisms of social programs in order to better identify potential beneficiary populations. MDS has built a large data infrastructure that includes social programs, household socioeconomic characteristics and targeting mechanisms. Approximately 80 social programs use Chile's Social Protection Sheet System (SPSS), including subsidies, scholarships, pensions and social services. In fact, many of the current rules of social programs use the SPSS, in particular its score, to determine eligibility of potential beneficiaries. A recent World Bank evaluation of Chile's social protection system indicates that there is room for improvement, especially to more efficiently utilize the information that is available.<sup>36</sup> Chile's Social Protection Sheet (*Ficha de Protección Social*) scored 3.07 out of a maximum of 5 points in terms of statistical quality.<sup>37</sup>

54. The Ministry of Social Development is currently designing and preparing a new and improved System for Support of Social Selection to replace the Social Protection Sheet. Through this new system, the government aims to move away from a system that targets based on socioeconomic status, to a more inclusive one that adds more information for the identification of beneficiaries of social programs. Within this new system the government is creating a Social Household Registry, established from the individual- and household-level data available, both self-reported and administrative, to maximize the use of the information available in the SPSS databases that cover approximately over 12 million Chilean.38 For individuals not covered in the registry, the government provides an application form to join the registry and thus collects the household's relevant socioeconomic variables. It also includes a formal mechanism for verification, update and incorporation of additional information to maintain an updated registry.

55. The harmonization of available benefits and social services, as well as improving their efficiency, can be a valuable tool in meeting Chile's goal of social inclusion. The new System for Support of Social Selection will provide a system that allows for better identification of poor and vulnerable populations. Using these data to evaluate and design targeting is crucial for an effective social policy that meets its objectives.

# 56. The policy actions supported under the SISP DPF are grounded in analytical evidence as outlined in Table 4 below:

<sup>&</sup>lt;sup>36</sup> World Bank (2014).

<sup>&</sup>lt;sup>37</sup> This was performed through the application of the Evaluation Tool for Quality of Administrative Records (HECRA).

<sup>&</sup>lt;sup>38</sup> Some of the administrative data includes information on taxes, pensions, education and asset ownership.

	Analytical Underninning
Prior Actions Biller 1. Promoting Equal Opportunities in Education	Analytical Underpinnings
<ul> <li>Pillar 1. Promoting Equal Opportunities in Education</li> <li>Prior Action 1 - The GoC has enacted the Inclusion Law to improve social integration and expand schooling options for all students within the mandatory levels of schooling (primary and secondary education). (Inclusion Law No. 20845 approved June 2015)</li> <li>Prior Action 2 - The GoC has created the program for PACE to support the transition of highly vulnerable students from upper secondary education to tertiary education. (Ministerial Resolution 680, January 29 2015, &amp; the 2015 Public Sector Budget Law Partida 09, Chapter 01, Program 03, Subtítulo 24, Item 03, Asignación 905</li> <li>"Prior Action 3 - The GoC has expanded scholarships for students that belong to the seven lowest income deciles to promote equitable access for tertiary education. (2015 Public Sector Budget Law Partida 09, Chapter 01, Program 30, Subtítulo 24, Item 03, Asignación 200 "Becas de Educación Superior", Ministry of Education; Decree 97 that establishes the scholarship program in 2013)</li> <li>Pillar 2. Improving the Conditions to Enhance the Qualit Prior Action 4 - The GoC has provided resources to state universities for institutional strengthening, research and innovation, teacher development and outreach activities to improve the conditions to enhance quality of tertiary education (2015 Public Sector Budget Law Partida 09, Chapter 01, Program</li> </ul>	PISA 2012 Results: What Makes School Successful? Resources, Policies and Practices (OECD 2012); PISA 2012 Results: Excellence Through Equity: Giving Every Student the Chance to Succeed (OECD 2012); Anti-Lemons: School Reputation and Educational Quality (MacLeod and Urquiola 2009); Economic Mobility and the Rise of the Latin American Middle Class (World Bank 2013); Measuring Inequality of Opportunities in Latin America and the Caribbean (World Bank 2009); Do Our Children Have a Chance? The 2010 Human Opportunity Report for LAC (World Bank 2012). Reviews of National Policies for Education: Tertiary Education in Chile (World Bank-OECD 2009). ty of Tertiary Education The Global Competitiveness Report 2014–2015 (World Economic Forum 2014); Comparable Estimates of Returns to Schooling Around the World. (Montenegro & Patrinos, World Bank 2014)
Chapter 01, Program 30, Subtitulo 24, Item 03, Asignación 807 "Convenio Marco Universidades Estatales", Ministry of Education)	
Pillar 3. Strengthening Institutions for Poverty Measurer Social Programs	nent and Enhancing Targeting Mechanisms of
Prior Action 5 - The Government of Chile has enhanced	From Noise to Signal: The Successful Turnaround of
the measurement and monitoring of poverty by implementing and releasing (a) a revised official methodology for measuring monetary poverty and (b) launching and implementing an official Multidimensional Poverty Index (MPI). (2015 Public Sector Budget Law Partida 21, Chapter 09, Program 01, Subtítulo 24, Item 03, Asignación 330 "Encuesta CASEN", Ministry of Social Development, and Oficio No. 888 from MDS to the President of the Special Mixed Committee of Budgeting of the Borrower's Congress to inform the release of the new methodology, March 30, 2015)	

### Table 4. Prior Actions and Analytical Underpinnings

<b>Prior Action 6</b> - The GoC has designed a new allocation model for benefits and social services to improve targeting for social programs. (Oficio No. 1244 of March 30, 2013) from MDS to the President of the Special Mixed Committee of Budgeting of the Borrower's Congress describing the effect of the new allocation model in the improvement of the targeting of social programs, 2015 Public Sector Budge Law Partida 21, Chapter 01, Program 01, Subtítulo 24 Item 03, Asignación 241 "Sistema de Apoyo a la Selección de Beneficios Sociales" Ministry of Social Development).	Poor: Evidence from a Field Experiment in Indonesia (Alatas et al. 2012); For Protection & Promotion: The Design and Implementation of Effective Safety Nets (World Bank 2008); Designing and Implementing Household Targeting Systems: Lessons from Latin American and The United States (Castaneda & Lindert, World Bank 2005)
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

#### 4.3 LINK TO CPS AND OTHER BANK OPERATIONS

57. The proposed SISP DPF is consistent and closely aligned with the objectives of the World Bank Group's Chile Country Partnership Strategy (2011–2016) (CPS) Report No. 57989-CL, which was discussed by the Board of Executive Directors on February 15, 2011. The CPS outlines a flexible program to support the government's vision of becoming a highincome country by 2018. A key factor in achieving this vision is improving the quality of education to increase the availability of a skilled workforce and foster innovation. The CPS focuses on three areas: (a) Public Sector Modernization; (b) Job Creation and Equity Improvement, and (c) Promoting Sustainable Investments. The SISP DPF is fully aligned with the government's Program 2014–2018, which explicitly identifies education as a key area for reducing social and economic inequality, and stresses the importance of improving its social protection system for the poor. The SISP DPF is consistent with the CPS, particularly its second area of Job Creation and Equity Improvement, which clearly references the poor quality of education as one of Chile's most pressing development challenges. In addition, the CPS also highlights the importance of improving Chile's social protection system to include vulnerable populations. The CPS gives high priority to improving quality, financing, and equitable access to tertiary education services and to the improvement of Chile's social protection system.

58. The proposed SISP DPF program also complements past and current knowledge services and technical assistance in Chile. For example, policies under Pillar 1 and 2 have close links with the Reimbursable Advisory Services (RAS) on Tertiary Education Quality Assurance and the Tertiary Education Finance for Results Project that aims to improve quality and relevance for students in tertiary education by strengthening the link between funding of tertiary education institutions and accountability for performance. Additionally, policies under Pillar 3 are closely related to the technical work carried out by the RAS on Social Information SystemRedesign, which provided technical inputs for an updated and improved version of the country's Integrated Social Information System and Registry. Finally, also related to Pillar 3, technical assistance provided specific policy recommendations to improve the Chilean institutional framework for poverty measurement in order to enhance its overall transparency and accountability.

# 4.4 CONSULTATIONS, COLLABORATION WITH OTHER DEVELOPMENT PARTNERS

59. **The government's long-term reform program included a process of consultations.** The Inclusion Law was widely consulted with various stakeholders including academics, teachers' unions, the private sector and student groups before being presented for discussion in Congress. The government took into consideration the contributions made by various national and international actors for the development of the new poverty methodology, including the OPHDI and the Economic Commission for Latin America and the Caribbean (CEPAL), a report by the Commission for Poverty Measurement and recommendations from a joint collaboration from the Ministry of Social Development and the National Institute for Statistics.

60. The World Bank consulted with several development partners and academia in the design of the SISP DPF operation. The World Bank worked closely with the government in defining the SISP DPF's Prior Actions, based on the priority areas in the government's PDG, and consulted with the Inter-American Development Bank to ensure coordination with programs supported by that institution. In addition, the team has also consulted with the United Nations Development Programme (UNDP) Human Development Report Office (HDRO) and with United Nations Economic Commission for Latin America and the Caribbean (UN ECLAC) regarding the discussions of the new methodologies for poverty measurement. The World Bank discussed the potential risks and unintended consequences of the education prior actions with a diverse body of Chilean and international academics and opinion leaders.

# 5. OTHER DESIGN AND APPRAISAL ISSUES

# 5.1 POVERTY AND SOCIAL IMPACT

61. The government's policies supported in the SISP DPF are expected to have a positive poverty and social impact. Previous evidence and prospective analysis indicate that there are reasons to expect a positive impact from each of the supported development policies.<sup>39</sup> The policy actions included in the Inclusion Law are expected to increase equity in the distribution of educational quality across socioeconomic groups. Specifically, policies for primary and secondary education that support a regulated admission system, gradually eliminate co-payments and prohibit profit in educational institutions that receive public funding are expected to have a positive poverty and social impact by increasing the share of students with the expected years of schooling for their corresponding age and expanding the opportunities to access quality education for students in the bottom 40 percent of the income distribution. It is also expected that increasing the coverage of SEP will diminish schools' local market power and improve quality-based competition in poor neighborhoods, thereby inducing quality improvements. Small effects on overall poverty and inequality are expected from the elimination of copayments. In the short run, the elimination of co-payments affects disposable income, benefiting mostly the middle class and the vulnerable.<sup>40</sup> Simulated scenarios with eliminated copayments indicate that extreme and moderate poverty would decrease slightly relative to the status quo. Similar effects are found with respect to income inequality.

<sup>&</sup>lt;sup>39</sup> For further detail on the Poverty and Social Impact Assessment please refer to Annex 6.

<sup>&</sup>lt;sup>40</sup> The vulnerable are those living above the poverty line but not yet considered middle class.

62. One of the uncertainties in the process of implementation of the Inclusion Law is how much it will improve quality of education. There is a gap in the literature as many studies have focused on the voucher reform *per se* and do not consider in depth the potential differences between for-profit, non-profit and municipal schools. Existing evidence shows that for-profit schools in Chile tend to reduce costs on staff by shortening the school day, hiring less experienced and younger teachers and, in middle schools, by hiring teachers without a specialty.<sup>41</sup> However, further research is needed to establish the impacts on quality of such behaviors.

63. **Expanding opportunities for highly vulnerable students is expected to increase completion of tertiary education and thereby leading to higher labor market returns.** The expansion of scholarships in tertiary education and implementation of policies that support the PACE are expected to reduce inequities in access and completion of tertiary education, increase the probability of completing university and technical degrees and improve earnings of low-income households. A cohort analysis with household surveys shows that even if returns to tertiary education adjust to changes in the stock of human capital, the potential distributional impacts on labor market returns are non-regressive. This shows that second round effects, such as changes in returns to schooling as a result of the projected expansion of the human capital stock, are estimated to have limited impact on poverty reduction and inequality but are not expected to revert the equalizing first round effects. Results of an impact evaluation of the pilot phase of the PACE program highlight the importance of improving communication of the benefits to mitigate the risk of lower than expected take up among eligible students, particularly among the most vulnerable.

64. Finally, improvements in distributive outcomes could be expected from the implementation of a multidimensional poverty measure and enhancing targeting mechanisms of social programs. Multidimensional poverty assesses broader social aspects of poverty that directly affect households' welfare. Positive impacts on policy design for effective poverty reduction and shared prosperity are expected through identification and differentiation of monetary and non-monetary deprivations. Additionally, improving the efficiency in the targeting of social programs would contribute to welfare improvement of the bottom 40 percent of the income distribution and to reductions in medium term inequalities through a policy of social inclusion.

# **5.2 ENVIRONMENTAL ASPECTS**

65. None of the elements under the proposed SISP DPF operation are likely to have adverse effects on the environment, forests and other natural resources. The operation does not support actions linked to the construction or rehabilitation of schools, or other civil works that would likely impact the environment. No effect is expected on forest and other natural resources.

# 5.3 PFM, DISBURSEMENT AND AUDITING ASPECTS

66. Chile relies on a robust State Financial Administration System (SAFE) supported by a Financial Administration Information System (SIGFE). The SAFE is a set of administrative processes that allow administration of state funds including tracking the achievements of the

<sup>&</sup>lt;sup>41</sup> Levin (2001); Elacqua, Martinez and Santos (2011).

State's objectives with said funds. The SAFE includes the budgetary accounting, fund administration, public credit, financial control and purchases and provision of services processes.<sup>42</sup> The SIGFE is a system developed and managed, as of 2002, by budget office (DIPRES) with the main purpose of designing and implementing an integral and standard Information System, aimed to support the decision-making process of all the individuals that are responsible for administering public funds while also giving more transparency to Chile's Public Financial Management (PFM) at the sector and institutional levels.<sup>43</sup>

67. The Comptroller General's Office of the Republic of Chile (*Contraloría General de la República de Chile* or CGR) leads PFM reform through the modernization of processes with the adoption of the International Public Sector Accounting Standards (IPSAS), issued by the International Federation of Accountants (IFAC). The main objectives of this reform are: (a) to ensure that the financial information produced by the Governmental Accounting System (SICOGEN) is useful for decision making processes, and (b) to increase the overall levels of transparency and accountability through improving the quality of accounting and fiscal reporting and oversight of public funds use in the country. The World Bank is supporting the CGR's modernization agenda with: (a) a governance Technical Assistance (TA) study focusing on the adoption of IPSAS, and (b) an upcoming RAS which will include both diagnostic and forward-looking analysis, and recommendations on modernization of the government's accounting and auditing systems. The TA and RAS are expected to be completed in FY16 and FY17 respectively.

68. **DIPRES, the second key champion of Chile's PFM reform, leads policy changes aimed at improving transparency and the modernization of government institutions through Management and Budgeting Based on Results (GBR and PBR respectively).** DIPRES is the technical entity in charge of proposing the allotment of State funds, leading and regulating the budget-making process, and regulating and supervising the execution of public expenses. The main function of the DIPRES consists in contributing to improving the efficiency of the funds assigned and the use of public funds in different programs, projects and institutions, also encouraging a better management and transparency in the use of public funds and accountability. In this manner and through the development of 1,200 performance indicators adopted for more than 150 public institutions, the carrying out of constant evaluations of programs and institutions, and thorough reviews of the execution of expenses and management reports, Chile has been recognized as one of the countries that developed a very high-quality GBR and PBR systems (Marcel et al., 2014).

69. The Ministry of Finance will be responsible for the implementation of this SISP DPF operation. The untied balance of payments/budget support will be disbursed against satisfactory implementation of the development policy operation and not tied to any specific purchases. No

<sup>&</sup>lt;sup>42</sup> In terms of scope, the SAFE applies to: (i) the public services and entities of the three powers, Higher Education Institutions, also known as Public Universities, and other autonomous entities that make up the Central Government; (ii) Municipalities that make up the General Government; as well as, (iii) public companies and financial entities, such as the Central Bank and the State Bank, that, as a whole, represent the National public sector. DIPRES is responsible for consolidating the approved budget for all public sector entities as required by their budget law and posting the final approved budget on their website.

<sup>&</sup>lt;sup>43</sup> SIGFE serves 90 percent of the entities that approve its budget through the Public Sector Budget Law. Additionally, the financial information generated by the 31 public homologated entities, that use their own systems, is entered into the SIGFE through the management and aggregation module. It is important to note that SIGFE also provides the functionalities necessary so that public entities comply with the accounting directive and financial control provided by the CGR.

procurement requirements will apply. If the proceeds of the loan are used for ineligible purposes as defined in the Development Policy Loan Agreement, the World Bank will require the government to promptly, upon notice from World Bank, refund an amount equal to the amount of said payment. Amounts refunded to the World Bank upon such request shall be cancelled. While the whole amount of the loan will be available upon effectiveness (that is, Single tranche), there could be more than one disbursement of loan proceeds. This is particularly relevant in case disbursements take place in Chilean pesos, where the amount disbursed would be dependent on the market appetite for a local currency bond issuance.

70. **Disbursement arrangements will follow the procedures for DPFs.** The proceeds of the loan will be disbursed against satisfactory implementation of SISP DPF and the maintenance of an adequate macroeconomic policy framework by the Government of Chile. Once the loan is effective, the Bank will disburse the funds as a single tranche withdrawal from the Loan Account into an account maintained by the government in the Central Bank and acceptable to the World Bank. The account is denominated in foreign currency and forms part of the country's foreign exchange reserves at the Central Bank of Chile. The government will ensure, within 30 days that upon deposit of the funds into said account, such amount or an equivalent amount will be credited in the Borrower's accounting system to an account that finances budgeted expenditures. The proceeds of the loan may not be used to finance expenditures typically excluded under the Loan Agreement.

71. The joint IMF/WB FSAP report in FY11 concluded that there were no significant weaknesses in the Central Bank's safeguards framework, identifying a few measures to address including completing implementation of recommendations made in the FY04 FSAP report. Given that the Bank's review of the borrower's current PFM is satisfactory and the conclusion that fiduciary arrangements are adequate, the Bank will not require a dedicated account at the Central Bank for loan proceeds and as such no audit will be required for the deposit account.

# 5.4 MONITORING AND EVALUATION

72. The preparation of the SISP DPF operation is being led by DIPRES, with participation from the MINEDUC and the MDS. These agencies will be responsible for the overall implementation of the program, and for reporting on progress. In addition, the World Bank is designing a joint study program with the MINEDUC and with the support of international academics, to perform a detailed four year evaluation of the Higher Education Reform. This plan will include laying out the different studies that can help develop and improve the implementation as well as to leverage the gradual implementation to learn from each step of the reform.

73. **Program outcomes will be monitored through the measurement of the indicators that will be determined during negotiations of SISP DPF.** Indicators will seek to assess progress towards the implementation of the development policies supported by the proposed DPF and will be evaluated one year following the disbursement of the loan.

74. **Grievance Redress**. Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation may submit complaints to the responsible country authorities, appropriate local/national grievance redress mechanisms, or the World Bank's

Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of the World Bank's non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and World Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit <u>http://www.worldbank.org/GRS</u>. For information on how to submit complaints to the World Bank Inspection Panel, please visit <u>www.inspectionpanel.org</u>".

## 6. SUMMARY OF RISKS AND MITIGATION

75. **Overall risk.** Based on the assessment of the different risk categories and proposed mitigation measures, the overall risk rating of the proposed SISP DPF is considered Low. The most relevant risks, which pose moderate risks to the operation, fall within the following categories: (a) political and governance; (b) sector strategies and policies; and (c) stakeholders. All of the remaining risk categories, including the risk associated with institutional capacity for implementation and sustainability are rated as Low.

## **Political and Governance**

76. **There is some degree of political opposition to the overall Education Reform.** Even though, the gradual implementation of the Inclusion Law has mitigated initial concerns from the opposition, political risk to achieve the objectives of this operation is considered Moderate.

## Sector Strategies and Policies, and Stakeholders

77. The risks related to sector strategies and policies and stakeholders are perceived as Moderate, due to some degree of political opposition to the Inclusion Law. The potential closing of subsidized private schools due to the elimination of profit in the provision of primary and secondary education may have negative impacts on students currently attending those schools, as they may have to migrate to other schooling opportunities: private schools, non-profit subsidized private schools or public schools. However this risk has not materialized during the first year of implementation. This risk may be mitigated by the absorption of these students by public schools that are currently under capacity. In addition, external factors such as lack of information or school distance may continue to restrict mobility of poor students to better schools even though they will now be free to select their preferred school. Supply side interventions supported by the education reform, including improving the quality of teachers and increasing the availability of funding to improve the quality of infrastructure in public schools, aim to improve the quality of education thereby raising students' performance in public schools and will, therefore, also function as a potential mitigation mechanism.

# Institutional Capacity for Implementation and Sustainability

78. **The risk of implementation of the policy actions supported by this SISP DPF is Low.** However there are some potential factors that may pose challenges to implementation. One of the main perceived implementation challenges is the effective implementation of the new admissions process for any primary or secondary school receiving public funding within five years as mandated by the Inclusion Law. Another potential implementation challenge is the verification of the elimination of profits in primary and secondary schools receiving government subsidies. Difficulties in verification may stem from the limited information available to the government on the balance sheets of subsidized private schools. Gradual implementation and monitoring and evaluation will mitigate some of these challenges.

79. The Ministry of Social Development has in-house capacity to design and implement the new system for selecting beneficiaries of social programs. However, MDS may face challenges in the implementation of the system, which requires MDS to play a large coordination role to ensure the appropriate institutions provide timely information to the system and that institutions utilize the new system to allocate social programs. This potential risk is mitigated by the opportunity to postpone the adoption of the new system for one year.

## Systematic Operations Risk-rating (SORT)

Risk Categories	Rating (H, S, M, or L)
1. Political and governance	Moderate
2. Macroeconomic	Low
3. Sector strategies and policies	Moderate
4. Technical design of project or program	Low
5. Institutional capacity for implementation and sustainability	Low
6. Fiduciary	Low
7. Environment and social	Low
8. Stakeholders	Moderate
Overall	Low

### Table 5. Risk Categories and Rating

## ANNEX 1: POLICY AND RESULTS MATRIX

Prior Actions	<b>Results Indicators</b> <sup>44</sup>
Pillar 1: Promoting Equal Oppo	ortunities in Education
<b>Prior Action 1</b> The Government of Chile has enacted the Inclusion Law to improve social integration and expand schooling options for all students within the mandatory levels of schooling (primary and secondary education). ( <i>Inclusion Law No. 20845 published June 2015</i> )	<b>Results Indicator 1</b> Number of students who receive the Preferential School Subsidy (SEP). [ <i>Baseline</i> = 1,250,383] / <i>Target</i> [1,630,726] Responsible Entity: Ministry of Education
<b>Prior Action 2</b> The Government of Chile has created the Program for PACE to support the transition of highly vulnerable students from secondary education to tertiary education. ( <i>Ministerial Resolution 680, January 29 2015, &amp; the 2015 Public Sector Budget Law Partida 09, Chapter 01, Program 03, Subtítulo 24, Item 03, Asignación 905 "Programa de Acompañamiento y Acceso Efectivo a la Educación Superior", Ministry of Education)</i>	<b>Results Indicator 2</b> <sup>45</sup> Number of students in secondary school incorporated in the PACE program. [ <i>Baseline</i> = 7,614] / <i>Target</i> [57,000] Responsible Entity: Ministry of Education
<b>Prior Action 3</b> The Government of Chile has expanded scholarships for students that belong to the seven lowest income deciles to promote equitable access for tertiary education. (2015 Public Sector Budget Law Partida 09, Chapter 01, Program 30, Subtítulo 24, Item 03, Asignación 200 "Becas de Educación Superior", Ministry of Education; Decree 97 that establishes the scholarship program in 2013)	<b>Results Indicator 3</b> Number of full scholarship recipients that belong to the five lowest income deciles enrolled in their first year of tertiary education. [ <i>Baseline</i> = 2,479] / <i>Target</i> [30,000] Responsible Entity: Ministry of Education

<sup>&</sup>lt;sup>44</sup> Baseline corresponds to December 2014 and targets to December 2016. These targets are subject to revision pending discussions with the Government given the revised timeline of the DPF.

<sup>&</sup>lt;sup>45</sup> This indicator will be disaggregated by gender.

Pillar 2: Improving the Conditions to Enhance the Quality of Tertiary Education					
<b>Prior Action 4:</b> The Government of Chile has provided resources to state universities for institutional strengthening, research and innovation, teacher development and outreach activities to improve the conditions to enhance quality of tertiary education. (2015 Public Sector Budget Law Partida 09, Chapter 01, Program 30, Subtitulo 24, Item 03, Asignación 807 "Convenio Marco Universidades Estatales", Ministry of Education)	Results Indicator 4: Number of students enrolled in state universities included in the <i>Convenio Marco</i> .         [Baseline = 0] / Target [180,000]         Responsible Entity: Ministry of Education				
Pillar 3: Strengthening Institutions for Poverty Measurement and	d Enhancing Targeting Mechanisms of Social Programs				
<b>Prior Action 5:</b> The Government of Chile has enhanced the measurement and monitoring of poverty by implementing and releasing (a) a revised official methodology for measuring monetary poverty and (b) launching and implementing an official Multidimensional Poverty Index (MPI). (2015 Public Sector Budget Law Partida 21, Chapter 09, Program 01, Subtítulo 24, Item 03, Asignación 330 "Encuesta CASEN", Ministry of Social Development, and Oficio No. 888 from MDS to the President of the Special Mixed Committee of Budgeting of the Borrower's Congress to inform the release of the new methodology, March 30, 2015)	Results Indicator 5: Release of monetary and multidimensional poverty indicators based on the new methodology and its corresponding microdata with the release of the 2013 and 2015 household survey (CASEN). [ <i>Baseline</i> = 0] / <i>Target</i> [1] Responsible Entity: Ministry of Social Development				
<b>Prior Action 6:</b> The Government of Chile has designed a new allocation model for benefits and social services to improve targeting for social programs. ( <i>Oficio No. 1244 of March 30, 2015 from MDS to the President of the Special Mixed Committee of Budgeting of the Borrower's Congress describing the effect of the new allocation model in the improvement of the targeting of social programs, 2015 Public Sector Budget Law Partida 21, Chapter 01, Program 01, Subtítulo 24, Item 03, Asignación 241 "Sistema de Apoyo a la Selección de Beneficios Sociales" Ministry of Social Development).</i>	<b>Results Indicator 6:</b> Number of social programs and subsidies whose eligible beneficiaries are determined by the new targeting system. [ <i>Baseline</i> = 0] / <i>Target</i> [10] Responsible Entity: Ministry of Social Development				

#### **ANNEX 2: LETTER OF DEVELOPMENT POLICY**

MINISTERIO DE HACIENDA

Santiago, 28 de septiembre de 2015

Señor JIM YONG KIM, Presidente Grupo Banco Mundial 1818 H Street NW

> Asunto: Carta de política - Préstamo para Políticas de Desarrollo en favor de la Inclusión Social para la Prosperidad Compartida

Estimado Señor Kim:

El objetivo del gobierno de la Presidenta Michelle Bachelet es sentar las bases para lograr un país con mayor inclusión social, que brinde a todos los ciudadanos las mismas oportunidades para desarrollarse plenamente. Chile ha logrado avances significativos en materia de crecimiento económico y de reducción de la pobreza durante los últimos años. El país ha tenido un crecimiento económico sostenido en los últimos 20 años, con promedio de 4,6 por ciento, superior a la media de los países de América Latina. Este crecimiento económico ha contribuido de manera sustantiva a la significativa reducción de pobreza observada en los últimos años. En efecto, entre 2006 y 2013 la pobreza moderada se redujo de 29.1% a 14.4%, mientras que la pobreza extrema disminuyó de 12.6% a 4.5%. La economía chilena sigue siendo una de las más sólidas en la región, con baja inflación y una creación dinámica de empleos de calidad. Sin embargo, para alcanzar el desarrollo es necesario enfrentar los factores que perpetúan desigualdades económicas y sociales en el país.

La necesidad de resolver las persistentes brechas sociales exige que se realicen cambios estructurales profundos. Entre ellos, una educación más accesible, equitativa y de calidad en todos sus niveles, la cual no solo producirá una mayor inclusión social, sino que también permitirá formar a la siguiente generación de profesionales y técnicos en las habilidades productivas relevantes que den el impulso que necesita la economía chilena.

#### MINISTERIO DE HACIENDA

Mayores opciones para acceder a una educación de calidad permitirán que se configure una sociedad con más oportunidades y más justa. A pesar de que Chile ha conseguido importantes logros en materia educativa, destacando la cobertura universal en educación primaria y más del 90% en cobertura para educación secundaria, la segregación social en las escuelas persiste y la educación pública se ha visto reducida y fragilizada.

En este sentido, el Gobierno de Chile presentó ante el Congreso la Ley de Inclusión Escolar, uno de los pilares de la Reforma Educacional, que fue publicada mediante la Ley N°20.845 de junio de 2015. Su objetivo es mejorar la calidad de la educación y fortalecer la educación pública en los niveles primario y secundario. Otros componentes clave de la Reforma Educacional tienen como objetivo mejorar la calidad y equidad en el acceso a la educación superior y expandir la oferta pública de educación parvularia. Para lograr una mejor educación, que sea accesible para todos, es necesario contar con un sistema integrado y equitativo que no implique una carga financiera insostenible para los estudiantes y sus familias. La reforma educacional requerirá de un significativo aumento en el gasto público, para lo cual se efectuó una importante reforma tributaria aprobada en septiembre de 2014.

Los pilares de la reforma educacional son: (i) Calidad Educativa; (ii) Inclusión; (iii) Gratuidad; y (iv) Fin al Lucro en todo el sistema educativo. El Gobierno de Chile proveerá las herramientas y dispondrá sustantivos recursos para mejorar la calidad, no solamente medida por los resultados escolares, y asegurar una efectiva fiscalización, con el debido apoyo y acompañamiento. A nivel de educación superior, habrá mayores exigencias hacia las instituciones para su acreditación de calidad y más recursos serán destinados para mejorar la investigación e innovación en el sector, así como una mejor vinculación con los sectores productivos.

Reducir la segregación escolar es uno de los pasos más importantes para lograr un país más integrado social y culturalmente. Chile es el segundo país con más segregación social entre los países evaluados por el Programa Internacional de Evaluación de los Alumnos (PISA) de la Organización para la Cooperación y el Desarrollo Económico (OECD). Por medio de la Ley de Inclusión, se espera reducir la segregación en las escuelas al regular la admisión y eliminar el copago en las escuelas que reciben financiamiento público. A través de la política de gratuidad en la educación terciaria el Gobierno quiere lograr que el acceso a una educación de calidad no dependa del nivel socioeconómico. Por último, el fin al lucro en el sistema educativo que recibe financiamiento público permitirá que los recursos que el Gobierno destine a la educación se traduzcan en una mejora a la calidad.

Asimismo, en el marco de la Reforma Educacional, el Gobierno de Chile se ha esforzado para garantizar el derecho a la educación a estudiantes de sectores vulnerables por medio de facilitar su acceso a la educación superior. Para ello, la Ley de Presupuesto 2015 contempla más fondos públicos para la expansión del Programa de Acompañamiento y Acceso Efectivo a la Educación (PACE) que preparará a los estudiantes de entornos vulnerables durante la Educación Media y les acompañará posteriormente al Acceso a la Educación Superior. La misma Ley de Presupuestos asigna recursos para la expansión de las becas para los estudiantes en los primeros siete deciles de la distribución de ingreso y contempla el incremento de recursos a universidades estatales para fortalecer la educación pública.

#### MINISTERIO DE HACIENDA

Por otra parte, para que las políticas sociales del Estado sean eficaces es fundamental contar con instrumentos adecuados de medición y caracterización de la pobreza. El Gobierno de Chile ha mejorado la credibilidad y la consistencia de las mediciones oficiales de pobreza por medio de revisiones de la metodología implementada en la década de los 90s. A principios de 2015, el Gobierno presentó una nueva metodología oficial para la medición de la pobreza monetaria, creando mecanismos institucionales para la mejora de su calidad y la transparencia. El diseño y la introducción de esta nueva metodología es el resultado de un importante esfuerzo de muchos actores, incluyendo la Fundación para la Superación de la Pobreza, la Comisión para la Medición de la Pobreza, la Comisión Técnica Interinstitucional, la Comisión Económica para América Latina y el Caribe (CEPAL), Iniciativa Oxford de Pobreza y Desarrollo Humano (OPHI) y el panel de expertos CASEN 2013, bajo la dirección del Ministerio de Desarrollo Social. Al mismo tiempo, el Gobierno de Chile presentó un Índice de Pobreza Multidimensional (IPM) que complementará la estimación de la pobreza monetaria y proporcionará un conjunto más completo de herramientas para la caracterización de la pobreza, las carencias y la desigualdad, y que a su vez servirá para una mejor focalización de los programas sociales. Continuar con las mejoras en estos instrumentos y garantizar su sustento institucional es un desafío para nuestro Gobierno.

Otro aspecto importante con miras a disminuir la inequidad y fomentar la inclusión social consiste en el mejoramiento de los mecanismos de focalización de programas sociales. Se ha iniciado un proceso para mejorar en forma gradual el instrumento de focalización, la Ficha de Protección Social (FPS), de manera tal de transitar hacia la asignación de transferencias monetarias por el mecanismo de la exclusión de los sectores de mayores ingresos. De esta forma, es el Gobierno quien asume la responsabilidad de identificar y seleccionar a los beneficiarios de la política social.

Dado el objetivo de continuar fortaleciendo las políticas que permitan garantizar mayor inclusión social, erradicar la pobreza extrema y reducir los niveles de desigualdad, el Gobierno de Chile solicita al Banco Mundial un Préstamo para Políticas de Desarrollo en favor de la Inclusión Social para la Prosperidad Compartida, para apoyo en tres áreas clave: (i) promoción de la igualdad de oportunidades en la educación; (ii) fortalecimiento de las condiciones necesarias para mejorar la calidad de la educación terciaria, y, (iii) fortalecimiento de instituciones para la medición de la pobreza y mejora de mecanismos de focalización de los programas sociales.



c.c.: - Subdirección de Racionalización y Función Pública, DIPRES.
 - Oficina de Partes, Ministerio de Hacienda.

34

#### TRANSLATION LETTER OF DEVELOPMENT POLICY

MINISTERIO DE HACIENDA

Santiago, September 28, 2015

Mr. JIM YONG KIM, President World Bank Group 1818 H Street NW

> Subject: Letter of Development Policy – Social Inclusion for Shared Prosperity Development Policy Loan

Dear Mr. Kim.

The objective of President Michelle Bachelet's government is to lay the foundations for a country with greater social inclusion that provides all citizens with equal opportunities to develop fully. Chile has made significant advances in economic growth and poverty reduction over the last decade. The country has had sustained economic growth in the last 20 years, with an average growth rate of 4.6 percent, it has exceeded the average growth rate of Latin American countries. This growth has contributed substantively to the significant poverty reduction observed in the last years. Between 2006 and 2013, moderate poverty decreased from 29.1 percent to 14.4, while extreme poverty decreased from 12.6 to 4.5 percent. The Chilean economy remains one of the strongest in the region, with low inflation and a dynamic creation of quality jobs. Nonetheless, to achieve further development it is necessary to address the factors that perpetuate economic and social inequalities in the country.

The need to resolve persistent social gaps requires deep structural changes. This includes providing greater access to equitable and high quality education at all levels, which not only leads to greater social inclusion, but will also train the next generation of professionals and technicians in the productive skills necessary to boost the Chilean economy.

More choices to access quality education will result in a fairer society with greater opportunities. Even though Chile has made important achievements in education, including universal coverage in primary education and over 90 percent coverage in secondary schooling, social segregation persists in schools and public education has been weakened.

#### MINISTERIO DE HACIENDA

In this regard, the Government of Chile submitted to Congress the Inclusion Law, one of the fundamental pillars of the Education Reform, which was published under Law No. 20,485 on June 2015. The law aims to improve the quality of education and strengthen public education for primary and secondary schooling. Other components of the Education Reform aim to improve the quality and equitable access to tertiary education and expand the supply of public early childhood education. In order to achieve better education that is accessible to all, it is necessary to have an integrated and equitable system that does not involve a high and unsustainable financial burden for students and their families. The Education Reform will require a significant increase in public spending, thus in September 2014 a major tax reform was approved.

The pillars of the Education Reform are: (i) Quality of Education; (ii) Inclusion; (iii) Gratuity; and (iv) End of profit in the public education system. The Government of Chile will provide tools and significant resources to ensure better quality, not only as measured by school results, and ensure effective supervision, with the proper support and assistance. In tertiary education, there will be greater demands on institutions for quality accreditation and more resources will be allocated to improve research and innovation and improve links with the economy's productive sectors.

Reducing school segregation is one of the most important steps to achieve a more culturally integrated country. Chile is the second country with the greatest social segregation between the countries assessed by the Program for International student Assessment (PISA) of the Organization for Economic Cooperation and Development (OECD). The Inclusion Law is expected to reduce segregation in schools by regulating the admission process and eliminating the copayment in schools that receive public funding. Through gratuity policy in tertiary education the Government wants to ensure that access to quality education does not depend on socioeconomic status. Finally, the end of profit in public education institutions will allow for Government resources allocated to education to be translated to improved quality.

Similarly, through the Education Reform, the Government of Chile has dedicated tremendous effort to ensure the right to education for vulnerable students by facilitating their access to tertiary education. For this, the 2015 Budget Law includes an expansion of public funding for the Program for Effective Access to Tertiary Education (PACE) that prepares students from vulnerable environments during secondary education and helps them transition to tertiary education. The same Budget Law allocates resources for the expansion of scholarships for students from the seven lowest income deciles of the income distribution and provides increased resources to public universities to strengthen public education.

For state social policies to be effective it is fundamental to have adequate instruments for measurement and characterization of poverty. The Government of Chile has improved the credibility and consistency of official poverty measurements through reviews of the methodology implemented in the 90s. In early 2015, the Government presented a new official methodology to measure monetary poverty, creating institutional mechanisms for improving its quality and transparency. The design and introduction of this new methodology is the result of an important effort of several actors, including the Foundation for Overcoming Poverty, the Commission on the Measurement of Poverty, the Technical Inter-agency Commission, the Economic Commission for Latin America and the Caribbean (ECLAC), the Oxford Poverty and Human Development Initiative (OPHI) and the CASEN 2013 Expert Panel under the leadership of the Ministry of Social Development. At the same time, the Government of Chile presented a Multidimensional Poverty Index (MPI) that will complement the estimation of monetary poverty and will provide a more complete set of tolos for the characterization of poverty, deprivation and inequality

#### MINISTERIO DE HACIENDA

and will also contribute to better targeting of social programs. Continuing improvements in these instruments and ensuring their institutional support is a challenge for our Government.

Another important aspect to reduce inequities and foster social inclusion consists in improving the targeting mechanisms of social programs. The Government has initiated a process to gradually improve the targeting instrument, the Social Protection Sheet (FPS), so as to move towards the allocation of monetary transfers through the exclusion of higher-income sectors. Thus, the Government is the entity responsible for identifying and selecting beneficiaries of social policies.

Given the objective of further strengthening policies that guarantee greater social inclusion, eradicate extreme poverty and reduce inequality, the Government of Chile requests to the World Bank the Social Inclusion for Shared Prosperity Development Policy Loan for support in three key areas: (i) promoting equal opportunities in education; (ii) improving the conditions to enhance the quality of tertiary education; and (iii) strengthening institutions for poverty measurement and enhancing targeting mechanisms for social programs.

Sincerely,	$\bigcap$
(	REPUBLICA DE OHILS MINISTRO MINISTRIO DE HACIENCIA RODRIGO VALDES PULIDO Minister of Finance
SGA/JRC/JOM/THJ/clr	cionalización v Eunción Pública, DIPRES,
c.c. : - Subdirección de Rad	cionalización y Función Pública, DIPRES. finisterio de Hacienda.

## **ANNEX 3: FUND RELATIONS ANNEX**

# CHILE—ASSESSMENT LETTER FOR THE WORLD BANK

The 2015 Article IV mission occurred in June 2015.

1. Chile's economy grew at a modest pace over the past year, as it continued to adjust to the end of the commodity super-cycle. GDP growth averaged 1.9 percent in 2014, well below the last 10 year average of 4<sup>3</sup>/<sub>4</sub> percent. The main driver of this slowdown was the collapse of private investment growth, down 7 percent in 2014. To a large extent, this reflect the inevitable adjustment of the Chilean economy to the end of the mining boom, but also appears to be related to the adjustment costs and increased uncertainty from the structural reforms agenda launched in 2014.

2. Staff expects GDP growth to increase modestly in 2015 and 2016. In staff's baseline scenario, GDP growth accelerates to 3.1 percent in 2016 from 2.5 percent in 2015. Non-mining business investment is expected to pick up, as monetary policy conditions remain highly accommodative and business sentiment gradually improves. This will more than offset continued weakness in mining investment, as copper prices are expected to remain relatively stable in the medium term. Headline inflation is projected to converge to 3 percent by mid 2016, reflecting the waning of the inflationary pressures from the peso depreciation in 2014 and the negative output gap.

3. The financial sector appears generally healthy, although recent developments in Chile's non-banking sector warrant close attention. Banks' profitability remained strong in 2014. Banks' non-performing loans have decreased slightly from already low levels, and capital ratios are above regulatory thresholds. On the other hand, life insurance companies and pension funds continue to be pressured by the low-yield environment and have kept on restructuring their portfolios towards riskier or less liquid assets, notably, real estate, lower rating domestic and foreign corporate bonds.

4. Non-financial corporate and household debt continued to increase. The debt-to-GDP ratio of Chilean non-financial firms was about 100 percent at end-2014, a relatively high level compared to other emerging economies, largely reflecting Chilean firms' increasing reliance on foreign currency funding. But there are mitigating factors: foreign currency debt is hedged and there are little signs of maturity mismatches. Moreover, increased maturities mitigate rollover risks. Household debt-to-disposable income also rose to about 60 percent in 2014 and continued to grow in 2015, driven by higher mortgage debt, with households bringing forward their home purchasing in anticipation of the scheduled increase in VAT from 2016. Despite higher debt, household debt service-to-income ratios have remained at low level due to low interest rates. 5. The balance of risks is mainly on the downside. The main risk to the baseline scenario is a more persistent weakness of private sector confidence and investment, amid continued uncertainty over the structural reform agenda and the external outlook. On the external front, a further decline in copper prices implies more depressed activity in the mining sector. Although Chile's deep local capital market, sound macro fundamentals, and credible policy framework are likely to reduce the risk of a "sudden stop" of capital inflows, a sharper-than-expected increase in foreign interest rates could increase the cost of funding for the non-financial corporate sector and banks.

6. Macroeconomic policies have been highly expansionary. The strong fiscal impulse in 2014 and 2015 (of about 2 percent of GDP) has been appropriate, given the severity of the slowdown, the need to cushion the temporary effects of structural reforms, the low level of debt, and the emphasis on infrastructure and education spending. The Central Bank lowered the policy interest rate from 5 percent in September 2013 to 3 percent in November 2014, keeping it unchanged afterward. Going forward, a policy mix that combines tighter fiscal policy with continued monetary policy accommodation would better sustain the return of confidence and the economic recovery.

7. Staff revised down its estimate of medium-term GDP growth, but authorities' structural reform agenda has the potential to lift productivity growth in the longer run. The reforms aim at fostering stronger and more inclusive long-term growth, including by addressing well-known gaps in Chile's education system and infrastructure. To help finance spending in these areas, a reform of the tax system was approved in September 2014 which gradually increases capital income taxation. If well implemented, the reforms have the potential to boost productivity and GDP growth. However, the positive impact of some of the reforms (particularly of the education system) may take a long time to fully materialize, while the higher cost of capital is likely to have a negative short-term impact on activity. Staff has revised down its estimate of medium-term (2020) GDP growth to 3.7 percent (from 4.1 last year) against the backdrop of lower capital accumulation (due to lower copper prices and higher capital taxation), slower population growth, and a lower trend TFP growth.

#### Table 3.1. Chile: Selected Social and Economic Indicators

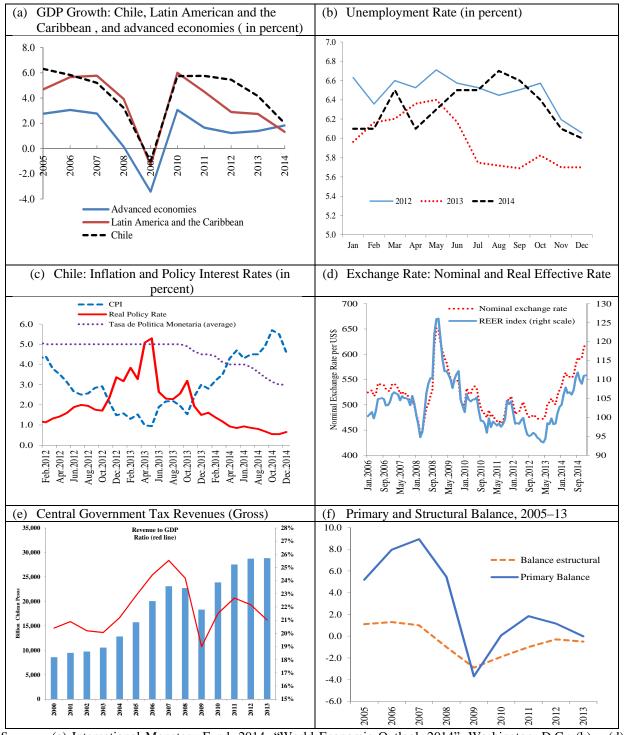
GDP (2014), in billions of pesos	147,166			Quota			
GDP (2014), in billions of U.S. dollars	258.0			in million	s of SDRs		856
Per capita (U.S. dollars)	14,480			in % of to	otal		0.36%
Population (2014), in millions	17.8			Poverty rat			14.40
Main products and exports	Copper				cient (2011)		50.84
Key export markets	China, Euro	area, U.S.		Literacy rate (2011)			98.9
	2010	2011	2012	2013	2014	Pro 2015	į. 2016
						2013	2010
Contract of Contra	(Annual perc	entage char	nge, unless	otherwise :	specified)		
Output						20	
Real GDP Total domestic demand	5.7	5.8 9.3	5.5	4.3	-0.7	2.5	3.1 3.7
Consumption	9.7	7.8	5.7	5.5	2.5	4.4	3.3
Private	10.8	8.9	6.1	5.9	2.2	23	3.3
Public	4.6	25	3.5	3.4	4.4	15.8	2.9
Investment	27.0	14.2	12.5	-1.1	-10.3	0.3	5.0
Fixed	11.6	15.0	11.6	2.1	-6.1	0.2	3.1
Inventories 1/	2.9	0.0	0.3	-0.9	-1.1	0.0	0.4
Net exports 1/	-7.6	-4.2	-2.0	0.5	3.2	-0.8	-0.6
Exports	2.3	5.5	0.1	3.4	0.7	15	3.0
Imports	25.5	16.0	4.8	1.7	-7.0	3.4	4.3
Employment Unemployment rate (annual average)	8.2	7.1	6.4	5.9	6.4	6.5	6.6
Consumer prices							
End of period	3.0	4.4	1.5	2.8	4.6	3.3	3.0
Awerage	1.4	3.3	3.0	1.9	4.4	3.7	3.0
	(In percent o	of GDP, unle	ss otherwis	e specified)	)		
Public sector finances							
Central government revenue	21.6	22.6	22.2	21.0	20.7	20.4	22.1
Central government expenditure	22.0	21.4	21.6	21.6	22.4	23.5	24.1
Central government fiscal balance	-0.5	1.3	0.6	-0.6	-1.6	-3.2	-2.0
Structural fiscal balance 2/	-2.5	-1.0	-0.1	-1.1	-1.5	-2.8	-1.7
Fiscal impulse	-1.9	-1.4	-0.9	1.0	0.5	1.3	-1.1
Public sector net debt	-2.2	-4.9	-1.8	-1.7	-1.3	2.6	4.6
Public sector gross debt	25.9	34.9	34.6	33.7	36.1	38.8	39.6
Central government gross debt	8.6	11.2	12.0	12.8	15.1	17.6	19.0
Of which, share of FX-denominated debt (in percent) Money and credit	17.3	17.2	16.1	12.9	15.9	15.3	15.7
Broad money (percentage change)	9.3	18.5	7.6	14.9	9.3		
Credit to the private sector (percentage change)	7.1	16.9	12.1	10.2	10.4		
3-month central bank bill rate (%)	1.7	4.9	5.1	5.0	4.0		
Balance of payments							
Current account	1.7	-1.2	-3.6	-3.7	-1.2	-0.4	-1.2
Current account (in billions of U.S. dollars)	3.8	-3.1	-9.6	-10.1	-3.0	-1.1	-3.2
Foreign direct investment inflows	7.1	9.3	10.7	7.0	8.5	8.8	8.7
Gross international reserves (in billions of U.S. dollars)	27.9	42.0	41.6	41.1	40.4	40.4	40.4
In months of next year's imports of goods and services	3.9	5.6	5.5	6.0	6.2	5.9	5.5
Gross external debt	39.1	39.6	45.5	47.9	56.5	60.1	61.1
Public Private	2.6	2.9	3.1 42.4	2.6	3.3 53.2	3.8	4.1
Exchange rate	(Annual perc	entage chai	nge)				
Real effective exchange rate (real appreciation +)	5.4	0.4	3.2	-0.6	-8.8		
Terms of trade	22.0	15	-6.6	-2.8	-1.3	12	-1.0

#### **Table 1. Chile: Selected Social and Economic Indicators**

Sources: Central Bank of Chile, Ministry of Finance, Haver Analytics, and Fund staff calculations and projections.

1/ Contribution to growth. 2/ Headline balance adjusted for the economic and copper price cycles.

#### ANNEX 4: CHILE SELECTED MACROECONOMIC INDICATORS



#### Figure 4.1. Chile Selected Economic Indicators

*Sources:* (a) International Monetary Fund, 2014, "World Economic Outlook 2014". Washington, D.C.; (b) - (d) Central Bank of Chile; (e) - (f) DIPRES.

## ANNEX 5: SECTORAL BACKGROUND: EDUCATION AND SOCIAL PROTECTION

## **Education System**

1. The Chilean education system consists of four different levels: pre-school (for children under 6 years of age), primary (ages 6–14), secondary (ages 15–18), and tertiary education. Pre-school education –called *educacion parvularia* – consists of three different levels: *sala cuna* that covers children 84 days to 24 months of age, *jardin infantil (nivel medio)* for children 2–4 years old, *pre-kinder* for children 4 to 5 years old and *kindergarten* for children 5 to 6 years old. As it is common around the world, enrollment rates to pre-school are higher for older children (figure 5.1). Compared to other LAC countries Chile has one of the highest figures of attendance in all levels for children 3 years and older, however it is still far from the OECD and EU21 averages of 76 percent and 82 percent respectively for children 3 and 4 years old.

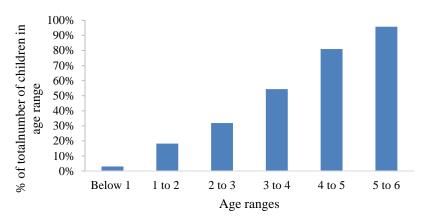


Figure 5.1 Enrollment in *Educación Parvularia* by age (2013)

2. **Primary and secondary education are mandatory.** Additionally, in 2013 a reform was passed to include the kindergarten level (beginning in 2015) and extend to 13 years guaranteed and mandatory schooling for all Chileans.<sup>46</sup> The country performs well in terms of education coverage, with enrollment rates near 100 percent in primary education and 90 percent for secondary education, although there are significant differences by region (figure 5.2).

3. **Tertiary education includes: Universities, Professional Institutes** (*Institutos Profesionales* or IP), and Technical Training Centers (CFTs or Centros de Formación Técnica). According to the Tertiary Education Information System (*Sistema de Información de Educación Superior*) in 2015, in Chile there were 158 tertiary education institutions. Of these, 60 are universities, of which 25 belong to the Council of Rectors (CRUCH). These are also called traditional universities. Within CRUCH there are 16 public universities and 9 private universities that receive state transfers. In addition, there are 35 private universities outside CRUCH. By law, universities in Chile must be non-profit institutions. Another significant part of the tertiary education system is composed by 56 Technical Training Centers and 42 Professional Institutes. In

Source: CASEN 2013.

<sup>&</sup>lt;sup>46</sup> Ley No 20.710

addition, there are tertiary education institutions of the Armed Forces under the Ministry of Defense.

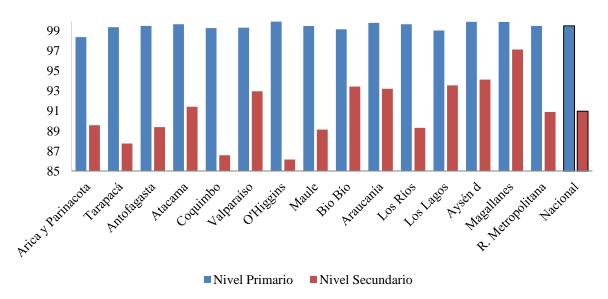


Figure 5.2. Net Enrollment Rate by Level and Region (2011)

Source: CASEN 2011.

4. Enrollment in tertiary education is one of the highest in the region with 74 percent in 2012, up from 48 percent in 2005. Although a majority of the enrollment is still concentrated in universities, technical institutions have grown significantly in recent years. In 2012, 50 percent of first year tertiary education students enrolled in a CFT or IP. However, weaknesses remain. Diagnostics to date have noted an important lack of policy coordination of the technical and professional education system at all levels and modalities. Quality assurance and evaluation are not robust, and the system lacks institutional mechanisms for coordination with stakeholders in the private sector. Links between technical programs, professional degrees and academic degrees (for example, legal requirement of *licenciatura* before obtaining certain professional degrees) are often an obstacle, as is the lack of certification systems in some fields. In addition, there are no monitoring systems to assess whether institutions are teaching the technical and professional competences the country requires.

5. In addition, social segmentation is evident in the pattern of students accessing different types of tertiary education institutions. Twenty-five universities, represented by the Council of Rectors of Chilean Universities (CRUCH), and eight private universities use a centralized selective admission system based on the combined results of the University entry test (*Prueba de Selección Universitaria*, PSU) and the secondary school report. This group is often recognized to be of better quality and prestige than their counterparts. In contrast, Technical Training Centers (*Centros de Formación Técnica*, CFTs), Professional Institutes (*Institutos Profesionales*, IPs) and non-selective private universities, often of lower quality, provide direct access to students. This results in a higher proportion of students from private secondary schools enrolled in selective universities and greater enrollment of municipal and subsidized private school students in CFTs, IPs and non-selective private universities. In 2010, 76 percent of private school

students enrolled in selective universities, in contrast only a third from municipal schools enrolled. Moreover, municipal school students accounted for 37 percent of total enrollment in the non-selective institutions and over half came from subsidized private schools.<sup>47</sup>

# **Education Reforms**

6. In 1981 Chile embarked on an educational experiment unique in its scope and ambition by financing public education K-16 through a voucher system. The reform had several aspects: i) it transferred the administration of public schools from the central government to municipalities, ii) it introduced an individual student subsidy in the form of a voucher, and iii) it curtailed the collective bargaining rights of public school teachers. Private schools were subdivided into two branches: subsidized schools that participated in the voucher program and unsubsidized ones that did not. The former started receiving a fixed amount of money for each student attending school and were allowed to select students. Such schools could be either not for profit, mostly religious schools, or for-profit ones. Public schools, on the other hand, continued to be requested to enroll all students who apply unless they run out of capacity. This applies to the first three levels of schooling: pre-school, primary, secondary.

7. **Only in the 1990s were private subsidized schools allowed to charge additional fees from their students in the form of co-payments.** Contreras, Sepúlveda and Bustos (2007) report that in 2005 the average co-payment at public subsidized schools was 13,438 Chilean Pesos (this compares to 1,492 Pesos at public ones that have some limited possibilities to raise additional funds). McEwan, Urquiola and Vegas (2008) report that 79.2 percent of private subsidized school students paid less than 20,000 Pesos, and 22.5 percent attended for free.

8. In order to improve educational inequities, the Chilean government introduced in 2008 the Preferential School Subsidy Law (SEP). The SEP established a new targeted voucher that would give significantly more resources to schools for each eligible student enrolled. Eligible students correspond roughly to those in the poorest 40 percent of the distribution.<sup>48</sup> The SEP effectively eliminated tuition fees for the most vulnerable students in most private-subsidized schools. It also required schools to provide a plan (*Plan de Mejoramiento Educativo*) on how the additional funds were going to be used.

## **Social Protection**

9. Chile's Social Protection System has been shaped from the mechanisms of contributory social security for those that are part of the formal labor market. This includes affiliations to the health system (FONASA<sup>49</sup> and ISAPRES<sup>50</sup>) and the pension system (AFP<sup>51</sup>). Additionally, Chile implemented a mandatory unemployment insurance in 2002, funded by

<sup>&</sup>lt;sup>47</sup> OECD (2012) "Quality Assurance in Higher Education in Chile" Reviews of National Policies for Education.

<sup>48</sup> In order to be eligible, students must either belong to the lowest 33 percent of the income distribution according to the government targeting instrument *Ficha de Proteccón Social*; or belong to the social program for the poor Chile *Solidario*; or students' parents must show that they are poor, of very low education or part of the lowest socioeconomic group in the public health system.

<sup>&</sup>lt;sup>49</sup> Fondo Nacional de Salud.

<sup>&</sup>lt;sup>50</sup> Instituciones de Salud Previsional.

<sup>&</sup>lt;sup>51</sup> Administradoras de Fondos de Pensiones.

worker, company, and State contributions. The State's contributions go directly into a special fund called the Solidarity Unemployment Fund (FCS- *Fondo de Cesantia Solidario*).

10. In order to provide coverage for the main risks individuals face, contributive social security is complemented with non-contributory mechanisms. These include affiliations to the public health system with free access to pensions, Unique Family Subsidy (*Subsidio Único Familiar, SUF*), subsidies for disabilities, the solidarity pension (*Pensión Básica Solidaria de Vejez e Invalidez, PBS*) for those that did not contribute to social security during their work life and the Solidarity Pension Contribution (*Aporte Previsional Solidario*) for those that contributed to social security but have insufficient savings to cover the value of a minimum pension. These benefits are targeted to the most vulnerable population. Free health is targeted for the poorest 20 percent, the subsidies mentioned above are targeted for the poorest 40 percent and the Solidarity Pension Contribution targets the poorest 60 percent.

11. **Chile's Social Protection System also includes support for employment.** This includes the unemployment benefit, subsidies to youth employment and female employment, job training, job placement services, financing and technical assistance to support micro enterprise and productive activities. These subsidies and programs are also targeted for the most vulnerable populations, with some covering the poorest 20 percent and others the poorest 40 percent.

12. Additionally, the Social Assistance component covers different sectors and provides temporary support to prevent and deal with risk. Three main areas where social assistance mechanisms are included are: (a) subsidies to pay for services of drinking water, electricity, and gas (this only operates in certain parts of the country), (b) support programs for education including school meals, supplies, a set of scholarships at all education levels and access to credits for tertiary education, and (c) subsidies for rental, purchase and improvement of housing.

13. The *Chile Solidario* system promotes the incorporation of families and persons living in extreme poverty into public programs and social services, helping them access better living conditions so that they can overcome poverty. To overcome social barriers, *Chile Solidario* implemented programs to offer specialized psychosocial support and accompaniment to families and individuals to facilitate their transition into other social integration processes. These programs were: Puente (*Bridge*), aimed at families living in extreme poverty; Vínculos (*Linkages*), aimed at vulnerable senior citizens and the elderly living alone; Calle (*Street*), aimed at individual adults living in extreme poverty; and Abriendo Caminos (*Forging Paths*), aimed at supporting children from families where one of the members was serving a prison sentence.<sup>52</sup> From its beginnings in June 2002 through June 2008, Chile *Solidario* covered roughly 278,000 families (Larrañaga et al, 2009), over 100 percent of all families living in extreme poverty at the beginning of this period.

14. In 2012, *Chile Solidario* was partially replaced by the IEF, which sought to benefit 170,000 families living in extreme poverty. This program consists of cash transfer combined with support aimed at building the capacities of the families. The program includes two types of cash transfers: unconditional transfers, which are granted per family and individual under the "dignity" pillar; and conditional transfers, which are granted based on compliance of certain "duties" (taking children to health checkups, enrolling them in school, and so on) and

<sup>&</sup>lt;sup>52</sup> http://www.ministeriodesarrollosocial.gob.cl/beneficios-sociales/

"accomplishments" (grants for women's employment, bonuses for good grades in school and for graduating middle school, and so on).

15. Additionally, the program provides support services in social and socio-labor areas. The purpose of the social support—which replaces the *Puente* program—is to build capacities for social inclusion by providing accurate and up-to-date information about social services and benefits. It is aimed at all IEF beneficiaries. The socio-labor accompaniment is geared towards raising the employability or entrepreneurial capacities of the beneficiaries so that they can earn their own income. It is focused on people over eighteen and able to work. If the beneficiaries are studying, their studies must be compatible with their participation in the program.

16. *Chile Crece Contigo* (CHCC), a Comprehensive Social Protection System for Early Childhood, created in 2009, was added as a new intersectoral policy. It covers 75 percent of children under 5, those affiliated to the public health system. CHCC tracks the development trajectory of each child starting at the first health check-up during pregnancy until the child enters pre-kinder. It provides some guaranteed services such as *sala cuna* and *jardin infantil*, and technical aids for children with disabilities for households of the 60 percent most vulnerable.<sup>53</sup> In addition, CHCC provides preferential access to a suite of social programs in different areas for families with children under 5 in households of the 40 percent most vulnerable.

17. For the functioning of the Social Protection System, a significant novelty has been the current development of the Integrated System of Social Information (SIIS), a national computerized technological platform that will register, store and process information on socioeconomic conditions of the priority population of social programs, services and transfers at the local level. The Social Information System as a main component of the SIIS compiled information of beneficiaries of 124 social protection programs as a Unique Beneficiary Registry, that allows monitoring and performance evaluation of social interventions. The SIIS currently has information for approximately 14 million Chileans.

Target group	Main Social Protection Benefits	Total number of Beneficiaries
Extreme Poor	• Ethical Family Income (IEF)	• 47.980 families
Bottom 20%	• Social Housing (debt free)	• 21.098 individuals
	• School feeding	• 1.725.354 individuals
	• School supplies	• 1.319.919 individuals
	• Financial Support for microenterprise	• 33.379 individuals
Bottom 40%	Monetary subsidies	• 2.765.441 individuals

 Table 5.1. Targeting of Selected Social Programs in Chile (2013)<sup>54</sup>

<sup>&</sup>lt;sup>53</sup> These services are only available for working mothers, those looking for work or studying.

<sup>&</sup>lt;sup>54</sup> Ministry of Social Development, 2013.

Target group	Main Social Protection Benefits	Total number of Beneficiaries
	<ul> <li>Scholarships for secondary education<sup>55</sup></li> <li>Social Housing (vouchers)</li> </ul>	• 156.508 individuals
		• 44.704 individuals
Bottom 60%	<ul> <li>Free tuition for nurseries (<i>salas cunas</i>) and kindergartens (<i>jardines infantiles</i>)</li> <li>Non-contributory pensions (<i>Pensiones Solidarias</i>)</li> </ul>	• 236.774 individuals
	<ul> <li>Solidarity Pension Payment (Aporte Previsional Solidario)</li> </ul>	• 581.954 individuals
		• 671.950 individuals
Bottom 70–80%	• Solidarity Fund for tertiary education loans	• 82.782 individuals
	Beca Nivelación académica	• 2.678 individuals
	• Scholarship for Academic Excellence	• 39.188 individuals
	Magallanes Scholarship	• 1.362 individuals
	• Beca Nuevo Milenio	• 135.999 individuals
	Beca para estudiantes hijos de profesionales de la educación	• 11.005 individuals
	Beca Patagonia Aysén	• 1.838 individuals

Source: Ministry of Social Development (MDS) using data from Banco Integrado de Programas Sociales (BIPS).

<sup>&</sup>lt;sup>55</sup> These scholarships include: (i) *Apoyo a la retención escolar* (19,089 beneficiaries), (ii) *Beca Indígena* (75,601 beneficiaries),
(iii) *Beca Integración territorial* (2,339 beneficiaries) and (iv) *Beca Presidente de la República* (59,479 beneficiaries)

#### ANNEX 6: POVERTY AND SOCIAL IMPACTS ASSESSMENT

1. This Poverty and Social Impact Assessment (PSIA) is developed according to World Bank guidelines and is designed to provide an analysis of the potential welfare effects of the government's program. In particular, it documents the expected impacts of each of the policy actions with regard to the key objectives of this operation: improving access to quality education, strengthening institutions for poverty measurement and the targeting of social programs. Specifically, the PSIA analyzes how these outcomes have potential effects on poverty, shared prosperity and equity.

2. Quantitative analyses specific to the policies supported by this operation were performed, along with a literature review of previous studies relevant to the prior actions. Useful information to define parameters and assumptions to perform the quantitative analysis, as well as to organize the literature review, was gathered from previous evaluations by the World Bank and other multilateral organizations, and from academic research papers. Several World Bank Group Global Practices also provided valuable inputs for this assessment.

3. Social inequality remains high and is constraining poverty reduction in Chile, making the promotion of equity a policy priority. The country's inequality levels have remained constant over the last decade, with only a slight reduction in the Gini coefficient between 2006 and 2013 (0.51 to 0.50). One of the main structural factors that may explain the observed levels of income inequality in Chile is low inter-generational mobility. For instance, parents' education and occupation are the circumstances that explain most of the inequality in access to quality education in Chile, suggesting that important barriers remain for inter-generational mobility. <sup>56</sup> There is evidence that in Chile a child's circumstances at birth have a strong influence on test scores. A recent World Bank Study (2014) finds that about 16 percent of the passing 2012 PISA test scores in Mathematics would need to be re-allocated across children to ensure no association between performance and their circumstances at birth.<sup>57</sup> With regard to quality of education, as measured by the 2012 PISA scores, Chile is among the lowest ranking OECD countries, especially in Math and Science. Moreover, Chile ranks as one of the countries with the most segregated school system among OECD members and is still behind the most developed nations in quality of education, innovation potential and as a result, availability of a skilled workforce

4. **The PSIA summarizes the results of studies analyzing the potential effects on poverty and equity of the proposed Prior Actions in education as well as policies to better target social spending and to enhance poverty measurement.** Findings suggest the policies supported by the first two pillars will have positive impacts on poverty reduction and equity in Chile. Second round effects, such as changes in returns to schooling as a result of the projected expansion of the human capital stock, are estimated to have limited impact on poverty reduction and inequality but are not expected to revert the equalizing first round effects. The third pillar concerning the strengthening of institutions for poverty measurement and enhancing targeting mechanisms of social programs will have an indirect effect through the enhancement of the transparency and quality of information

<sup>&</sup>lt;sup>56</sup> Ferreira et al. (2012); World Bank (2012); World Bank (2014).

<sup>&</sup>lt;sup>57</sup> World Bank (2014). "Social Gains in the Balance - A Fiscal Policy Challenge for Latin America and the Caribbean"

to effectively monitor poverty and other social welfare indicators of equity. Analysis of impacts on gender inequality of the proposed Prior Actions is included.

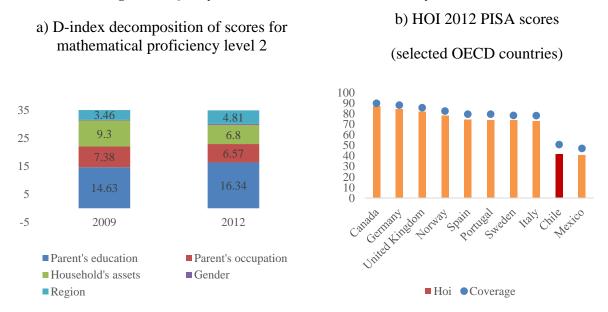


Figure 6.1. Quality of Education in Chile as Measured by 2012 PISA Scores

Source: LAC Equity Lab using PISA data.

*Note:* The D-index provides insight on how an opportunity would need to be re-allocated across children to ensure no association between performance and their circumstances at birth.

#### **Pillar 1: Promoting Equal Opportunities in Education**

**Prior Action 1.** The Government of Chile has enacted the Inclusion Law to improve social integration and expand schooling options for all students within the mandatory levels of schooling (primary and secondary education). (*Inclusion Law No. 20845 published June 2015*)

5. The enacted Inclusion Law aims to eliminate segregation of students from different socioeconomic levels, improve quality of education and advance towards a more culturally integrated educational system. The policy defines four main objectives, to: (a) increase funds to public schools to improve quality, (b) eliminate co-payment, (c) regulate the admission process, and (d) end profit in establishments that receive State funding. Quantitative analysis has been conducted for the first two objectives with results presented below. For the last two, a comprehensive literature review is used to assess their potential impacts on equity.

6. **Chile exhibits a highly segregate education system that has hampered intergenerational mobility.** Most of students in private subsidized schools are from a higher socioeconomic status and perform better academically than those in municipal public schools. This phenomenon translates into higher mean lifetime earnings for those of high socioeconomic background who graduate from private schools and perpetuates inter-generational inequality. As of 2013, the eighth, ninth and tenth highest income deciles paid on average three, four and seven times higher fees in private-subsided schools than the lowest income decile. (Figure 6.2). However, when academic results are broken down by socioeconomic level, there is no significant difference between the municipal sector and subsidized private establishments (figures 6.4 and 6.5).<sup>58</sup> This suggests that variables in the household, such as parents education, are equally or more relevant than the type of education being provided by the school.<sup>59</sup> According to PISA 2012, students from disadvantaged families in Chile are less likely to achieve high levels of performance. More than 23 percent of the difference in student performance can be attributed to their socioeconomic status while the average for OECD countries is 15 percent, making Chile one of the most socioeconomically segregated countries regarding education opportunities among OECD member countries.

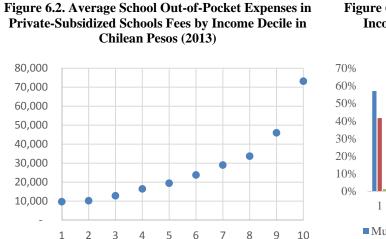
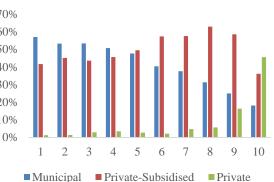


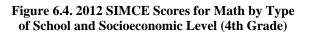
Figure 6.3. Secondary School Attendance by Income Decile and School type (2013)

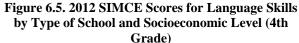


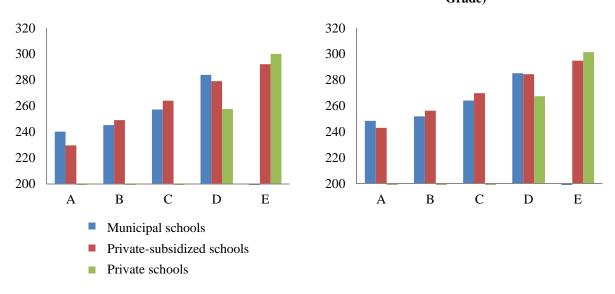
Source: Own calculations based on CASEN 2013.

<sup>&</sup>lt;sup>58</sup> Mizala and Romaguera (2000).

<sup>&</sup>lt;sup>59</sup> Peña (2002); Redondo, Descouvières & Rojas (2004).







Source: SIMCE 2012 – Agency for Education Quality – MINEDUC.

*Note*: SIMCE tests measure quality of education throughout the country and set three scores: (1) adequate, (2) elemental, and (3) insufficient. The socioeconomic level of the students is calculated based on the following variables: educational level of the mother, of the father, total monthly income, and vulnerability index (IVE). The first three figures are provided by a questionnaire filled out by the parents or guardians. The IVE is provided by the National Board for School Aid and Scholarships. There are five different socioeconomic levels: A, Low; B, Mid-Low; C, Middle; D, Mid-High; and E, High.

#### **Increase Funds to Public Schools to Improve Quality**

7. Increases in coverage of Chile's Preferential School Subsidy (SEP) are expected to reduce inequities in education and improve educational achievement for the poorest students. As part of the recent Inclusion Law, the Chilean Government will gradually eliminate co-payments in publicly funded schools, simultaneously increase subsidies to these institutions and expand the SEP to cover 80 percent of poor children. The SEP was introduced in 2008 to eliminate tuition fees for 40 percent of students at most voucher schools. Studies indicate the 2008 reform increased test scores for the bottom 40 percent and reduced inequality in educational achievement.<sup>60</sup> Nearly a third of the effect is due to families being able to choose better schools that were previously considered too expensive, while the rest is due to improvements in quality of existing schools in response to the policy.<sup>61</sup>

8. **Based on previous findings, short-run and long-run positive impacts on income inequality are expected from the increased resources to public education through the SEP**. Elacqua (2009) finds that policies that provide incentives for schools to enroll disadvantaged

<sup>&</sup>lt;sup>60</sup> Nielson (2013).

<sup>&</sup>lt;sup>61</sup> Ibid

students can help to mitigate the stratifying effects of educational vouchers. Nielson (2013) shows that preferential school subsidies attract poor students to attend more expensive but better schools. Additional prospective analysis is being carried out on the effects on the distribution of educational quality across socioeconomic groups of expanding the targeted voucher –SEP and SEP *Ampliada*-to students from the poorest 80 percent of the population (see Box 6.1). Based in Nielson (2013), this analysis is expected to deepen the understanding of how students sort according to school characteristics in the context of increased coverage of SEP and gradual elimination of copayments.

#### Box 6.1 Additional Prospective Analysis: Educational Quality across Socioeconomic Groups

The objective of this study is to estimate the effects on the distribution of educational quality across socioeconomic groups of expanding the targeted subsidy (*SEP* and *SEP Ampliada*) to 80 percent of the students from poor households.

Extensions of the model of school choice in Nielson (2013) are used to construct simulations of how students sort according to the prices that would be effective after the policy has been implemented but assuming that schools characteristics don't change, and then allowing both prices and quality to change. These simulations will estimate the magnitude in the tests score change for poor students that is driven by families' ability to choose better schools and the magnitude due to changes in quality of existing schools in response to the policy.

Applying a difference in differences analysis of school quality across time and across poor and non-poor neighborhoods changes in school quality are estimated. Results in Nielson (2013) indicate that schools in the poorest neighborhoods increased their quality by 0.14 standard deviations. This study replicates the analysis for the expansion of SEP in the current context and in the context of the implementation of the components of the Inclusion Law, particularly the progressive elimination of co-payment in the schools receiving state funding.

## **Eliminate Co-payment**

# 9. The elimination of copayments is expected to increase educational access and equity.

Chile's current copayment system allows publicly subsidized private schools to charge families a mandatory tuition fee on top of the public voucher; it thus introduces a price discrimination mechanism among those schools, which is directly linked to socioeconomic status by which students from lower socioeconomic backgrounds tend to attend free-of-charge schools.<sup>62</sup> Existing evidence shows that fee elimination tends to increase educational access, equity and student persistence, however there is the risk of declines in educational quality.<sup>63</sup> The components of increasing spending per student and expanding SEP will serve to mitigate the risks of declines in school quality (Box 6.1).

10. A partial equilibrium analysis indicates small effects on overall poverty and inequality from the elimination of copayments. In the short run, the elimination of copayments affects disposable income mostly benefiting the vulnerable population (considered better off than the poor but not yet middle class) and the middle class. A simulation exercise was carried taking into account how much poverty and inequality levels could change assuming that the new policy results in additional household disposable income through the removal of copayments. The results indicate that extreme and moderate poverty would decrease slightly relative to the status quo (table 6.1.). Extreme (moderate) poverty is expected to decrease from 4.536 (14.513) to 4.451 percent

<sup>&</sup>lt;sup>62</sup> Bravo and Quintanilla (2001).

<sup>&</sup>lt;sup>63</sup> Morgan, Petrosino and Fonius (2012).

(14.170). Similar effects are found with regard to income inequality–the Gini coefficient decreases slightly under both settings.

		Eliminating
	Status Quo	co-payment
Extreme Poverty	4.536	4.451
Moderate Poverty	14.513	14.170
Income Inequality (Gini coefficient)	0.51028	0.5096

Table 6.1. Poverty and Inequality Impacts of Eliminating Shared Funding

Source: Own calculation based on CASEN 2013.

*Note*: Moderate and Extreme Poverty are calculated using the new methodology and using official income aggregate. Results are presented for the entire population. Calculation of the Gini coefficient are based on household monetary income.

11. Elimination of copayments potentially affects positively school attainment, especially for the bottom 40 percent of the distribution. Assuming that the totality of resources currently used as copayments are invested by families in children's education, partial equilibrium analysis shows that the gap between years of schooling for age and actual schooling attainment drops, especially for the bottom three quintiles (figures 6.6 and 6.7)

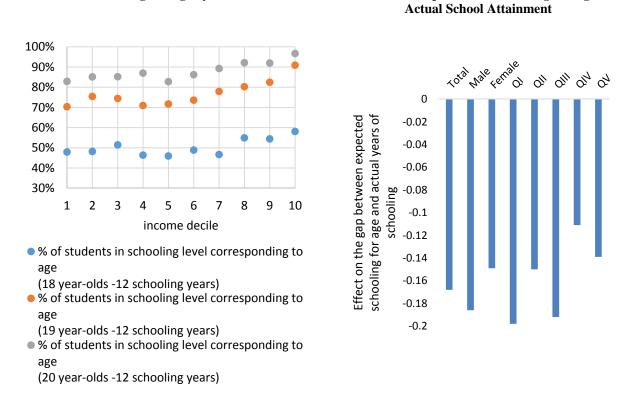


Figure 6.7. Effect of Higher Household Spending in

Education on Gap Between Schooling for Age and

# Figure 6.6. Share of Students with the Expected Years of Schooling for Age by Income Decile

Source: Own calculations based on estimations in Szekely (2015) using data from EPF 2011 and CASEN 2013.

12. Analysis of potential effects of changes in educational expenditures on secondary attainment show that elimination of copayment could potentially increase the probability of a student aged 15 to 18 years having completed secondary education in 9 percent. The analysis in Szekely (2015) assumes that the elimination of copayment is equivalent to an increase in family income. The impact on investments in human capital (education) is calculated by estimating the income elasticity of education expenditure based on data from the Survey on household expenditure (EPF 2011).

#### **Regulation of the Admission Process**

13. The regulation of the admission process of schools receiving state funding is expected to reduce stratification across Chilean schools. The current unregulated admission policies give schools strong incentives to select children from higher socioeconomic backgrounds and with better academic performance since the monetary and non-monetary costs of teaching those children are lower.<sup>64</sup> Thus, the Inclusion Law specifies that schools cannot apply student selection mechanisms that generate arbitrary discrimination on the basis of socioeconomic, ethnic, cultural or religious characteristics. MacLeod and Urquiola (2012) indicate that if schools are able to select students based on ability there is an "anti-lemons" effect where competition leads to segregation

<sup>&</sup>lt;sup>64</sup> Valenzuela, Bellei and de los Ríos (2013).

by parental income, increased transmission of income inequality, and lower student effort. In this scenario, the most qualified students join schools with the best reputations and thus earn the highest incomes, whereas their counterparts with inferior abilities remain in the worst schools. In contrast, if schools cannot handpick students on ability then a competitive market for education is efficient and incentivizes entry by high productivity schools.

14. The gap in test scores between public and subsidized private schools is the result of student selection, rather than differing performances. Mizala and Romaguera (2000) show how the subsidized private school scores consistently better than public ones on the SIMCE test. However, when running regressions on test scores on school type, using school level averages, the indicator variable for subsidized private schools turns insignificant once socioeconomic and geographical variables are controlled for. By contrast, non-subsidized private schools perform significantly better even after all the control variables are added. Similarly, Sepúlveda and Bustos (2007) indicate that the effect of private subsidized schools depends on their socioeconomic status: high socioeconomic status private schools do outperform public ones, while low status ones actually perform worse. They also show that once a school's selection criteria are controlled for (distinguishing between student ability, socioeconomic selection, and religious selection), the amount of copayment required ceases to be a statistically significant predictor for test score outcomes.

15. The two most important school characteristics in parental choice are test scores and distance from home.<sup>65</sup> However, while the former is a normal good, the latter is inferior. That is, as household income rises, parents look for schools with higher test scores and are willing to send their child farther away. Given that poorer households strongly prefer a close location, abolishing student selection by schools could be ineffective, given that selection is mostly driven by parents.

16. To better inform implementation of school assignment, a systematic review of experiences around the world on school choice and assignment systems has been carried out. Based on the work by Nielson, Elacqua and Agarwal (2015) the systematic review describes characteristics of coordinated and centralized school admission systems. Abdulkadiroglu, Agarwal and Pathak (2015) find that coordinated and centralized school admission generates on average higher utility compared to uncoordinated mechanisms. Even though students prefer nearby schools, estimates suggest substantial heterogeneity in the willingness to travel.

17. Second round effects of implementation of the Inclusion Law by socioeconomic group include differential peer group effects. The existing literature is not conclusive on the peer group effects at different points of the (achievement, conditional test score) distribution: Schindler Rangvid (2004) find that the effect from a heterogenous peer composition on test scores does affect weak learners positively, while the effect for good readers is negative, but at all estimated quantiles, the effect is not significantly different from zero. Hoxby and Weingarth, (2006) suggest that reassignments are beneficial if they created schools in which there was a critical mass of students at each achievement level represented in the school. On the other hand, reassignments were pernicious if they created schools whose children have bimodal or simply very diffuse achievement distributions.

<sup>&</sup>lt;sup>65</sup> Gallego and Hernandez (2008, 2009).

# End Profit in Establishments that Receive State Funding

18. Theoretically, profit making could have positive or negative effects on students' achievement by school. On the one hand, profit seeking in a competitive setting provides incentives to meet client (parents) satisfaction, innovation and offering quality service for the same (or lower price) that other schools. On the other hand, profit seeking could imply cost reductions that decrease the quality of education, for example hiring less experienced personnel (teachers) or providing shorter contracts. In the case of Chile, the combination of profit seeking with school ability to select students and to charge copayments also rises the concern that for-profit schools could have had incentives to select the "less costly" students to educate, widening segregation and decrementing quality.

19. Studies show that after adjusting for student characteristics the for-profit schools achieve at a slightly lower level in Spanish and Mathematics than both the municipal and non-profit schools. In terms of test scores differences by type of school, not-for-profit -mostly religious- schools appear to perform better than either public or for-profit-private ones even if selection is taken into account.<sup>66</sup> McEwan (2001), Bravo and Quintanilla (2001), Contreras, et al. (2011) and Valin (2011) find, after controlling for socioeconomic characteristics and possible selection bias, that the subsidized religious schools outperform the public ones, but that the forprofit schools perform worse. In terms of integration or segregation by type of school, results show that non-profit schools -mainly Catholic schools- enroll a lower proportion of vulnerable students in comparison to for-profit and municipal schools. For-profit schools enroll a significant proportion of these students, in some cities even higher than the municipal schools. Within each type of schools, the evidence shows that municipal schools are much more homogeneous while for-profits and non-profits tend to concentrate the vulnerable students in few establishments. In some cities the non-profits concentrate the vulnerable students but in others is the for-profit sector that concentrates them. (Elacqua, Martinez and Santos, 2011; Elacqua, 2011).

20. There is mixed evidence on the potential effects of end of for-profit schools that receive state funding. There is evidence in Levin (2001) and Elacqua, Martinez and Santos (2011) that for-profit schools in Chile tend to reduce costs on staff by shortening the school day, hiring less experienced and younger teachers and in the middle schools by hiring teachers without a specialty. Further research is needed to establish if this is efficient behavior or the reduction in inputs damages quality. Studies in the United States show no evidence of systematic difference in the objectives and goals of non-profit and for-profit schools. Lubienski, Gulosino, and Weitzel, 2009; Miron, et al., 2010) show that competition drives the non-profit institutions to behave like for-profits using location and selection strategies that in practice exclude the most vulnerable students. There is a gap in the literature in the sense that many studies have focused on the voucher reform *per se* and do not consider in depth the potential differences between for-profit, non-profit and municipal schools. This has also been the case in the international experiences for example in Sweden (Sahlegren 2010).

21. One of the uncertainties in the process of implementation of the Inclusion Law is how much it will improve quality of education. The potential exists for student migration to schools of unknown or even lesser quality. Given that the existing not-for-profit sector is limited in its

<sup>&</sup>lt;sup>66</sup> Bravo, Contreras and Sanhueza (1999); McEwan and Carnoy (2000).

expansion, and that copayments will be eliminated as well, one would expect the Inclusion Law to result in a large increase in students at public schools. Hsieh and Urquiola (2006) explain that, even though there was a considerable movement of students from public to private institutions with the introduction of the voucher system, the number of public schools has barely fallen. This seemingly implies that losing students to the private sector does not have any consequences, possibly because municipal officials are unwilling to cut funds. This would imply that public schools may simply face smaller class sizes if students vote with their feet; an observation that is unfortunately absent from the discussion of the relative performance of the two school types. However recent evidence from the first year of implementation shows that this risk has not materialized.

22. Further analysis is being carried out to advance the general distributional impact of the joint implementation of the components in the Inclusion Law. In particular, a relative and absolute incidence analysis is being conducted on the gains and losses from increases in indirect transfers via public spending in education (Box 6.2).

#### Box 6.2 Additional Prospective Analysis: Absolute and Relative Distributional Incidence Analysis

Following the methodology of the Commitment to Equity Assessment (CEQ) based on Lustig and Higgins (2013) analysis of absolute and relative distributional incidence is being carried out for the effects of increasing public spending in education, eliminating co-payment and expanding scholarships for tertiary education.

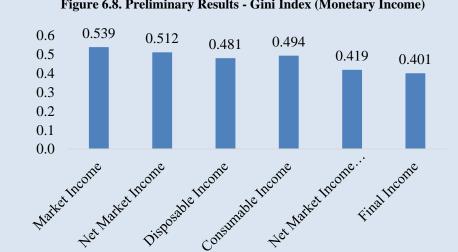


Figure 6.8. Preliminary Results - Gini Index (Monetary Income)

Source: Preliminary results using CASEN 2013 following the methodology of the Commitment to Equity Assessment (CEQ) based on Lustig and Higgins (2013). This graph will include the measures under scenarios of reform.

The analytical approach in CEQ comprehensively assesses the tax/benefit system in Chile, including indirect subsidies, taxes and in-kind benefits in the form of free education and health care. This approach allows examining the distributional effects of individual programs and policies, as well as the net effect of the mix of policies and programs in the country. The results of this analysis are expected to inform in more detail in what extent increasing public spending in education, eliminating co-payment and expanding scholarships for tertiary education are poverty reducing and redistributive.

**Prior Action 2:** The Government of Chile has created the Program for Effective Access to Higher Education (PACE) to support the transition of highly vulnerable students from upper secondary education to tertiary education. (*Ministerial Resolution 680, January 29 2015, & the 2015 Public Sector Budget Law Partida 09, Chapter 01, Program 03, Subtítulo 24, Item 03, Asignación 905 "Programa de Acompañamiento y Acceso Efectivo a la Educación Superior", Ministry of Education)* 

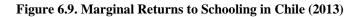
23. The Program for PACE is expected to address the unequal access to tertiary education associated to higher returns by supporting the transition of vulnerable students from upper secondary education to tertiary education. The program seeks to accompany young individuals from upper secondary school in academic, psychological and vocational fields. It encompasses two important dimensions of equity: equality of opportunities and agency. The goal is to prepare and fully support their entrance to college. Once enrolled in the career of their choice students are offered further support to ensure they complete their studies. Gonzalez-Velosa et al. (2014) and Urzua (2013) estimate that university degrees on average have a positive rate of return in Chile, suggesting that vulnerable populations would benefit from programs that encourage post-secondary completion. In addition, studies have shown that providing students with information about their future earnings can increase their expectations and thus improve their educational outcomes.<sup>67</sup>

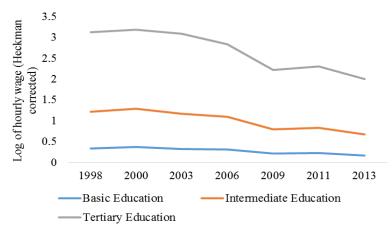
24. **Individuals who achieve higher levels of education are expected to increase their labor earnings.** In order to assess the potential effects of the PACE, the marginal return to completing secondary and upper-secondary schooling are estimated to give a sense on the magnitudes in which labor income is expected to increase if individuals complete high school or college relative to them achieving a level below high school completion. As expected, the results indicate that returns to schooling are higher for individuals that obtain a higher level of education (figure 6.9). This suggests a program like PACE that encourages students to finish at least secondary school will likely result in higher earnings for their targeted population.

25. **Results of an impact evaluation of the pilot phase of the PACE program identifies potential areas of improvement.** The study collects information on perceptions and opinions of students, schools and universities involved in the development of the program. Different collection strategies have been designed to incorporate representative data from quantitative and qualitative studies.<sup>68</sup> One of the salient findings in this preliminary evaluation is the risk of less than perfect take up among eligible students, particularly among the most vulnerable.

<sup>67</sup> Jensen (2007).

<sup>&</sup>lt;sup>68</sup> Ministry of Education and UNDP Chile





*Source*: Own calculations based on calculations based on CASEN 2013. *Note*: Education results are all with respect to the excluded category incomplete basic education or less. Socio-demographic controls include years of experience and years of experience squared.

**Prior Action 3:** The Government of Chile has expanded scholarships for students that belong to the seven lowest income deciles to promote equitable access for tertiary education. (2015 Public Sector Budget Law Partida 09, Chapter 01, Program 30, Subtítulo 24, Item 03, Asignación 200 "Becas de Educación Superior", Ministry of Education; Decree 97 that establishes the scholarship program in 2013)

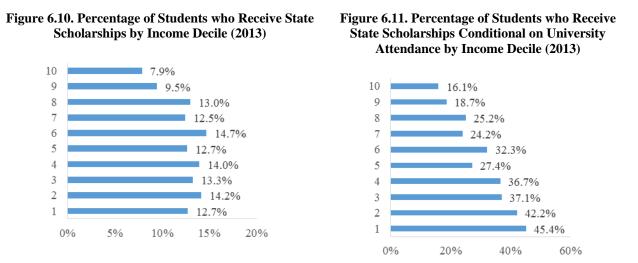
26. **Expanding access to scholarships for the poorest deciles in Chile will likely contribute to reducing inequity.** For the highest income decile enrollment in tertiary education was 91 percent in 2011 but only 27 percent for the lowest one. This is partly due to the steep cost of higher education and the complex student financing system. Nonetheless, the number of students receiving aid increased by 86 percent between 2009 and 2013. In 2013, 53 percent of students enrolled in tertiary education received some sort of student aid from the government to pay tuition; of these, 12.7 percent of students from the lowest income decile received state scholarships and 45.4 percent received scholarships conditional on attendance (figure 6.11).<sup>69</sup>

27. A recent World Bank study by Montenegro and Patrinos (2014) indicates that returns to tertiary education are the highest, signaling that tertiary education is a worthy private investment. Own analysis using CASEN household surveys (1998–2013) confirms significant higher returns in the labor market to tertiary education, however the trend is decreasing in the last ten years (figure 6.9). This panorama emphasizes the importance of transitioning to higher education in Chile by at the same time increasing productivity.

28. **Some studies indicate there is evidence of binding credit constraints in Chilean higher education.** Solis (2011) analyses the impact of a financing program in Chile that offers tuition loans to students who belong to the lowest four income quintiles and obtain a score above 475 on the College Admission Test (*Prueba de Selección Universitaria, PSU*). The author finds that

<sup>&</sup>lt;sup>69</sup> División de Educación Superior, Ministerio de Educación Chile 2014.

having access to the loan doubles the probability of enrollment and reduces the gap between the rich and the poor. Similarly, Rau, Rojas and Urzúa (2014) analyze the impact of loans for higher education on enrollment and drop out decisions in Chile and show that the State Guaranteed Loan (SGL)<sup>70</sup> program increases enrollment and reduces dropout rates. They further differentiate between short (related to income) and long-term (related to ability) constraints and find a significantly higher impact on dropouts for students with low levels of ability from poorer families.<sup>71</sup> This suggests there are binding constraints in tertiary education (particularly in the long run), and thus expansion of financing opportunities, such as more scholarships for the lowest income deciles, could alleviate this limitation and potentially increase enrollment in higher education.



Source: Own calculations based on CASEN 2013.

*Note:* Income deciles are created based on official per capita monthly income. Only state scholarships are considered in the analysis.

29. An exercise of gradual expansion of scholarship coverage shows slight first round effects on poverty and inequality reduction.<sup>72</sup> To estimate the impact of expanding scholarships for higher education to the seven lowest income deciles on poverty and inequality six different scenarios were considered. These range from 5 to 50 percent of tuition being paid by the government. The analysis does not use as a benchmark the jump from the sixth to the seventh income decile, this is mainly due to data limitations and that doing this would result in a small sample that would yield no changes.<sup>73</sup> In addition, the results of Table A.2 do not take into account that individuals tend to finance their tertiary education through loans. The simulated results indicate that the greater the state contribution the larger the impact on poverty and inequality reduction. However, it is important to note this is only a partial equilibrium analysis with a uniform

<sup>&</sup>lt;sup>70</sup> The SGL is the largest source of public funding in higher education in Chile.

<sup>&</sup>lt;sup>71</sup> Carnerio and Heckman (2002) distinguish short run liquidity constraints from long term factors that promote ability (that is, family income) and find that the latter is more important.

<sup>&</sup>lt;sup>72</sup> This analysis provides an approximation of the expected results from the government's policy to gradually provide full financing for tertiary education for the seven lowest income deciles.

<sup>&</sup>lt;sup>73</sup> Information on how much a student pays for tertiary education and if she receives a scholarship is available in household survey data, however the amount of the scholarship is not reported.

increase in earnings for the first seven deciles, thus only observes a first round partial effect on poverty and inequality. A more integrated analysis following the CEQ methodology explained in Box A.3 will provide further details on the incidence of expanding scholarships for tertiary education.

	Moderate Poverty	Extreme Poverty	Gini Index
Status Quo	14.513	4.536	0.51028
Simulation 1 (State Pays 5% of the Tuition)	14.465	4.490	0.51008
Simulation 2 (State Pays 10% of the Tuition)	14.384	4.454	0.50989
Simulation 3 (State Pays 20% of the Tuition)	14.283	4.422	0.50952
Simulation 4 (State Pays 30% of the Tuition)	14.160	4.392	0.50919
Simulation 5 (State Pays 50% of the Tuition)	13.988	4.371	0.50860

 Table 6.2. Poverty and Inequality Rates Conditional on State Funding

*Source:* Own calculations based on CASEN 2013. Moderate and Extreme Poverty are calculated using the new methodology for poverty measurement and using the official income aggregate. Calculations of the Gini Index for income inequality are based on household monetary income. State contributions to tuition are chosen arbitrarily. These results do not take into account the effect of the financing policy and are calculated only for the first seven income deciles.

30. Analysis of potential effects of expanding scholarships on tertiary education enrollment and completion show an increase of 5.4 percent in the probability of students aged 19 to 22 years of having tertiary education. Based on Szekely (2015), the effect of covering 100 percent of tuition cost of tertiary education in a public institution to those students between 18 and 23 years of age that currently do not receive any scholarship is a 5.4 percent increase in the probability of reaching tertiary education level. The impact on investments in human capital (education) is calculated by estimating the income elasticity of education expenditure based on data from the Survey on household expenditure (EPF 2011).

## Pillar 2. Improving the Conditions to Enhance the Quality of Tertiary Education

**Prior Action 4:** The Government of Chile has provided resources to state universities for institutional strengthening, research and innovation, teacher development and outreach activities to improve the quality of public education and its links with the labor market. (2015 Public Sector Budget Law 2015 Partida 09, Chapter 01, Program 30, Subtitulo 24, Item 03, Asignación 807 "Convenio Marco Universidades Estatales", Ministry of Education January 2015)

31. **Improving the quality of public higher education through increased resources will likely enhance labor market returns and reduce inequity in Chile.** As noted earlier, completion of higher education is associated with positive average returns and currently has the highest return of all education levels. This emphasizes the importance of investing in tertiary.<sup>74</sup> Nonetheless, in Chile it still produces a negative economic return for many.<sup>75</sup> On average, university degrees have a positive return of 62 percent, however, when this is broken down by decile we observe that the 90<sup>th</sup> percentile of the distribution has a net rate of return of 167 percent, while for the 10<sup>th</sup> percentile

<sup>&</sup>lt;sup>74</sup> Montenegro and Patrinos (2014).

<sup>&</sup>lt;sup>75</sup> Reyes, Urzúa and Rodríguez (2013).

there is a negative return of 16 percent.<sup>76</sup> These outcomes suggest individuals in the 10<sup>th</sup> percentile would have been financially better off not pursuing a tertiary degree.

32. Using CASEN household surveys (1990–2013) it is estimated that average schooling for the economically active population will increase. Results of a partial equilibrium analysis (that assumes no changes in labor demand) show that the stock of human capital will likely change towards higher proportion of the economically active population –those between 30 and 65 years of age- reaching completed secondary, incomplete and complete tertiary levels (Box 6.3). This analysis highlights the importance of transitioning to higher education in Chile while increasing its quality and relevance in the labor market.

#### Box 6.3 Distributional Effects in Human Capital and Returns in the Labor Market

This analysis based on Szekely (2015) assumes that the elimination of copayment in primary and secondary education, as well as expansion of scholarships for tertiary education are equivalent to an increase in family income.

The impact on investments in human capital (education) is calculated by estimating the income elasticity of education expenditure. The study then estimates the gaps in educational attainment for individuals between 6 and 22 years of age to determine the correlation between educational spending and the observed gap<sup>77</sup>. This gap is multiplied by the estimated elasticity to obtain the effective change in years of education that is expected from the elimination of the co-payment and scholarship coverage. This same analysis by income decile allows obtaining an education profile of the school-age cohort that will differ from the one observed before the implementation on the reform components. Finally, estimations of the potential distributional impacts on labor markets from this policy change are carried out.

# **Pillar 3: Strengthening Institutions for Poverty Measurement and Enhancing Targeting Mechanisms of Social Programs**

**Prior Action 5:** The Government of Chile has enhanced the measurement and monitoring of poverty by implementing and releasing (a) a revised official methodology for measuring monetary poverty and (b) launching and implementing an official Multidimensional Poverty Index (MPI). (2015 Public Sector Budget Law Partida 21, Chapter 09, Program 01, Subtítulo 24, Item 03, Asignación 330 "Encuesta CASEN", Ministry of Social Development, and Oficio No. 888 from MDS to the President of the Special Mixed Committee of Budgeting of the Borrower's Congress to inform the release of the new methodology, March 30, 2015)

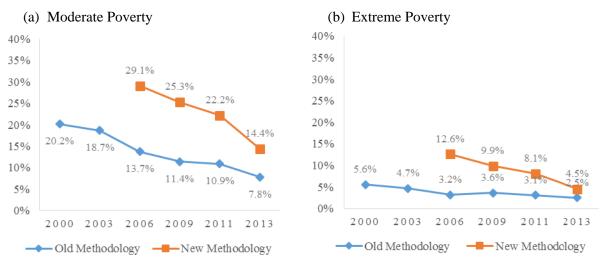
33. The new monetary poverty methodology is expected to enhance the quality of information to effectively monitor poverty and other social welfare indicators of equity. Chile's poverty measurement methodology had not been updated for over 25 years and thus there was an agreement among the policy, non-governmental and academic community that the traditional methodology did not reflect the current poverty situation of many Chilean households. The new income poverty methodology takes into account international best practices in terms of poverty measurement, Chile's current development level as well as Chile's societal preferences and highest standards (figure 6.12).

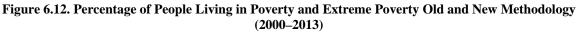
34. As the poverty measurement methodology in Chile solidifies and progress is measured transparently and communicated accurately and clearly, policymakers can focus more on addressing the country's key challenge of high inequality and on promoting

<sup>&</sup>lt;sup>76</sup> Gonzales-Velosa, Rucci, Sarzosa and Urzua (2014).

<sup>&</sup>lt;sup>77</sup> This is equivalent to the expected years of education according to the individual's age minus their observed years of education.

**prosperity for all.** Poverty measurements give governments the necessary information to target interventions aimed to alleviate poverty, monitor and evaluate relevant projects and policy interventions, and to evaluate the effectiveness of institutions whose objective is to help the poor. Thus, a clear process to produce credible and transparent measures is central for governments to track progress towards achieving their social agenda. The methodology and dissemination of data used is crucial to guarantee the quality and reliability of policies designed to target poverty. A trustworthy and high standard measure must be technically solid, operationally viable and easily replicable. The GoC is committed to update periodically the coherence and comparability of the measurement process to allow for comparisons across time and regions to design more effective policies.

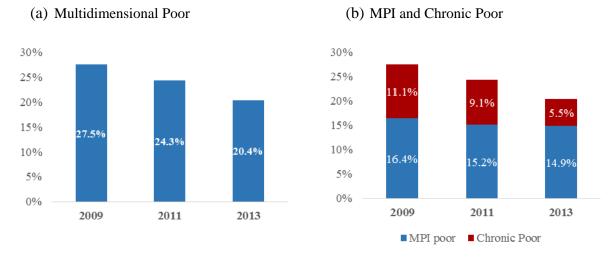




Source: Own calculations with Data from Ministry of Social Development.

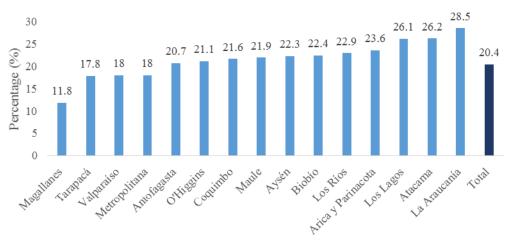
35. The implementation of a multidimensional poverty measure will enrich the processes of assessment, design and evaluation of social policies for vulnerable populations. The government recognizes that poverty is multidimensional and that many households' poverty levels also depend on a number of deprivations that affect their well-being and quality of life. Between 2009 and 2013, Chile's multidimensional poverty decreased from 27.5 percent to 20.4 percent. However this disguises important regional variations, with the lowest multidimensional poor region with a rate of 11.8 (*Magallanes*) and the highest with 28.5 percent (*La Araucanía*) Figure 6.14). Similarly Chile's chronic poor, defined as the proportion of individuals who are deprived in monetary and non-monetary dimensions, declined by 5.7 percentage points during the same time period.

36. **Multidimensional poverty assesses broader social and health-related aspects of poverty that directly affect households' welfare.** The MPI shows aspects in which the less welloff are deprived and helps to reveal the interconnections among those deprivations. It can be used to identify the poorest regions for geographic targeting, to monitor the effectiveness of programs over time, to identify in which indicators individuals are most deprived and finally to complement other measures such as inequality and income poverty. These applications allow policymakers to design policies and direct resources more effectively. In the Chilean case, multidimensional poverty indicators consider four main dimensions with equal weights: Education, Health, Labor and Social Security, and Dwelling. As in other cases of multidimensional poverty measurement, indicators are defined for each dimension, and for each of these a cutoff is set. When the particular household or person falls below the cutoff, it is considered deprived in that particular indicator. Within each dimension, every indicator has the same relative weight (table 6.3).



#### Figure 6.13. Chile's Multidimensional Poor (2009–2013)

*Source*: Own calculations using data from the Ministry of Social Development. *Note*: Figure (b) between those that are only MPI poor and those that are both income and MPI poor (Chronic Poor).



#### Figure 6.14 Regional Multidimensional Poverty (2013)

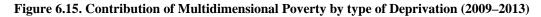
Source: Own calculations using data from the Ministry of Social Development.

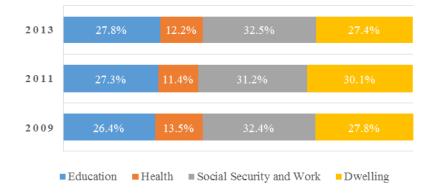
37. In 2013, the most common non-income deprivation for Chilean households concerns access to labor and social security and education (figure 6.15). Nearly a third of Chilean households don't have access to social security, 9 percent are unemployed and 10.7 percent do not receive pensions. For education, the largest share is in educational attainment, where 32 percent of Chilean households have individuals that obtained less years of schooling than stipulated by the law according to their age. The remaining education indicators, attendance and repetition are below 3 percent. This reflects the importance of addressing Chile's educational gaps. The MPI equips policymakers to design relevant policies based on its' populations deprivations.

	Dimensions				
	Education (25%)	Health (25%)	Labor and Social Security (25%)	Dwelling (25%)	
rs	Attendance	Child malnutrition	Employment	Overcrowding	
Indicators	Repetition	Enrollment	Social Security	Dwelling conditions	
Inc	Mean years of schooling	Attention	Retirement	Basic Services	

Table 6.3. Multidimensional Poverty Dimensions and Indicators

Source: Ministry of Social Development.





Source: Own calculations using data from the Ministry of Social Development.

38. **Positive impacts on policy design for effective poverty reduction are expected through identification and differentiation of monetary and non-monetary deprivations.** Studies have shown that people who are poor only as measured by income are often only temporarily in this condition due to a short term shock, and are referred to as "transient poor." People who are chronically poor, that is, stuck in the condition over an extended period, are typically not only income-poor but also face complex non-monetary challenges, such as sub-standard housing or lack of access to clean water and sanitation. The policy mix to address these types of poverty effectively may differ substantially.

39. Recent reductions in poverty in Chile reflect progress pulling out individuals from monetary poverty, however the share of population with non-monetary deprivations has stayed mostly unchanged across the regions. Following the methodology of Castañeda et al. (2012) chronic and transient poor are identified nationally and by region in Chile in 2009 and 2013. Castañeda et al (2012) developed a multidimensional approach using cross-sectional data that combines both monetary and non-monetary deprivations to differentiate the chronic poor from the transient poor in Brazil. The method relies on the idea that depth and complexity—two static characteristics of poverty—are associated with persistence. Every period, households are classified into four groups: (a) chronic poor (those who were multi-dimensionally and income poor); (b) transient poor: monetary poor but non-poor in the other dimensions; (c) poor in non-monetary dimensions: not poor in monetary but poor in non-income dimensions; and (d) the better off: those who were not deprived in any indicator. The analysis uses the new monetary and non-monetary poverty measures (figures 6.16 and 6.17).

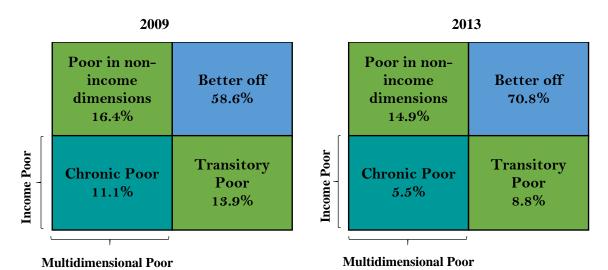


Figure 6.16. Chronic and Transitory Poor in Chile (2009–2013)

# *Source:* World Bank calculations based on CASEN 2013. Moderate and Extreme Poverty are calculated using the new poverty methodology and using the official income aggregate. Own estimations of Multidimensional Poverty Index using data from the Ministry of Social Development

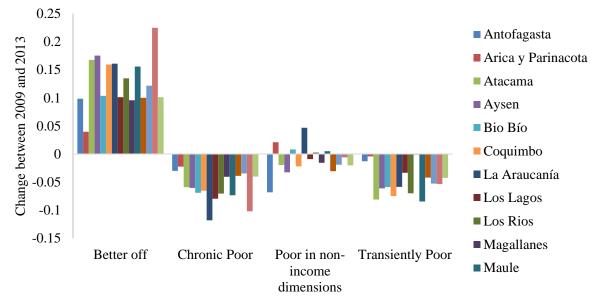


Figure 6.17. Changes in Share of Population Considered Chronic and Transient Poor in Chile by Region (2009–2013)

*Source:* Own calculations based on CASEN 2013. Moderate and Extreme Poverty are calculated using the new poverty methodology and using the official income aggregate. Own estimations of Multidimensional Poverty Index using data from the Ministry of Social Development.

**Prior Action 6:** The Government of Chile has designed a new allocation model for benefits and social services to improve targeting for social programs. (*Oficio No. 1244 of March 30, 2015 from MDS to the President of the Special Mixed Committee of Budgeting of the Borrower's Congress describing the effect of the new allocation model in the improvement of the targeting of social programs, 2015 Public Sector Budget Law Partida 21, Chapter 01, Program 01, Subtítulo 24, Item 03, Asignación 241 "Sistema de Apoyo a la Selección de Beneficios Sociales" Ministry of Social Development).* 

40. **Improving targeting for social programs will likely result in better policy design and indirectly contribute to poverty reduction and enhancing equity.** Harmonization of benefits and social services available, as well as improving the efficiency of these can be a valuable tool in meeting Chile's goal of social inclusion. In particular, the new System for Support of Social Selection will allow for the development of a system aims to move away from a system that targets based on socioeconomic status, to a more inclusive one that adds more information for the identification of beneficiaries of social programs.

41. **Targeting social transfers to the poor can contribute to poverty alleviation.** Coady, Grosh and Hoddinott (2004) find that targeted programs provide on average 25 percent more resources to the poor than would random allocations. Nonetheless, design and implementation details matter for distributive outcomes.<sup>78</sup>

<sup>&</sup>lt;sup>78</sup> Coady, Grosh and Hoddinnott (2004) summarize targeting outcomes from 122 targeted social assistance programs in 48 countries.