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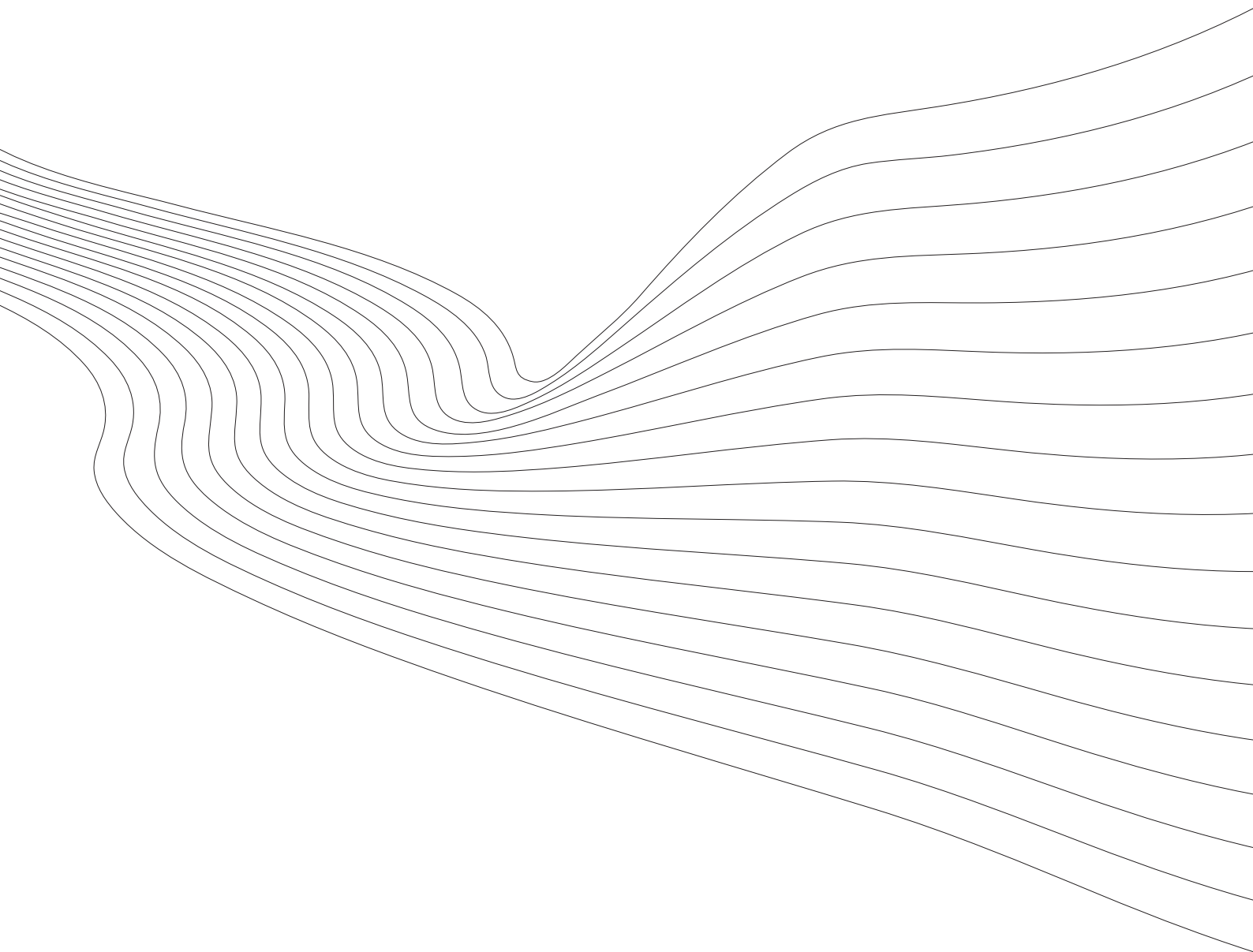
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KOF Factbook Education System Chile



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List of Abbreviations

AAs	Accreditation Agencies
APEC	Asia-Pacific Economic Cooperation
CFT	Technical training centers
CNA	National Accreditation Commission
CNED	National Education Council
CNFP	National Council for Vocational Education and Training
CRUCH	Council of Rectors of Chilean Universities
ECC	Early Childhood Care
ECE	Early Childhood Education
EMCH	Elective courses in scientific-humanistic studies
EMPT	Technical-professional studies
GDP	Gross Domestic Product
GII	Global Innovation Index
GVA	Gross Value Added
ILO	International Labour Organization
IP	Professional Institutes
ISCED	International Standard Classification of Education
KOF	Swiss Economic Institute
MINEDUC	Ministry of Education
OAS	Organization of American States
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
PMR	Product Market Regulation
PPE	Pre-primary Education
PSU	National admission test
R&D	Research and Development
SINAC-ES	National Higher Education Quality Assurance System
STEM	Science, Engineering and IT
UCE	Unit of Curriculum and Evaluation
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEVOC	International Centre for Technical and Vocational Education and Training
VET	Vocational Education and Training
VPET	Vocational Professional Education and Training
YLMI	Youth Labour Market Index
WEF	World Economic Forum

FOREWORD

In the last years, vocational education and training has received more and more attention. The increased pressure to upgrade the skills of the workforce through an increasingly competitive world economy, or the high youth unemployment rates in the aftermath of the world economic crises putting pressure on politicians to provide solutions could be part of the reason why. In fact, vocational education has, among others, been suggested as one major solution to these problems since it provides an education pathway for those who do not continue with tertiary level education and helps upgrading the skills of those who would have started working immediately and would have received some form of on-the-job training.

The increased attention for vocational education and training was in particular perceptible among policy makers. In Europe, the European Commission defined common objectives for the further development of the vocational education and training systems of the European countries for 2020 and an action plan for the upcoming years in the *Bruges Communiqué on enhanced European cooperation in vocational education and training for 2011-2020* (European Commission, 2010). In the United States, Obama mentioned in a speech that he wanted to increase the investment in vocational education and training system of the United States of America (The White House, 2015). But also many other countries worldwide, such as South Korea or Hong Kong, show increased interest in extending their vocational education system.

Worldwide, only a few countries have a well-elaborated and efficient vocational and professional education and training (VPET) system, among these the Swiss VPET system. It is a good example of how an education system can contribute to the successful matching between market demand and supply. It is highly efficient in getting the adolescents into the labour market (7.7% from 2005-2012, compared to the OECD average of 14.6%, OECD, 2015).

Though not many countries have VPET system that is comparable to Switzerland, many have a vocational component in their education system. To provide information about the education systems of other countries, with a special focus on the part of the education system teaching vocational skills, is the major purpose of the KOF Factbooks Education System.

SUMMARY

In the KOF Factbook Education System Chile, we will describe the vocational system of Chile in general and in particular refer to factors that are crucial for the functioning of the system. Among others, these comprise the regulatory framework and the governance of the VPET system, specifying the actors that are involved and which competencies and duties they have. Further, the curriculum development and the actors involved in this process, as well as the financing of the system, etc.

The Factbook is structured as follows. We will refer to the Chilean economy, labour market, and political system in the first part of this Factbook. The second part is dedicated to the description of the entire formal education system. The vocational part of Chile's education system will be explained in the third part. And finally, the last section gives a perspective about the set of reforms Chile's education system went through in the past and will face in the future.

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The KOF Factbook Education System series has to be regarded as work in progress. The authors do not claim completeness of the information which has been collected carefully and in all conscience. Any suggestions for improvement are highly welcome!

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1. The Chilean Economy and its Political System

One of the main purposes of an education system is to provide the future workforce with the skills needed in the labour market. The particularities of a country's economy and labour market are important factors determining the current and future demand for skills. Therefore, these will briefly be described in the first part of this Factbook. In addition, this part provides an overview of Chile's political system with emphasis on the description of the education politics.

1.1 The Chilean Economy

Since a long time, the Chilean economy has been an exception among the other Latin American economies. Due to persistently high economic growth above the OECD average, it has the highest per capita income in Latin America and is a member of the OECD since 2010. In addition, Chile mastered the global economic and financial crisis starting in 2008 better than many other OECD countries (OECD, 2013a). This is largely due to Chile's sound macroeconomic, fiscal and monetary policies, its well-developed financial system and up-to-date institutions. Hence, it represents a benchmark for other emerging market economies involved in structural reforms (OECD, 2003).

Starting in the 1970s, Chile was the first Latin American country which implemented extensive trade and market liberalization reforms. Being ruled by an authoritarian regime by this time (1973-89), Chile returned to democracy in 1989. The successive democratic governments pursued a market-oriented strategy, reforming and modernizing the economy further (infrastructure, trade and capital markets) and improving equity in the country by raising the spending in education and health care and by re-establishing workers' rights. The success of these reforms, resulting in a GDP per capita growth of about 8% p.a. from 1989 to 1997, was not sustainable in the years thereafter (1998-2013), where GDP per capita growth declined to an average of 4.1% p.a. Besides a sluggish global economy affecting the Chilean economy around 1998-2003, there were also domestic causes for this slowdown in GDP growth (OECD, 2003).¹

¹ One example is the privatisation of the pension system initiated in the early 1980s. While the pension system was privatised in the early 1980s, competition among pension funds remained insufficient. In addition, the problem of an ageing population, imposing higher spending in the future, was not approached. In the light of persistently low social contributions (as a result of a low number of well-paid jobs in the economy, due to high hiring and firing costs, an ever rising minimum wage and high number of unskilled workers) and low contributions to pension funds out of which the pensions should be financed, the privatization of the pension system was not well elaborated. Rather, it should have gone hand in hand with a deregulation of the labour market legislation, improvements in the unemployment insurance and efforts to increase the labour market participation and training opportunities of adolescents and women and to increase competition among pension funds (in order to lower the high administrative costs of the pension market) (OECD, 2003).

In the successive years (from 1998 until approximately 2010), further mutually reinforcing reforms to foster sustainable economic growth followed. These concerned the education system (increase educational outcomes), the labour (increase labour force participation) and product market (lower entry barriers), as well as the financial markets (increase competition), productivity and innovation, and environmental standards (OECD, 2013a).

Today, Chile is a role model economy in the region with persistently high economic growth compared to other OECD countries, renowned for its prudent fiscal policy, strong inflation-targeting framework and healthy financial sector. In the time period from 1986 to 2008 Chile experienced, after South Korea, the second highest GDP growth among all OECD countries and, therewith, ranks first among all Latin American countries. In the time from 1986 to 2008, Chile's average GDP growth was at 6.1% p.a., while that of South Korea was at 6.8% p.a. (OECD-average: 2.8% p.a.).

Despite its economic success, inequality in Chile is still high: among all OECD countries, Chile has the highest income inequality (Gini Coefficient of 0.5, OECD: 0.31 in 2010)². However, relative poverty has declined faster than in any other OECD country (-6% points since 2005) (OECD, 2013a:12).

Despite efforts to increase educational attainment in Chile, a further bottleneck for productivity growth in general in the past was the lack of a skilled workforce which influences firms' capacities to adopt new technologies and organisational or marketing innovations. In 2010, the OECD suggested to improve the overall education quality and access to higher education in general and the qualification level of the Chilean workforce in particular. This by improving and expanding the vocational education and training (VET) sector and lifelong learning, fostering mobility from low-productivity to higher productivity jobs (OECD, 2010:67). While the first suggestion had been implemented, the reform concerning the VET system was still not realised by 2013 (OECD, 2013a:9).

In 2013, the service sector was the most important component of the gross value added (GVA) of the Chilean economy (61.3%, see Table 1). Thereby, each service subsector contributed a similar share to the aggregate. Also the service sector was the most important one in terms of employment in 2013. A similar result holds for the EU-28 countries. Here, also the service sector was most important to the economy- in terms of value addition and employment. The ratio between labour invested and value added produced indicates higher labour productivity of Chile in the secondary sector relative to the EU-28 countries and vice

² The Gini Coefficient is a measure for income inequality. The Gini is zero if everyone has the same income and is one if a single person has all the income. Income refers to income after taxes and transfers, adjusted for difference in household size (<http://www.oecd.org/social/income-distribution-database.htm>).

versa for the tertiary sector. In the secondary sector in Chile, roughly one half of the value added is produced in the mining, the other half in the manufacturing sector (11.5%). The primary sector is still quite big in Chile with almost twice as big shares of value added and total employment of the total economy compared to the EU-average.

Table 1: Breakdown of total value added and employment by sectors, 2013

Sector	Chile: Value added (%)	EU-28: Value added (%)	Chile: Employment (%)	EU-28: Employment (%)
Primary sector	3.4	1.7	9.7	5.0
Agriculture, hunting and forestry, fishing	3.4	1.7	9.7	5.0
Secondary sector	35.3	24.5	21.1	21.9
Manufacturing, mining and quarrying and other industrial activities	26.8	19.1	12.5	15.6
of which: Manufacturing	11.5	15.3	11.7	14.0
Construction	8.5	5.4	8.6	6.3
Tertiary sector	61.3	73.8	69.2	73.1
Wholesale and retail trade, repairs; hotels and restaurants; transport; information and communication	17.5	23.8	31.8	27.5
Financial intermediation; real estate, renting and business activities	20.9	27.1	8.7	15.9
Public administration, defense, education, health, and other service activities	22.9	22.9	28.7	29.7

Sources: OECD (2014a,b) and Eurostat (2015a,b)

In general, vigorous competition in product markets and an appropriate innovation policy framework are two important ingredients for attaining strong productivity growth. Although Chilean economy is the most competitive one in Latin America, the country has still some distance to the leading countries³. According to the WEF Global Competiveness Index (GII) rankings 2014-2015, Chile ranks at the 34th place. The country owes its position mainly to its traditional strengths: macroeconomic stability, an efficient government, and a strong institutional setup. In contrast, Chile's educational system has important weaknesses, in particular in mathematics and science. In addition, firms do not get the workforce with the necessary skills in order to increase their productivity or to start innovative projects (WEF, 2013: 37).

With regard to product market regulation, Chile has a level of regulation comparable to some of the other OECD countries. Taking the OECD Index of Product Market Regulation (PMR) into account, there has been considerable decrease in PMR from 2008 to 2013 (OECD, 2013b). The index dropped from 1.75 to 1.51 index points. Therewith, PMR in Chile is

³ Top five countries 2014/15: Switzerland on the first place in the overall ranking, followed by Singapore and the United States, Finland and Germany.

comparable with that of Switzerland (index-value: 1.50 in 2013) but much higher than that of the USA (1.08 in 2013). The state-involvement in the economy is not excessive and there has been a trend for less control since 2008. Although the complexity of regulations for starting a business (which could mean a barrier to entrepreneurship) is less competition friendly than in other countries, Chile's administration has made great efforts to reduce burdens on start-ups. In contrast, barriers to trade and investment are relatively moderate (Koske et al., 2014).

Compared to the high competitiveness of Chile's economy, the country has a rather poor innovation capacity. According to the Global Innovation Index (GII) 2014 (Dutta et al., 2014), Chile ranks on 46th position, but it is still the most innovative country amongst the Latin American countries. According to the OECD (2013a), the business research and development (R&D) intensity of the Chilean economy is low and technological progress has suffered since there are not enough domestic science, engineering and IT (STEM) graduates. As a consequence, innovative outputs have been weak.

1.2 The Labour Market

In the first part of this section, we will describe the general situation on Chile's labour market. In the second part, we will refer to the youth labour market in particular.

1.2.1 Overview of the Chilean Labour Market

The level of competitiveness and innovation performance of the Chilean economy is closely related to the labour market. In 2011, about 66.2% of the Chilean population aged 15-64 years participated in the labour force (Table 2). The labour force participation rate is vitally lower for the youth (15-24 years: 38.4%) than for the adults (25-64 years: 75.5%). Although the rates are quite high, compared to other Latin American countries, they are for all age groups still slightly below the OECD average. The labour force participation rate among the adults is highest for those with tertiary education (88.1%) and lowest for those with less than upper secondary education (63.8%). These are very similar to that of the OECD average.

In contrast, the overall unemployment rate in Chile was with 7.4% slightly below the OECD average in 2011 (Table 2). The same was true for the unemployment rate among adults (5.6%), where the risk of becoming unemployed was lowest for those with tertiary education (4.3%). Surprisingly, unemployment was higher for those with upper secondary level education than for those with lower secondary education.

At a first glance, this result is rather surprising, since education is in general a good insurance against the risk of being unemployed. One possible explanation for this result could be that roughly one third of the labour force is employed in sectors of the economy with

a low skill requirements- namely the agricultural, hunting and fishing sector, the mining and quarrying, as well as construction and partly the manufacturing sector. Another possible explanation for the low unemployment rate could be the low labour force participation rate. If less people participate in the labour force, less can become unemployed. However, unemployment at all education levels was (well) below the OECD average.

According to the OECD Index of Employment Protection, Chile has a comparatively high level of employment protection for permanent workers (regular contracts) which lies above the OECD average (index value of 2.63 versus 2.04 of the OECD average in 2013). The trade union density is very modest (in 2012 Chile: 15.3%; OECD Average: 17.0%). In addition, Chile has the lowest income tax level of all OECD member states, which is an advantage with respect to competition.

Table 2: Labour force participation, unemployment by education 2011

	Labour force participation	OECD average	Unemployment rate	OECD average
Total (15-64 years)	66.2	70.6	7.4	8.1
Youth (15-24 years)	38.4	47.3	17.5	16.2
Adults (25-64 years)	75.5	76.1	5.6	7.0
Women (15-64 years)	53.9	61.8	8.9	8.1
Less than upper secondary education (25-64 years)	63.8	63.4	6.0	12.6
Upper secondary, post-secondary level education (25-64 years)	75.1	79.8	6.4	7.3
Tertiary education (25-64 years)	88.1	87.5	4.3	4.7

Source: OECD (2013a, 2014c).

Despite a recently very dynamic labour market and a low unemployment rate in the past years, according to the OECD (2013a:27 et seq.) some groups still remain at the margin of the labour market- namely women, low-skilled workers and young people. Therefore, the OECD opines that if these groups were integrated in the labour market, this could help to counteract the ongoing decline in labour supply growth and help to reduce poverty. On the other hand, prolonging the time youngsters spend in education could yield more effective outcomes with regard to poverty, but also for overall economic growth.

1.2.2 The Youth Labour Market

The low labour market participation of young people in Chile reflects to a large part the poor basic skills and difficulties to transition from study to work. Improving the employability of the youth implies improvements in the quality of and access to compulsory education (especially for the most vulnerable groups), as well as the use of the workplace as a place of learning, in particular with respect to VET but also for academic programmes (OECD, 2013a:31).

The labour force participation rate of the youth (aged 15 to 24) was with 38.4% in 2011 about 19% below the OECD average. And youth unemployment in Chile stood with 17.5% above the OECD average in 2011.

In general, there are several barriers and disincentives to hire the youth in general and to realize a combination of school- and work-based training in particular. One example is Chile's high minimum wage (67% of the median wage, OECD average: 48% in 2011) for all workers above the age of 18 (the minimum wage for those below 18 has been reduced in the past), which make employers reluctant to hire those with the least work experience. On the other hand, a minimum wage can help prevent the spread of low-pay jobs. Apprenticeship contracts for the youth could be a good alternative for both sides, since it implies low-cost labour for the employers and education for the youth, given that the training programmes are of high quality (OECD, 2013a:32.).

Chile's strict employment protection legislation is in general a barrier to hiring, especially for the youth. While the regulation of temporary contracts is low, it is very high for regular contracts, making employers reluctant to convert temporary to permanent contracts. Which, in turn, results in high turnover rates due to a high share of temporary contracts⁴. This hurts the youth the most, since they are to a large extent the ones who are hired on temporary contracts, which makes it hard for them to get a permanent contract and thus into regular employment (OECD, 2013a:32.). Apprenticeship contracts, exempting the youth for the time of training from these regulations, could be one possibility to improve the transition of the youth into regular employment. In order to facilitate the transition of the youth into decent jobs, the OECD (2013c) suggests that severance payments for regular workers should be reduced and in order to keep the youngsters in the labour force, the unemployment insurance should be strengthened.

Chile has training programmes that combine school- and work-based training and which have the goal to enhance the transition of the youth into the labour market. However, according to the OECD (2013a), these are of poor quality, do not meet the requirements of the labour market and are so job-specific that they leave little possibilities to move within the VET system or towards higher education.

⁴ As a consequence, high labour turnover can potentially reduce labour productivity. First because temporary workers always need some time in the beginning to get familiar with the tasks they need to do. If they are exchanged over and over again, this involves a productivity loss (cost). And second because firms have relatively little incentives to invest in the training of temporary workers.

One part of the public training programmes is an “apprenticeship programme”⁵ aiming to increase the employability of disadvantaged youth (*Formacion en el Puesto de Trabajo, Aprendizices*). All workers in this programme are between 15 and 24 years old. It lasts for 12 months and combines on-the-job with classroom training. During this time, the apprentice receives half of the minimum wage and the employer a training voucher with the aim of incentivizing him to provide further training. Apart from this, Chile has other training programmes (including internships) which are designed to provide the adolescents with the basic skills necessary for job readiness (numeracy, basic computer competencies etc.) (OECD, 2013a:64). However, these programmes are rather comparable to active labour market programmes than to decent VET training. In addition, it is not clear yet if these programmes are really effective (OECD, 2013a: *ibid.*). One of the bottlenecks for realizing a combination of the school- and work-based education and training in past were strict regulations on working hours, making the combination difficult. However, a new act is on the way to lower the regulations and add more flexibility here (OECD, 2013a:32).

Another attempt of the Chilean government to improve the school-to-work transition of the youth has been an in-work benefit (*Subsidio al Empleo Joven*) launched in 2009. This is a monetary contribution granted by the State to improve the salaries of workers between 18 and under 25 years of age who receive low wages (i.e. belong to the most vulnerable 40% of the population). However, this programme, has scarcely been taken up by the employer side and thus might not contribute substantially to job creation (*ibid.*).

The KOF Youth Labour Market Index (KOF YLMI)

To compare the labour market situation of adolescent across countries, the KOF Swiss Economic Institute developed the KOF Youth Labour Market Index (KOF YLMI) (Renold et al., 2014). The basic idea behind this index is that a single indicator, such as the unemployment rate, does not suffice to describe the youth labour market adequately and to provide enough information for a comprehensive cross-country analysis. To improve the information content of such an analysis and to foster a multi-dimensional approach, the index consists of twelve labour market indicators⁶, which are summarized in four categories.

The first category describes the *activity state* of the young, specifically of those between 15-24 years old, on the labour market. Therein, the adolescents are classified according to whether they are employed, in education or neither of both (unemployed, discouraged and neither in employment nor in education or training, see info box to the right). The category

⁵ This term was used by the OECD (2013a), though it might be misleading if compared to the use of the term in countries with a successful apprenticeship system, as for example Switzerland.

⁶ The data for these indicators are collected from different international institutions and cover up to 178 countries for the time period between 1991 and 2012.

working conditions and the corresponding indicators reflect the kind and the quality of jobs of the working youth. The *education* category accounts for the share of adolescents in education and training and for the relevance of and need for their skills on the labour market. The fourth category, *transition smoothness*, shall connect the other three categories by capturing the school-to-work transition phase of the youth. Each indicator of the KOF YLMI ranges from 1 to 7. Thereby, a higher score reflects a more favourable situation on the youth labour market and a more efficient integration of the youth in the labour market.

Dimensions of the KOF YLMI	
Activity state	- Unemployment rate - Relaxed unemployment rate ⁷ - Neither in employment nor in education or training rate (NEET rate)
Working conditions	Rate of adolescents: - with a temporary contract - in involuntary part-time work - in jobs with atypical working hours - in work at risk of poverty ⁸ Vulnerable unemployment rate ⁹
Education	- Rate of adolescents in formal education and training - Skills mismatch rate
Transition smoothness	- Relative unemployment ratio ¹⁰ - Long-term unemployment rate ¹¹
Source: Renold et al. (2014).	

One of the major drawbacks of the KOF YLMI is the data availability. Often, a category is based on a single indicator or no indicator for that category exists at all. This could make comparisons across countries or groups of countries problematic or even impossible. As it can be seen in the following, this is the case for Chile.

The KOF Youth Labour Market Index for Chile

For Chile, there are only two indicators of the above mentioned indicators available, namely the unemployment rate and relative unemployment ratio. Therefore, conclusions based on this index are very limited.

Figure 1 shows the evolution of the (limited) KOF YLMI for Chile since 1991 until 2012 and compares it to the OECD-average. In the entire time period from 1991 to 2012, Chile had a lower score of the (limited) KOF YLMI than the average of OECD countries. This is equal to saying that Chile constantly had a higher unemployment and relative unemployment ratio, i.e. the youth unemployment rate was higher than the adult unemployment rate, than the OECD average, as it can be seen in Figure 1.

⁷ It is calculated as the number of unemployed and discouraged workers as a share of the entire labour force. Discouraged workers have given up the search for work (not actively seeking), although they have no job and are currently available for work (also: "involuntary inactive").

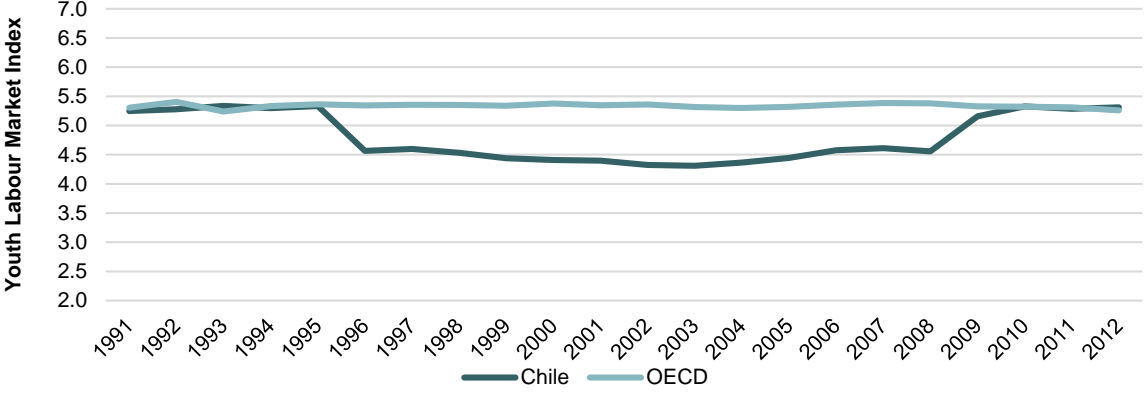
⁸ Those who cannot make a decent living out their earnings, being at risk of poverty as a percentage of the working population.

⁹ Share of the employed population working on their own account or those working in their family business and thus contributing to the entire family income. Both are less likely to have formal work arrangements and are therefore less protected by labour laws and more exposed to economic risk.

¹⁰ Is defined as the youth unemployment rate (15-24 years) as a share of the adult unemployment rate (25+). If the youth cohort is affected in the same way than the adult group with respect to unemployment, then the relative unemployment ratio will be equal to one. If the youth are relatively more affected, then the ratio will be bigger than one.

¹¹ Those unemployed for more than one year (52 weeks) in the total number of unemployed (according to the ILO definition).

Figure 1 : KOF YLM-Index Chile versus the OECD average, 1991-2012



Source: KOF (2014).

1.3 The Political System

Understanding the basics of a country’s political system and getting to know the political goals with respect to its education system, are crucial points for the understanding of the education system in a broader sense. In the first part, we explain Chile’s political system in general. The politics and goals and regarding the education system will be referred to in the second part.

1.3.1 Overview of Chile’s Political System

After the military coup in 1973, which overthrew the democratic government of Salvador Allende, Chile was led by the dictator Augusto Pinochet. In 1989, the democratic parties allied in the so-called group *Concertación* and removed the dictatorship. Since then, Chile’s political system can be classified as a presidential system, as most of the South American countries have. A presidential system is composed of a strong president, which is not only head of the state but also leads the government. According to Rinke (2008), the president of Chile, has, even compared to other Latin American countries, a very powerful position. The president appoints amongst other things three members of the constitutional court, the government’s secretaries, the regional governors, and commander-in-chief of the armed forces. Moreover, the president has veto-holding powers against the legislative’s bills, which only can be avoided with a three third majority in the parliament. However, the president is still dependent on a multi-party coalition in order to ensure a majority in the parliament. Since the Concertación has a common program, the government is highly stable since the democratic turn in 1989. Although the Concertación is dominated by left and center parties, the firms support the government, as a neo-liberal discourse is predominant in the Chilean society. As a consequence, the firms have a high influence on the governmental policies while the trade unions are rather weak by comparison.

According to the Economist's Democracy Index of 2012, Chile ranks 36th out of 167 countries and is thus classified as a flawed democracy (Economist Intelligence Unit, 2012). In particular due to its low score in political participation, Chile fails to be acknowledged as a full democracy. This is a result of the still present conflict with the indigenous population of Chile, with whom the government has unsolved problems about land questions and cultural autonomy.

With regard to corruption, Chile ranks 20th of 182 countries in the Corruption Perception Index of Transparency International in 2012 (Transparency International, 2012). In doing so, the country has not only the best score in South America, but also a higher score than European countries like France or Austria.

Chile is currently not only member of the Organization of American States (OAS), but also the only South American country that participates in the Asia-Pacific Economic Cooperation (APEC). Therefore, it seeks to conclude free-trade area agreements with several countries. Since 2010, Chile is also member of the OECD.

1.3.2 Politics and Goals of the Education System

Since its independence in 1810, Chile is characterized by a strong centralism. As a consequence, the ministry of education is the most important actor in the education system, as it sets the framework and guidelines of the national education policy. In contrast to many other countries, the decisions for all educational levels are made by the ministry (OECD, 2013d). The ministry gives licenses for schools to operate, monitors school and student performances, and sets school subsidies. However, within this framework, the schools are relatively autonomous. Basically, one can distinguish between municipal schools and privately managed subsidised schools. While privately managed schools have full autonomy, about half of the decisions for the municipal schools take place at the ministry's level.

According to the OECD (2013d), Chile has mainly two challenges that are the central aspects of the latest educational policies: quality and equity. On one hand, a large proportion of students show low reading proficiency according to PISA (Programme for International Student Assessment) in 2009. On the other hand, and more important, not everybody has the same educational chances, in particular those with a socio-demographically disadvantaged family background or from rural areas. School performances vary greatly across the country, and the better schools, mainly the privately managed schools, have too expensive fees for most of lower class students. In addition, upper secondary students are still expected to continue on a higher education.

In order to strengthen performance and support for disadvantaged students, the government has introduced a law on preferential subsidies. It increases funding for schools that endorse those students until the secondary education.

With regard to tertiary education, a more comprehensive scholarship program was introduced paying full tuition expenses for high-performing disadvantaged students. Moreover, interest rates were decreased for student loans.

To support quality assurance, the parliament has drafted a bill, which aims to increase monitoring and evaluating schools to ensure quality. Another effort has been made to enhance professionalism amongst teachers and school leaders. In many cases, school leaders have exercised pedagogical leadership and received special training, but they were not professionally recruited. As a result, a recent reform has been established requiring competitive and open selection processes for school leaders, as well as higher salaries.

2. Formal System of Education

This section contains an overview of Chile's education system, from pre-primary education until the tertiary education level. Overall, it comprises eight years of basic education (Educación Básica) and four years of secondary education (Educación Media) and is compulsory for this time or until the pupils are 18 years old.

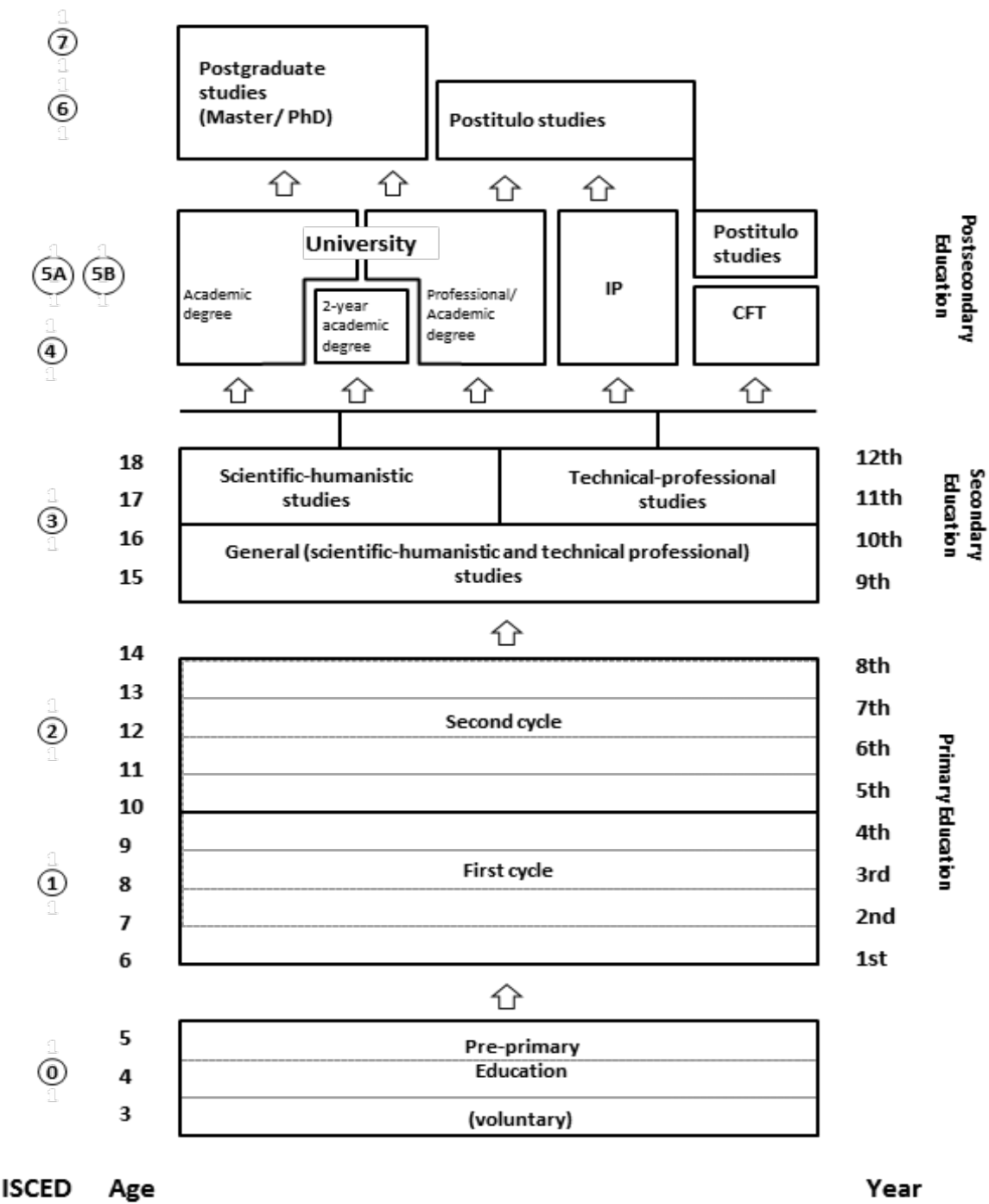
Figure 2 shows the structure of the entire education system including the abovementioned postsecondary studies and the connections (freedom of choice) between the single institutions.

2.1 Pre-Primary Education

Pre-primary education (PPE; *Educación Parvularia*) is provided for children up to the age of 5 and is not part of compulsory education. Figure 2 shows the levels of education according to the *International Standard Classification of Education* ISCED (UIS, 2012). All forms of pre-primary education in Chile are classified as ISCED 0 level¹². These consist of “education only” programmes (or Early Childhood Education (ECE) programmes) which focus on the learning aspect, and so-called integrated programmes which include education and childcare (Early Childhood Care (ECC)). Both are delivered by qualified teachers and follow a formal curriculum (Santiago et al., 2013). These forms of PPE exist nationwide.

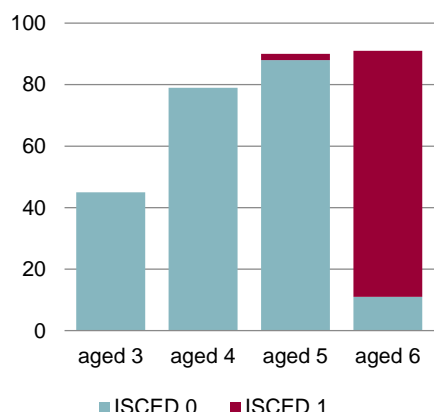
¹² The UNESCO defines *early childhood* as the period from birth to eight years old (UNESCO, 2003). Various interpretations of *early childhood* exist. All definitions centre around the three key concepts: early childhood care, development and education. Even if not clearly separable from the child development perspective, the *learning aspect*, namely *early childhood education* (ECE), shall be at the centre of attention in this document.

Figure 2: Structure of Chile's Education System



Source: Own graphical representation.

Figure 3: Enrolment rates in pre-primary education by age



Source: OECD (2012).

Figure 3 presents the enrolment rates according to ISCED level and age. For most of the pupils, pre-primary education starts at the age of 4 and lasts for 2 years. In 2012, only 45% of all 3 years old children, 79% of all 4 years old, 88% of those aged 5 and 11% with age 6 were enrolled in PPE (Figure 3). Compared to the OECD average rates are quite low for the 3 and 4 years old and better for the 5 to 6 years old (3 years: 70%, 4 years: 82% and 5 years old: 81%, still 22% of the 6 years old).

Regarding the financial structure and organization, 34% of all institutions classified as level 0 were publicly funded and organized in 2012, whereas the majority of 60% are

subsidized privately (private but government-dependent institutions) and only a tiny minority of 6% is entirely funded privately (OECD, 2014b).

2.2 Primary and Secondary Education

As Figure 3 shows, the vast majority of pupils aged 6 attend programs which are classified as ISCED level 1. This age marks the beginning of primary (*Educación Básica*) and mandatory education at the same time. Primary education usually lasts for eight years, up to the age of 13 and is divided into two cycles which each takes 4 years. During this time, all pupils attend the same classes and programs and are not assigned to different skill levels. With regard to equity, this late tracking of students is good for ensuring equal chances among pupils with different social backgrounds. Regarding the ISCED level, primary education encompasses level 1 and 2. For a better overview, the educational system's structure is depicted in Figure 2.

Secondary education (*Educación Media*) starts at the ninth grade and last for 4 years until the twelfth grade when pupils leave formal education, usually with the age of 17. According to ISCED, this education stage is classified as level 3. As of 2003, 4-year secondary education is compulsory for all students and, as for primary education, there is one national curriculum framework which roughly sets the content of the educational programs and minimal achievement requirements for all educational levels.

Secondary education is organized in two stages, each lasting for 2 years and commonly referred to as lower and upper secondary education. The first two years offer general subjects but comprise elective courses in scientific-humanistic studies (EMCH) and technical-professional studies (EMPT). The second stage (grade 11 and 12, also referred as

upper secondary education) gives students the choice between either of the two study directions. Students deciding for the general, rather academic curriculum (scientific-humanistic studies) are prepared to enter tertiary education (universities), whereas students who choose the technical-professional track are intended to follow the vocational education and training track (VET track) leading to a direct entrance in the job market or to a professional study at the tertiary educational level. In 2011, about 64% of all students in upper secondary education followed the general path, whereas 36% decided for the vocational track (Santiago et al., 2013:16). After completion of secondary education, all students receive a leaving certificate (*Licencia de Enseñanza Media*).

2.2.1 School Providers

The Chilean formal system of education knows four types of school providers, which are mainly classified according to their private or public status (Santiago et al., 2013:15; OECD, 2003:20):

- **municipal schools** are public institutions overseen by municipalities;
- **private subsidized schools** are private for-profit or private non-profit institutions run by an organization that receive public subsidies;
- **private non-subsidized schools** are private for-profit or private non-profit schools run by an organization that does not receive any public subsidies;
- **public schools with delegated administration** are institutions run either by public or private organizations but are owned by the Ministry of Education, mostly offering programs in technical-professional education.

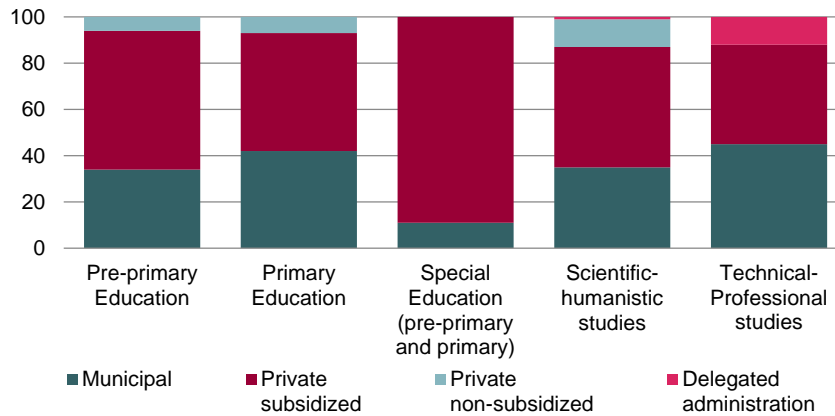
Figure 4 gives an overview of the enrolment rates of the different school providers regarding each school level separately. Noteworthy is the dominance of privately subsidized schools among almost all educational stages apart from technical-professional studies in secondary education.

Regarding this education level, there is a small share of schools with public delegated administrations which otherwise do not exist. Enrolment in private non-subsidized schools is rather low throughout all levels. In addition, it has to be noted that in total there are only 4% of students enrolled in special education on pre-primary and primary level. Special education refers to schools for mentally and/or physically handicapped children (Santiago et al., 2013:16).

However, the continuously increasing number of students enrolling in privately subsidized is the result of an ongoing development, whereas enrolment in public, municipal schools which

represented clearly the largest share of enrolments two decades ago, has dropped to a total share of about 40% (Santiago et al., 2013).

Figure 4: Enrolment rates by education level (and specialization) and by type of provider



Source: Ministry of Education (2014).

This trend came along with the education reforms of the 1980s which decentralised the administrative structure of public schools and introduced a new nationwide funding system which guarantees free school choice. The system is based on per-student-subsidies for schools (municipal and private schools) and works like a voucher system where parents receive entitlements for each school-attending child from the state. This voucher can then be redeemed by parents for the preferred school (public or private-subsidized), whereas school can cash-in the vouchers from the governments. The free market characteristic of the system causes more competition among schools which, eventually, could improve education quality. It further allows low-income students the attendance of private-schools.

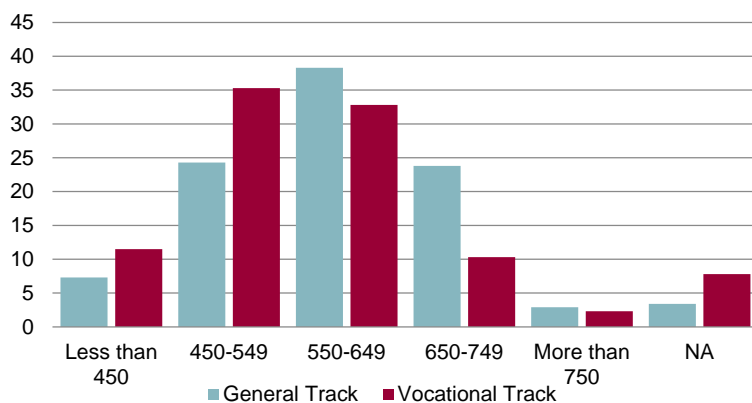
2.2.2 Transition to Postsecondary / Tertiary Education

Whenever there are admission requirements for entering tertiary education institutions, they are based on the results of the national admission test (*Prueba de Selección Universitaria*, abbr.: PSU) and sometimes also on a secondary school report (*Notas de Enseñanza Media*). The PSU is a compulsory test in the subjects language and mathematics and optionally in social science or science. It is open to applicants to choose all four tests. As the name suggests, the test is of particular interest for prospective university students since, in total, there are 33 universities using the PSU to admit students. In these cases, the minimum application score is 450 points (average of mathematics and language) out of a point scale ranging from 150 to 850 points. However, there are many other universities that do not require particular PSU scores. Similar, IPs and CFTs (see section 2.3) have usually not set requirements based on particular PSU results.

Theoretically speaking, every student in upper secondary education has access to any institution of higher education. Practically speaking, the attendees of the VET track are rather limited in their options compared to those who chose the general track. Since these students have significantly less hours of general education than their respective colleagues (see Chapter 3.1), it is not surprising that they score lower results in the PSU, which primarily demands general, academic knowledge.

Figure 5 compares grouped PSU test scores between attendees of the two upper secondary tracks. It shows that the higher the test scores are, the bigger the share of students who chose the general track. And, conversely, the lower the scores, the bigger the share of VET-track-attendees. Considering the larger number of programs and graduation possibilities at universities, it gets obvious that students choosing the vocational track have a higher barrier and rather restricted access to tertiary educational in general.

Figure 5: PSU results by program in upper secondary education (2009)



Source: Adapted from Bassi (2009:17).

These limitations are particularly acute if considering that a majority of students enrolled in vocational programs aims at continuing their studies at the post-secondary level rather than entering the labour market (VET Commission, 2009:32).

However, the weak general skills from students of the VET track become more apparent in tertiary education. From those VET students who attend university, 61% do not complete their studies, whereas the dropout rate of those following a further VET track (in IPs or CFTs) lays at 47% (Bassi, 2009).

The generally lower PSU test scores as well as the fairly high dropout rate is also reflected in student's confidence. In 2009, a survey asking for students' perception how well they think that upper secondary education prepared them for tertiary education was conducted (Bassi, 2009). It shows that, even when considering students who attend different tertiary

institutions/programs, the students who attended the general track feel better prepared for their current studies than those who attended the VET track.

Besides their generally lower skills and restricted access to tertiary education, VET track students also face the fact that employers express a need for more general skills and do not really emphasize particular vocational skills. Hence, focusing on these skills might not be of first importance and could also be learned on-the-job. Additionally, to meet employers' needs, a VET track curriculum needs to be constantly adapted to the current technical skill levels which in turn needs more effort than keeping up to date the academic curriculum.

Due to these reasons, the Chile's VET track in upper secondary education might bring only marginal benefits compared the general track regarding the teaching of specific occupational skills.

2.3 Postsecondary / Higher Education

The Chilean system of higher education drastically changed in the 1980s when several reforms of the education system took place. One of the major changes was the introduction of private, non-subsidized autonomous institutions. This change led to a diversification of the tertiary education system which originally included eight subsidized universities whereas six were privately and two publicly organized (Espinoza and González, 2013:25). Nowadays, there are many private players providing education at different levels. The current system can be distinguished between four types of institutions based on the programs and the kind of qualification they can grant:

i) Universities

Universities focus on 4 to 7-year undergraduate programs which might lead to a professional degree (the professions regulated by law are: architect, agricultural engineer, biochemist, civil engineer, commercial engineer, forest engineer, dentist, lawyer, pharmacist, primary and secondary school teacher, psychologist, surgeon, veterinarian) or on academically-orientated undergraduate and graduate programs leading to a licentiate, bachelor or master degree. In addition, universities also offer postgraduate studies (*Postítulo*) in professional subjects. According to ISCED, university studies are classified as categories 5A, 5B, 6 or 7 depending on the respective level of graduation (OECD/World Bank, 2009).

Universities can be divided in those receiving direct state subsidy and those that are completely self-financed. The former make up the Council of Rectors of Chilean Universities (CRUCH) whereas they can either be public or private. Self-financed institutions (or commonly named *new private universities*) arose with the reforms of the 1980s and

represented about 60% of all universities in 2010. However, regarding undergraduate enrolments, they roughly account for about 50% of all universities attendees. In contrast to the subsidized universities, the new private universities do not offer graduate programs, since costs for these courses are substantially higher.

ii) Professional Institutes (Institutos Profesionales, IPs)

IP typically offer 4-year programs leading to a professional or technical degree similar to those awarded by universities. These programs are classified as either 5A or 5B according to ISCED. All IPs are private, self-financed and can be either for-profit or non-profit.

iii) Technical Training Centers (*Centros de formacion Técnica, CFTs*)

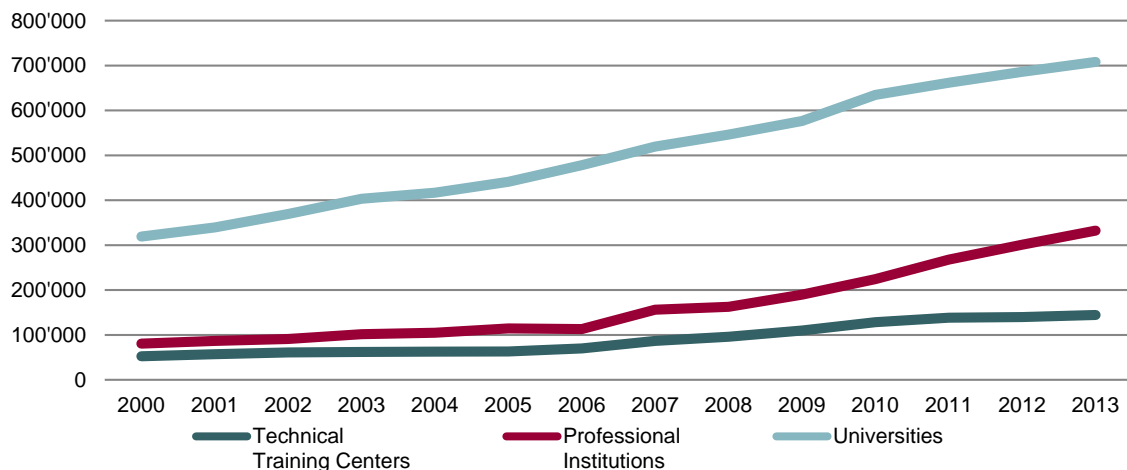
CFTs focus on 2-year programs where students gain occupational skills which lead to a technical certificate. According to ISCED, these programs are classified as 5B. All CFTs are private, self-financed and can be either for-profit or non-profit.

iv) Higher Education Institutes of the Armed Forces and Police (*Fuerzas Armadas y de Orden*).

While there are still private and public institutions, only IPs and CFTs are allowed to provide programs on a for-profit basis. In general, the structure of the system is strongly hierarchically organized, placing universities at the top of all aforementioned institutions. This is reflected by the types of undergraduate studies provided by each institution. At the university level, titles for professional and technical training as well as academic studies can be achieved. IPs can offer professional training as well as programs leading to a technical degree, while CFTs can only offer the latter type of program. This gradation comes along with the type of degrees these institutions issue: academic degrees like bachelor, licentiate, master or doctor titles are reserved for universities, whereas vocational education institutions (IPs and CFTs) are only allowed to issue professional and technical certificates that do not require academic qualifications (VET Commission, 2009:29).

In general, the freedom to choose between institutions is very limited and rigid. Swapping from one institution to another of the same level (e.g. from one university to another) is hard. Due to the system's hierarchical characteristics, it is even harder for students to move from CFTs or IPs to universities. Some institutions, in particular private ones, allow to change programs within an institution but this always depends on the programs specific requirements. The low permeability of the education system, both vertically (changing type of institutions) and horizontally (changing program within the same level/institution) leads to assume that there is no clear grading across institutions as well as a qualification differences within institutions of the same level.

Figure 6: Enrolment rates in higher education by type of institutions, 2000 to 2013



Source: Ministry of Education (2014).

Since the major education reforms of the 1980s, the number and diversity of tertiary education providers have changed tremendously. Along with this development, enrolment and completion rates have increased considerably over the last three decades. Figure 6 depicts this significant expansion of enrolment rates since the year 2000 for Universities, IPs and CFTs.

The largest proportion of students is registered at universities, whereas CFTs and IPs play only a minor role considering the total number of students at the tertiary education level. This is mainly caused by the sharp rise of undergraduate enrolments of the new private universities.

In contrast to the increasing enrolment rates, the total number of respective schools decreased over the years, resulting in even bigger, more concentrated, institutions.

In order to get a better picture of the different degrees students attend in institutions of higher education, Looking at the enrolment rates by level of education for each type of institution separately, it has to be noted that enrolment in CFT only account for 12%, IPs for 28% and universities for about 60% of total enrolment in higher education (Ministry of Education, 2014). The numbers further reveal the hierarchical structure of the system, meaning that students attending universities have the choice between all different levels/programs of the education system whereas CFTs attendees can only achieve undergraduate technical degrees.

All levels of education, apart from postgraduate studies, are provided by at least two different institutions. However, each level has slightly different characteristics and sometimes leads to different degrees depending on the institutions where they are attended. The following list further elucidates these levels:

Undergraduate Technical studies comprise 2-years programs in CFTs and IPs. Programs in CFTs are mainly attended by students who chose the vocational track in upper secondary education and lead to job market entry. Technical studies attended in IPs can either lead to direct job market entry or to further undergraduate professional studies.

Undergraduate Professional studies encompass various programs provided by universities and IPs.

Undergraduate professional studies at IPs lasts for 4 years and either lead to a direct entry into the job market or to a professional postgraduate study (*Postitulo*).

Undergraduate professional studies at universities also include academic education, meaning that bachelor and licentiate degrees are also counted as undergraduate professional studies (compare Figure 2).

For some of the professional degrees acquiring an academic education is an imperative, meaning that the respective studies can only be attended at universities (e.g. law, architect, medical science, many engineering sciences, teacher training etc.). Apart from these study programs, professional degrees awarded by universities and IPs are comparable in terms of qualification. Nevertheless, a difference exists regarding tuition, which on average is cheaper at IPs than at universities for the same studies.

Besides the 4-year programs provided by universities, there are also 2-year bachelor programs which usually lead to further undergraduate studies, either academically or professionally orientated. This type of program is comparable to the associate's degree as it is known from the United States.

Postitulo studies are professional postgraduate studies which can be regarded as professional specializations. Theoretically, postitulo exists at all levels, meaning that universities, IPs as well as CFTs can provide this kind of programs. However, in practice, the vast majority of such programs are given by universities followed by IPs whereas CFTs offer these programs extremely rarely (in total only 18 enrolments in CFTs postitulos studies in 2013).

Postgraduate studies are academically orientated and are only provided by universities. Usually, these studies comprise master and PhD programs.

In fact, postitulo studies could be named professional postgraduate studies, whereas master and PhD programs could be termed as academic postgraduate studies. However, similar terms are difficult to apply for undergraduate programs since the term professional studies comprises professional as well as academic programs.

Regarding the level of education achieved with a postitulo study, it is hard to tell whether there is a difference in qualification between such a degree attended at university and one awarded by an IP. Since postitulo degrees can also be awarded by CFTs, it gets clearer that this credential must be level-dependent. However, the fact that no sharp boundary can be drawn between similar degrees which are granted by different institutions, this suggests a weak institutional anchoring of these degrees.

3. Vocational Training and Education

VET in Chile is included in the formal education system, which comprises eight years of basic education (Educación Básica) and four years of secondary education (Educación Media). In secondary education students follow a general curriculum during the first two years and in the following two years they have to choose one of the three education tracks: the scientific-humanistic, artistic and technical-professional track, of which the latter is the vocational track.

3.1 Secondary VET

As described in section 2.2, VET in Chile starts in the second year of lower secondary education for those students who have chosen the vocational track (EMTP). At the upper secondary level, this track leads to a direct entrance in the job market or to a professional study at the tertiary educational level (Kis and Field, 2009:13).

VET at upper secondary education level is offered in a range of 46 specializations (*especialidades*) comprising 14 occupational areas, which again are grouped into six sectors (commercial, industrial, technical, agricultural, marine and artistic studies). Compared to the more comprehensive scientific-humanistic track which comprises 27 hours of general education a week, the vocational track offers only 12 hours of general and 26 of vocational education. After the four years of secondary education, students pursuing the VET track also receive the secondary school leaving certificate (*licencia de enseñanza media*).

After their graduation they VET graduates have the opportunity to attend a period of workplace training in order to receive a VET certificate. Normally, this requires on-the-job training (*practica profesional*) of about four months (480-960 hours). However, it is estimated that only half of all upper secondary EMTP graduates successfully complete workplace training. Possible reasons for this low participation rate are the following. For some time, those in workplace training did not receive any financial compensation, so many preferred to enter the labour market directly (or to be inactive). For those who intended to proceed to tertiary education, participation in workplace training meant a delay of the entry into

university. For others it might just not be worth the effort to complete the training (Kis and Field, 2009:33).

Only a small share of all VET students is enrolled in a dual VET track (4.5%), combining school- and work-based training (Kis and Field, 2009:13).

From an equity point of view, there is a difference in the distributions among students regarding their socioeconomic background and the enrolment in either of the two tracks. A vast majority attending EMTP programs comes from low-income households whereas the number of enrolments decrease with increasing household budgets. Additionally, a substantial part of low-income students are enrolled in public schools rather than in private subsidized ones.

3.2 Postsecondary VET

VET at the tertiary level comprises two-year programmes in technical training centers (CFTs) and four-year programmes in professional institutes (IPs).

The Chilean system of higher education knows in total 58 Technical Training Centers, which provide professional education lasting for 2 years and are aimed to teach supporting skills in various specialized professional occupations. Studies related to the health sector count the most graduates (e.g. nursing schools) followed by technical and management and commerce studies. Often, a CFT institution is specialized in only a few study areas, thus, they often provide a rather limited number of programs.

In IPs, students can develop top-level technical careers in fields like technology, agriculture or commerce. Overall, tertiary enrolment in Chile has increased in the past 20 years. However, most of the growth in enrolment happened in the university sector (not in CFTs or IPs)

3.3 Administrative and Supervisory Structure and Operation of the VET System

3.3.1 The State Side

VET in Chile is part of the formal education system and thus on one hand under the governance of the Ministry of Education, more specifically under the guidance of its main organ, the National Council of Education (*Consejo Nacional de Educación*). Since a part of the VET education programme is meant to happen at the workplace, the Ministry of Labour on the other hand also has key responsibilities in VET policy and supervision of different VET programmes (OECD, 2010: 85).

The Council of Education has to approve the educational programmes and plans, as well as the curricula, qualification frameworks (promoting the quality in basic and superior education) and has to manage the national education system in general. The Ministry of Education is organised at the national, provincial and regional level. Each of Chile's 15 regions has a Ministerial Regional Secretaries as the representative of the Ministry in the region (*Secretarias Regionales Ministeriales*). They are responsible for the planning, organisation and supervision of the VET system, as well as of other branches of the education system. One particular function of the Secretaries is to supervise the work of the Unit of Curriculum and Evaluation (UCE), which has the function to coordinate the design and implementation of the curricula (UNESCO-UNEVOC, 2014). Responsible for the quality of education in general is the National Accreditation Commission (Comisión Nacional de Acreditación).

Another stakeholder in the supervisory structure of the VET system is the National Innovation Council for Competitiveness (Consejo Nacional de Innovación para la Competitividad). It is a public-private body associated to the Ministry of Economy. Its task is to analyse public policies and collaboration projects between public and private sector in general, as well as pilot projects on innovation and to deduct recommendations.

3.3.2 Employer Engagement

In general, the engagement of the business sector in the provision of workplace training, the definition of skill requirements, the management of strategic direction of the VET system and institutions has been very low in the past (Kis and Field, 2009:32 et seq.). And if there is some form of collaboration between VET secondary schools and the industry, the quality and degree of interaction varies hugely, which is also the case for the workplace training after having completed tertiary level education. In 2009, the creation of a National Council for Vocational Education and Training (CNFP) had been announced and was implemented in 2010.

To assure the quality of the workplace training in Chile, the only tools in place are a training plan and visit of the company by the school. Often, the schools simply do not have the resources to fulfill the function of supervising the companies (Kis and Field, 2009:33).

Rather than having the school to assure the quality of workplace training, the companies should have the right incentives not to exploit the trainees. In addition, there should be functioning institutional mechanisms in place to reassure a high quality of the workplace training.¹³ One way to achieve a high quality workplace training could be through the creation

¹³ For an extensive explanation why involving the employers in the design of a VET system makes sense, see Kis and Field (2009:34 et seq.).

of special apprenticeship contracts, clearly specifying the rights and obligations of the employer and the apprentice (OECD, 2010: 85).

In the near future, the government wants to change the curricula towards the needs of the industry (OECD, 2013a:31). The success of this undertaking will be highly dependent on the extent to which the business sector is involved. In countries with a successful VET system like Switzerland, the business sector (professional associations) has a say in the creation of the curricula. Giving the business sector the option to participate in the curriculum development gives them the possibility to adjust the learning content according to their needs and to constantly adapt the curricula to changes in the skills they require. Also, employers need to be involved in policy development to ensure successful implementation of policy.

3.3.3 System of Quality Assurance

In general, the existing mechanisms of quality assurance in the Chilean education system are often weak. In particular in the post-secondary education, where no mechanisms exists to ensure basic standards of training quality. Many of the vocational institutions are not accredited by now, which makes it hard to judge the quality of their programmes. In the light of a poor educational background of students attending VET programmes, the bad qualification of the teachers and trainers (compared to the general education tracks), an improvement of the quality standards of VET programmes, a higher employer engagement and a strengthening of the link between them and the schools are very important (OECD, 2013a:63).

Currently, the VET system is being reformed. Therefore, the government started with the creation of the National Council for VET and set an agenda for the period 2010-2020 (*Agenda de Innovación y Competitividad 2010-2020*) aiming to develop competitiveness through innovation in Chile, to better relations between the educational sector and the industry, to strengthen the private-public cooperation (UNESCO-UNEVOC, 2014).

To improve the transparency and mobility of students between the different elements of the education system, the government has initiated the introduction of a qualifications framework in 2009. In addition, they develop a National Labour Skills certification System (Sistema Nacional de Certificación de Competencias Laborales, as part of the Chile qualifies (*Chile Califica*) programme) aiming to provide a framework for the recognition of professional competences (acquired on the job or thorough formal training), which also may help adults without formal degree to enter further education or increase their employability (OECD, 2010: 86). In addition, there are efforts to help those with particular numeracy and literacy needs among students in vocational programmes.

The existing system of quality assurance of the education system will be explained next.

Chile's system of quality assurance in higher education is the same for all kinds of institutions and programs no matter if these are vocational or academic ones. Generally, the licensing process is mandatory for every institution whereas the accreditation system is based on a voluntary participation, with the exception of medical studies and teaching careers which have to be accredited on a regular basis (OECD, 2012:25).

Today's system exists since 2006 when the actual National Higher Education Quality Assurance System (*Sistema Nacional de Aseguramiento de la Calidad de la Educación Superior*, abbr.: SINAC-ES) was established. It builds a framework by defining the main actors and their respective functions. The following section will focus on these main bodies and their respective functions:

- **National Education Council** (*Consejo Nacional de Educación*; abbr.: CNED) is responsible for the licensing of institutions. Among its duties is the provision of information about the licensing process.
- **National Accreditation Commission** (*Comisión Nacional de Acreditación*; abbr.: CNA) sets the accreditation criteria and manages and oversees the evaluation process for institutional as well as program accreditation. Furthermore, it is responsible for the authorization of Accreditation Agencies (see below). The CNA is composed of fifteen people, whereas the members are from different types of institutions of higher education in order to assure broad expertise.
- **Accreditation Agencies** (AAs) exclusively conduct program accreditations for a specific knowledge area and academic level. These bodies are private and for-profit and have to be authorized by the CNA.
- **Ministry of Education** (MINEDUC) is responsible for the legal compliance and of the formal recognition of any licensed institution. Furthermore, it is the main provider of information (gathering as well as publishing) about the entire higher education system.

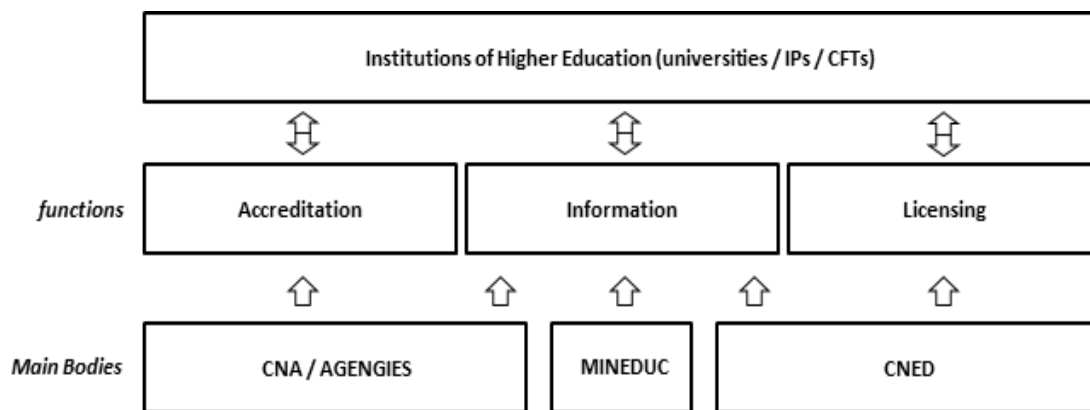
The four main functions of these actors can be summarized as follows:

- **Licensing** is the compulsory process any new institution has to go through in order to get an autonomous status. The process encompasses the approval and monitoring of the development of new institutions.
- **Institutional accreditation** is, as opposed to the licensing process, a voluntary process of quality assurance for autonomous institutions realized through self-evaluation and through external evaluation reports. In general, the quality of institutions is measured according to their own mission and goals. The accreditation process is overseen by the CNA.

- **Program accreditation** works like the institutional accreditation process with the difference that programs can also be accredited by private accreditation agencies.
- **Information** providing is a key function and duty of all aforementioned bodies. The MINEDUC set up an information system specifically for data concerning institutions of higher education.

Figure 7 depicts all aforementioned processes and actors and shows the respective relations. The quality assurance process starts whenever a new education institution registers at the ministry of education in order to go through the compulsory licensing process. The CNED's evaluation process lasts in minimum for 6 years after which it can be extended up to another 5 years in case requirements are not met. CNED then decides whether the institution attains the autonomous status or has to close down.

Figure 7: SINAC-ES main actors and functions



Source: Based on OECD (2012).

The institutional accreditation is voluntary and can be done any time after the licensing process is finished. After a formal request to the CNA, institutions have to conduct a self-evaluation followed by an external peer evaluation and report. Based on the results, the CNA decides on the accreditation period to be awarded to the institution which can be of a minimum of 3 years up to a maximum of 7 years (Espinoza and Gonzales, 2012).

One of the main incentives to become an accredited institution relates to the funding since successfully accredited institutions are eligible for students to receive state funds. In addition, program as well as institutional accreditation lead to public recognition and institutions also become responsible to keep up their quality level (OECD, 2012:28). These circumstances are further incentives for institutions to get accredited since getting new students also depends on the institutions reputation. Hence, the quality assurance process become more and more important especially among new private institutions (e.g. postsecondary VET providers) which, unlike traditional universities, have to build up their reputation and need to

differentiate themselves from the others in order to attract students (Espinoza & Gonzales, 2012:30).

In general, Chile's quality assurance system is fairly similar to the one of the United States. Both systems are composed of different bodies whereas no central authority exerts an exclusive national control over the institutions. Therefore, this kind of system could be described as bottom-up approach where institutions have incentives for self-accreditation and maintaining their educational quality. In the case of the United States and Chile, one of the main incentives are the state funds which are linked to the accreditation of programs and institutions.

In total, Chile counts 178 institution of higher education by 2014 (Ministry of Education, 2014) whereat 126 of them have an autonomous status (the remaining ones are in the process of licensing). 64% of these institutions are also accredited. However, regarding accreditation by type of institution, it stands out, that the vast majority of universities are accredited whereas only a minor share of IPs (38%) and CFTs (16%) do take part in this process (Espinoza & Gonzales, 2012:40).

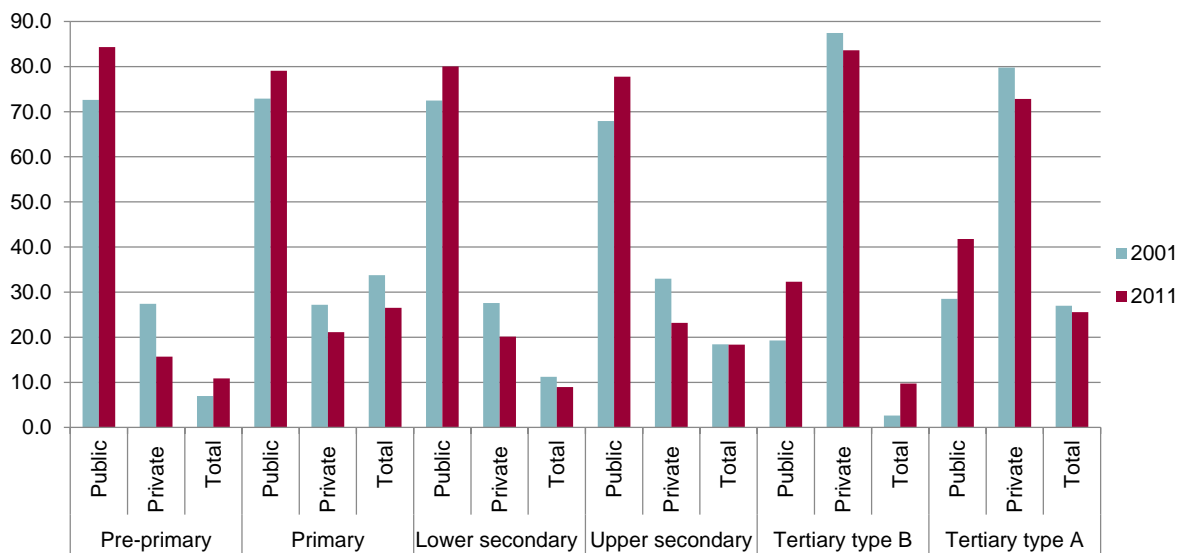
3.3.4 Educational Finance of the VET System

Similar to the national quality assurance system, the financing system applies for all types of institutions of higher education and cannot be defined specifically for VET programs. In general, institutions know four sources of funding (OECD, 2012:23):

- **Public grants and funds** comprise direct and indirect state grants. Only private and public CRUCH institutions have access to direct funds whereas private institutions (new private universities, all IPs and CFTs) can apply for indirect funds, which depends on the number of enrolled students which have successfully achieved the PSU. Besides these two major funding streams, institutions can also apply for several more subsidies like funding for specific research projects etc.
- **Tuitions** are admission fees paid by students directly to the institutions of higher education. However, since some of these money comes from student financial aid programs (whenever the respective institution is officially accredited students are eligible to receive public grants and loans), it can be partly considered as indirect public funding. For privates universities, tuitions represents the far biggest share of their funding, counting for over 80% of all earnings.

- **Service delivery** refers to earnings an institution of higher education receives by providing services for public or private organization. Among the services are advices and research on natural disaster forecast in subjects like seismology or meteorology. Especially for CRUCH universities, this kind of takings represents a substantial part of their total financing with roughly about 20%.
- **Donations** from private organizations and individuals account for about 2% - 3% of an institution's total funding.

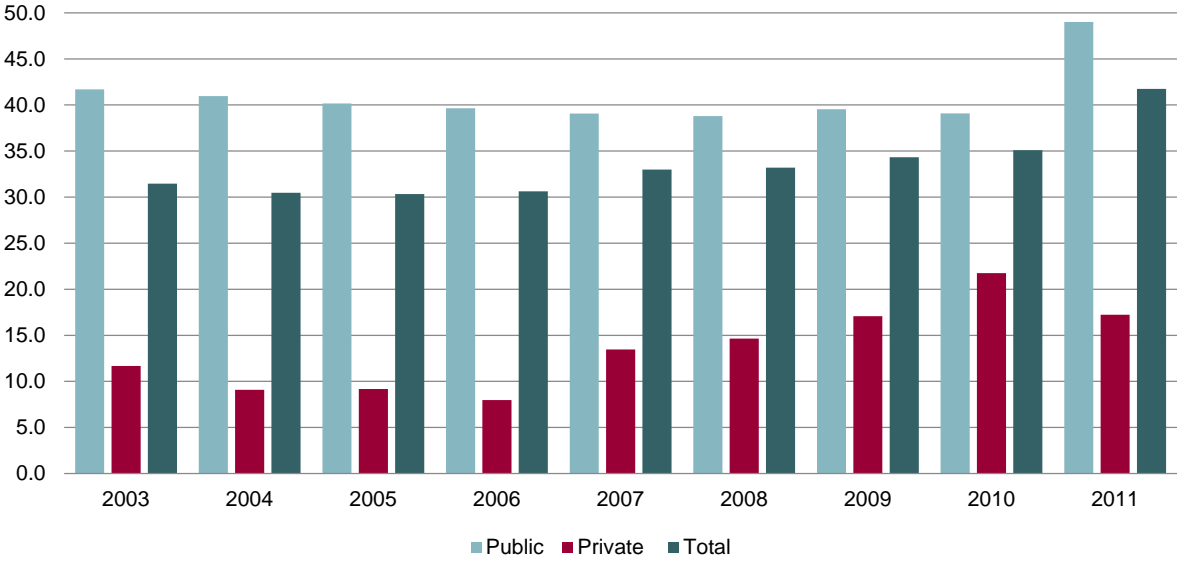
Figure 8: Expenditure in education by level of education and type of funding, 2001 and 2011



Source: OECD (2014d).

In the time from 1995 to 2011, Chile increased the total expenditure in education from 4.5% of GDP to 6.9%. In 2011, nearly one third (62.7%) of these expenditures came from public sources, the rest from private sources (OECD, 2014b). This pattern can also be seen in Figure 8, expenditure in education is disaggregated by level of education and type of funding: most of the funding came from public institutions. In 2001 and 2011, most of the financial resources were invested in the primary level and tertiary level A institutions, and only a minor share of the total budget went to lower and upper secondary education, including vocational education and training. Of the funding invested in upper secondary education (18.4% of the total budget in 2001 and 2011), only slightly more than one third was spend for pre-vocational and vocational programmes, as it can be seen in Figure 9.

Figure 9: Expenditure in pre-vocational and vocational programmes as a share in total expenditure at the upper secondary education level, by type of funding, 2003-2011



Source: OECD (2014d).

4. Major Reforms in the Past and Problems for the Future

Since the 1980s, Chile has experienced several educational reforms. In general, one can distinguish between four different waves (Delannoy 2000, Marin 2001, Gershberg/González/Meade 2012):

1980-1989: Market-Oriented Reform: Top-Down, Big-Bang System Change

During the 1980s, the military government of Augusto Pinochet introduced market-oriented reforms in order to strengthen the national economy. They government focused on increasing efficiency, greater accountability, as well as improving responsiveness to locals needs. The responsibility for the school management was transformed from national to the municipal government. In addition, a new system of capitation grants enabled the parents to choice between public and private schools. Since then, municipal and subsidized private schools receive the same amount of financial support from the central government. As a consequence, the share of students enrolled in public schools declined from 78% in 1981 to 43% in 2008.

1990-1996: Promoting Equity and Quality: Bottom-Up Cultural Change

After the democratic turn in 1989, the center-left coalition government introduced some changes in formal rules, although the main strategy was to creating a new culture of school autonomy. By doing so, the government relied on incremental changes in informal rules, behaviours, values, and inducements by adapting training, technical assistance, symbolic

and economic rewards. In order to improve the pedagogical and management practices, some government programs provided support to municipalities and schools, especially to those with a poor educational outcome. In addition, the value of vouchers in rural areas was increased to address equity concerns.

Table 3: Chile’s Educational Reforms Cycles

	Period			
	1980-1989	1990-1995	1996-2010	2011-today
Direction	Top Down	Mainly Bottom-up	Integrating macro structures with micro school culture	Top Down
Preferred Tools	Form Rules, Mandates	Informal Rules, Incentives	Accountability & Information Infrastructure	Monitoring & Evaluation
Objective	Efficiency	Quality and Equity	Improved performance across all dimensions	Reduce Social Inequality
Focus	System Structure	School Culture	Modern institutions	Complementing market mechanisms

Source: Delannoy 2000, Gershberg/González/Meade 2012

1997-2011: From Incremental Change to Full-Scale Reform: Linking Top-Down and Bottom-Up

In 1996, the government initiated the *Full School Day* program, which pulled a collection of modernization packages into a cohesive reform. Within the society, there was a high pressure that the program needs to have a higher impact, be more sustainable and efficient. Moreover, the focus was to modernize the ministry and other sectorial agencies in order to guarantee quality, since the investment in human capital nearly over a decade had only moderate success.

2011-today: Towards Accountability: The Return of the Ministry

In the 2010s, new proposals were approved by the Chilean Congress for increasing accountability of the education system. The new system goes further in providing central authority allowing the ministry to take actions against schools (e.g. closure of schools). In doing so, the system expands a stronger compact to all subsidized schools. While the education system has prior undertaken reforms in order to balance privatization and decentralization of the schools, it attempts nowadays to increase central monitoring and evaluation in order to oversee the programs. Moreover, the ministry has added accountability mechanisms like high-stakes or value-added testing.

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