

Chapter 6

Universalization of Basic Education in Chile and the Voucher System

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Summary

The voucher system, which was introduced into the Chilean primary education system by the military government in 1980, is examined. The author also carries out historical analyses with reference to the developmental task model in Chapter 2. It is revealed that subsidies to educational activities in the private sector can be retrospective to 1876 when subsidies were conferred to the non-fee private schools that were patronized by churches. In 1951, the per-student amount of such subsidies was increased to half of the cost per student of a public school. Such measures went along with “liberty of education”, the traditional idea asserted by the Chilean conservative forces. The introduction of the voucher system was conducted in the completion stage of the universalization of primary education. The author carries out detailed analyses about educational finances, school choices by children and families and education quality under the voucher system. Based upon the results of her analysis, she argues that when educational opportunities for poor families are concerned, the voucher system contributed to the quantitative enlargement of the opportunities but deepened the qualitative disparities among social classes and placed the poor sector in a more disadvantageous situation, contrary to the assertions of its supporters. The developmental task model showed that it is essential to complete diffusion of educational opportunities to the whole nation and reduce quality disparities at the same time. However, the voucher had adverse effects in terms of improving the quality of education.

The voucher system was retained after the political power transfer to the civil government in 1990. However, the government’s educational budget rose drastically. The disparities between areas and between social classes were inclined to decrease. The “finance sharing” system was introduced in 1993, which could increase the disparities. The Technical Committee Report in 1994 proposed the attainment of equity and quality improvement through better utilization of the voucher system. Since then, reforms have been carried out based upon this report. Presently, there are plans to give poor children vouchers with increased value.

Key words

Chile, basic education, voucher system

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Introduction

The state plays a significant role during the process of universalizing primary education, as evidenced in the past experiences of industrialized countries. Building a modern state and sustainably developing its economy requires not only an educated labor force but also citizens with democratic attitudes and knowledge. Equally important tasks lie in nurturing a sense of belonging to the country and thereby creating social cohesion among the people. Since these equate to outputs and externalities of public education, a public provision of primary education constitutes a policy priority of any government endeavoring to build a modern nation. At the same time, universalizing primary education is known to be a step-wise process with a different agenda in each stage (see Chapter 2). Therefore, it requires the state to take leadership in timely choosing the right policies, making juridical arrangements whenever necessary, and ensuring their implementation and enforcement. State interventions are also deemed crucial for channeling an early form of education demand developed in a family or in a small community into a national expansion of primary education services as a public system (see Chapter 3).

In recent years, however, there has been a worldwide prevalence of neoliberalism, which places value and trust in the market as opposed to the state. Accordingly, a number of countries made a move toward decentralization, privatization, and an introduction of market principles while reducing roles of the state, even in the education sector. Such a trend is also witnessed in the primary education policies of some developing countries whose universalization goals are yet to be attained. At the backdrop of this tendency lies the fact that education policies of developing countries receive ideological influences from developed nations, whether they like it or not, through discussions in the academia, international conferences on education, and bilateral and multilateral aid on education. An introduction of neoliberal policies in Latin American and Sub-Saharan countries after the debt crises in the 1980s is a good illustration. The conditions of new loans by international development banks included applications of policies that promotes small government, deregulations, and privatization as a remedy for inefficiency of the government. Those policies were then introduced in both economic and social policies in the late 1980s, and neoliberal policies in education were continuously encouraged in the 1990s (Psacharopoulos and Nguyen 1997).

Application of the market mechanism and promotion of privatization in education,

however, appear to be a move against universalization of primary education, where the state has historically assumed major responsibilities. At least, such policies were not applied when industrialized countries achieved the universalization goal a century ago. What does the introduction of neoliberal education policies mean to the universalization of primary education? Such inquiry may be an important contribution for pondering the above-mentioned ideological influences from industrialized countries on the policy formations in developing countries (see Chapter 1).

Driven by such a motive, this paper looks into the case of Chile, where neoliberal theories were extensively put into practice under the military government. With advice from Chilean economists trained in the University of Chicago, a neoliberal stronghold, the Pinochet military regime first introduced neoliberal economic policies. A nationwide application of an education voucher system later in 1980 was an unprecedented extension of neoliberal principles into the education sector. This paper first attempts to identify features of the evolution of the Chilean basic education system, and then explores the meaning of the voucher system introduced in the last stage of universalizing basic education.

It is assumed that as of 1980 Chile was already in the last stage of universalizing 8-year basic education¹, having reached an enrollment rate of 90% more than 10 years ago, and marking a completion rate of nearly 80%. Policy agenda during the stage includes lowering repetition and dropout rates by relaxing promotion and graduation standards or by improving quality of education. Once the completion rate is improved, more complex issues of the remaining 10-20% of students should be tackled. What, then, could the education voucher introduced during such a stage of universalization mean? The present article, having analyzed areas of major concern, reaches a conclusion that the voucher system in Chile resulted in further stagnating the universalization process by creating a condition even more difficult for the last 10-20% group to successfully complete the basic cycle.

The paper starts by briefly summarizing debate on the education voucher. It then examines changes of enrollment rates and percentage of graduates of basic education in Chile, in order to better understand its evolution and the characteristics of the process of universalization. Japan's case is employed whenever appropriate as a point of reference.

¹ According to "the model of universalization of primary education" by Kaneko (Chapter 2), an enrollment rate of above 90% marks a stage of "a shift toward universalization," and a completion rate of above 90% means it has reached the stage of "achievement of universalization," which is the last stage. Precisely speaking, in 1980 Chile was in the stage of "a shift toward universalization," one stage before the last one. In this article, we regard those two stages as the last.

After the educational situation before the voucher system is described, the significance of the voucher system in terms of universalization of basic education is explored from the following three perspectives: 1) education finance; 2) freedom of school choice; and 3) impact on quality of education. A brief reference is also made to the education policies employed by the democratic government after 1990. Lastly, findings are summarized and commented on in light of the universalization goal.

1. Brief Summary of the Education Voucher Debate

Discussions on the education voucher in recent years are traced back to the proposal of Milton Friedman, American leading economist of Chicago school (Friedman 1955). He proposed a system where parents receive a coupon from the government which equals a full or partial amount of tuition fees, and can choose a school of their preference, either public or private, to which they would like to send their children for education. In such a system, schools of better quality receive more students and gain more resources, while those of lower quality receive pressure for the betterment of their services, or in the worst case are obliged to close down. The system generally encourages new entry of private schools, and a student transfer from public to private schools. Regulations should be minimum, and private schools are free to charge tuition fees, if necessary (Friedman 1962).

Designs of the voucher system vary in reality. Beneficiaries, for example, may be the entire school-aged population in both public and private schools, or only children from low-income families. In some cases they may cover only either public or private schools. The amount of the voucher may be set equal for all, or differently in favor of disadvantaged students. State regulations and supervision may or may not be extended to private schools to control their admission policies and curricular contents. The method of financing also varies. Vouchers may be paid either by distributing coupons to parents, directly financing schools according to the number of their students, or reimbursing parents with the costs of private schools through tax credits.

Advantages of the system can be grouped into the following four points according to voucher advocates. The first three points are based on the assumption that private schools are more effective and efficient than public schools in producing students' learning results. First, the voucher system will promote competition among schools to obtain more students, which will lead to an improvement in the quality of public schools, which lack incentives for such purposes. Voucher advocates argue that the causes of

the low quality of public education lie in its bureaucratic management and extensive regulations, so that the introduction of a voucher system will dissolve the monopoly of public schools in education, and competition among schools will motivate public schools to make more efforts in quality improvement (Chubb and Moe 1990). Second, the overall efficiency of education will be improved through increasing participation of private schools, of which cost effectiveness (i.e., efficiency) is considered high, and through projected quality improvement of public schools promoted by the enhanced competition. Third, they also affirm that the voucher system contributes to equity by enabling underprivileged students who need good quality education the most an access to private schools of high quality (Friedman and Friedman 1980, p. 169). The fourth point concerns freedom of choice. In the traditional public education system, parents have entrusted the major responsibilities of educating their young children to teaching professionals, whereas in the voucher system they can render a more direct influence on their children's education by practicing the right of school choice. Moreover, freedom of choice will enhance people's interest and participation in education (West 1996, p. 2).

Opponents' opinions can be summarized by the following three points. First, they argue that the voucher system could lead to a destruction of public education. A marked increase of private schools promoted by the voucher system will make education a more private matter, and keep it from producing public benefits such as nurturing common values and attitudes, and social cohesion (Levin 1991). Second, a number of objections stem from equity concerns. Central to these, is an argument that freedom of choice induces stratification or racial separation of schools, and exacerbates poverty and inequality issues by making it more difficult for those schools serving low-income and minority children to improve their quality (Krashinsky 1986). For instance, low-income families cannot benefit from school choice as much as wealthy families do, because there is an unequal access to information on school quality, which is indispensable in making a sound decision when choosing a school. Even if equal access is guaranteed, low-income families have practically less choices, given that quality private schools are seldom found in low-income areas and that the family's financial capacity to cover commuting costs is limited (Carnoy 1998, p. 311). Furthermore, the ability to read given information and the criteria for judging quality of education vary among families of different socioeconomic backgrounds². As a result, children of a higher socioeconomic

² What people seek from education differs among socioeconomic groups. Low-income groups make much of discipline, keeping the rules, and obedience, while middle- and high-income groups seek learning techniques, strategies, and flexibility (Levin 1980).

level start to transfer from public to private schools, and this phenomenon known as “cream-skimming” may aggravate public schools even further (Levin 1980).

Lastly, opponents question the premise of the voucher advocates, that is, private schools being more effective and efficient than public schools. According to a review of research findings, results are mixed as to private schools’ higher effectiveness in improving student outcomes (McEwan 2000). Only modest gains are found in the math achievement of low-income and minority students attending private primary schools in experimental results. Those schools are, however, mainly run by Catholic churches, and the evidence does not verify effectiveness of profit-making private schools, a type of school that will increase by the voucher system. Research on cost effectiveness is scarce. Due to difficulties in obtaining comprehensive data on the costs of schools beyond simple information on tuition fees and other monetary expenditures, that the efficiency of private schools is superior to that of public schools has not yet been confirmed.

2. Evolution of Basic Education in Chile

This section shows how Chilean basic education evolved over the years by looking at growth of enrollment and a number of graduates. Although Chile is considered one of the educationally advanced countries in Latin America, it has not yet achieved a universal completion of basic education after one and a half centuries since its establishment. Reasons behind the tardiness will be explored through a comparison with the case of Japan.

2. 1. Enrollment Rates and Percentages of Graduates

Chile embarked upon the establishment of a primary education system relatively early among Latin American countries that declared independence in the 19th century. Having proclaimed education as one of the state’s responsibilities in the constitution of 1833, the government created a preceding body of the Ministry of Education inside the Ministry of Justice in 1837. When the University of Chile was founded in 1842, the base of the public education system was also organized by assigning supervisory roles of public primary and secondary schools to the Faculty of Philosophy and Humanity and by creating Provincial Councils and Departmental Inspections for the control of schools. The first “Law of Primary Instruction” enacted in 1860 asserted the free provision of primary education for the population between 7 and 15 years old. The 1920 education law legislated the compulsory nature of primary education, the length of

which was later extended from 4 to 6 years in 1929. The 1965 reform further extended it to 8 years, which was then called basic education.

Table 1 shows the growth in the enrollment rates of primary/basic education in Chile from 5 years after the enactment of the 1860 law to the present. Data from Egaña (2000) and Hamuy (1975) indicate enrollment rates of the school-aged population of 7 to 15 years of age, and PIIE (1984) and Ministerio de Educación (1998, 2004) refer to those of 8-year basic education. PIIE demonstrates continuous data by re-reading statistics from 1935 into the enrollment rates of 8-year basic education, which are conceptually close to gross enrollment rates. Meanwhile, the data from the Ministry of Education are obtained from their own equation, and should be understood as adjusted net enrollment rates, normally taking on slightly higher values than the net enrollment rates (See notes of Table 1 for details). The right-end column shows the evolution of Japan's primary education after the first education law enacted in 1872.

From this table, one can confirm tardiness in the expansion of basic education in Chile, particularly compared to the case of Japan. The 1935 enrollment rate of 56.7% suggests that Chilean educational services reached half of the school-aged children sometime in the late 1920s or, at the latest, in the early 1930s. It can be inferred that it reached 90% sometime in the 1960s from the fact that the figures exceeded 90% in 1970 for data from both PIIE and the Ministry of Education. Though not shown, yearly data from PIIE (1984, p. 551) indicate a figure of 93.2% in 1965, surpassing 90% for the first time. Since then, the figure remained in 90% range until 2002 according to data from the Ministry of Education, without reaching 100%. Judging from the fact that nearly 40 years have passed after reaching 90%, one may pronounce that stagnation has been witnessed in the last stage.

However, it may be unfair to compare the 6-year primary education of Japan to 8-year basic education in Chile. Japan attained universalization of 9-year compulsory education including 3-year junior high school education sometime in the 1950s, about 80 years after the enactment of the first education law. Therefore, it takes us somewhat by surprise that after one and a half centuries since the enactment of the Law of Primary Instruction, Chile has not yet attained universalization of basic education, viewed both from enrollment rates and percentages of graduates which will be discussed next.

Table 1 Growth of Enrollment Rate of Basic Education in Chile (%)

Year	Chile				Japan
	School-aged Population (7-15 years old)		Basic Education		Primary Education
	Egaña (2000)	Hamuy (1975)	PIIE (1984)	Ministry of Education (1998, 2004)	
1865	13.9 ^a	10.9			
1875	15.9 ^b	17.1			35.4
1885	19.8 ^c	20.4			49.6
1895		27.7			61.2
1900		35.5 ^d			81.5
1910					98.1
1920		46.2			99.0 ⁱ
1930		60.6			
1935			56.7		
1940		57.5	60.6		
1950		61.5 ^e	66.0		
1960			80.2	80.0 ^g	
1970			96.5	93.3	
1982			101.3 ^f	95.3	
1992				98.2 ^h	
2002				97.0 ^h	

(Notes) Data from PIIE (1984) are based on their own calculations by re-reading the statistics into 8-year basic education. Since their numerators contain students other than the school-aged population, the data can be regarded as gross enrollment rates. Calculations of Ministerio de Educación (1998, 2004) are based on the following equation. Those who are enrolled not only in basic education, but also in special education, preschool education and secondary education are all counted as the enrolled students of 6-13 years old. Thus, subtracting the results from 100 gives a percentage of the school-aged children of 6-13 not being schooled in any of the educational services.

<<Equation used by the Ministry of Education>>

Total number of students in Basic Education (BE)+Total number of students in Special Education (SpE)

Population aged 6-13+Number of students under 6 years old in BE+Number of students above 13 years old in BE+Number of students under 6 years old in SpE+Number of students above 13 years old in SpE - Number of students under 14 years old in Secondary Education - Number of students above 5 years old in Preschool Education

a: 1864, b: The year 1880 data are used as the numerator, and the census data of 1875 as the denominator, c: The year 1888 data are used as the numerator, and estimates based on the census data of 1885 as the denominator, d: 1907, e: 1952, f: 1981, g: Taken from the data of the Ministry of Education cited in Delannoy (2000, p.10), h: Only the figure for the year 2002 is taken from Ministerio de Educación (2004). According to the same source, the rate for the year 1992 is 95%, i: Length of education was extended from 4 to 6 years in 1908.

(Source) Egaña (2000, pp. 101-107), Hamuy (1975, p. 103), PIIE (1984, p. 551), Ministerio de Educación (1998, p.280), Ministerio de Educación (2004, p. 25), Monbusho ed. (1972, pp. 496-497).

What percentages of students have been completing basic education over the years? Since chronological data for completion rates are not available, census data are used instead to observe the trend. Table 2 indicates the percentages of those who completed more than one year, six years, eight years, and twelve years of education, as well as those who never attended school in each age group based on the censuses of

1992 and 2002.

First, percentages of people completing more than one year of education, which can be approximations of enrollment rates, confirm what has been discussed so far. In the first half of the 1960s, almost all children in Chile entered a primary/basic school at least once, as evidenced by 95.6% of the then school-aged children (40-49 age group of 1992). Second, according to the data for those with more than 6 years of completed education, the age group that exceeded 90% for the first time is the 20-24 age group of 1992. As they reached 12 years old in the first half of the 1980s, it was during this period when 6-year education was near universal both in enrollment and completion rates. Lastly, according to the data for those with 8 years of completed education, 81% is marked by the 20-24 age group of 1992 and the 30-39 age group of 2002, both of which reached 14 years of age in the first half of the 1980s. This suggests that at the time when the education voucher was introduced, about 80% of students completed the basic education cycle. The figure exceeds 90% only from the 20-24 age group of 2002, which became 14-year olds in the mid 1990s, implying that completion of basic education of the last 10% group became a central concern beginning in this period³.

Table 2 Years of Completed Education in Chile (Based on Census Data) (%)

Age group (Years old)	Years of Completed Education								Never attended school	
	More than 1 year		More than 6 years		More than 8 years		More than 12 years		1992	2002
	1992	2002	1992	2002	1992	2002	1992	2002		
6-14	--	91.1	--	34.3	--	12.4	--	0.0	--	--
10-14	98.5	--	53.5	--	16.5	--	0.0	--	--	--
15-19	99.0	99.0	92.5	95.4	81.1	90.6	24.5	29.1	0.9	0.4
20-24	98.8	99.0	91.2	95.1	81.1	90.6	48.2	65.8	1.2	0.4
25-29	98.6	98.7	88.0	93.9	76.8	87.8	44.5	61.6	1.3	0.6
30-39	98.1	97.8	84.2	89.6	71.4	81.6	37.9	52.7	1.9	1.1
40-49	95.6	96.8	72.0	84.7	52.2	75.1	24.0	44.7	4.4	1.8
50 and above	87.6	89.9	54.7	64.0	35.0	47.4	15.3	27.5	12.4	7.8

(Source) INE (1993, p. 342; 2003, p. 187)

2. 2. Background of the Gradual Expansion of Basic Education

What explains the gradual expansion of basic education in Chile? Exploring reasons behind the expansion leads to identifying characteristics of the evolution of

³ Since these data are not broken down into education subsectors, some respondents may have included years of preschool education in their answers. Therefore, the results were cross checked with the data on the last completed grade from the same censuses, and similar conclusions were obtained (INE 1993, p.322; 2003, pp.180-181).

Chilean education, which will also serve useful when examining the significance of the voucher system introduced later.

First, the issue of education finance is of importance. Although the state assumed primary responsibilities in leading the expansion of primary education both in Chile and Japan, the difference existed in that the Chilean government assumed complete responsibility for supporting public education not only politically but also financially since its early stage of development.

In Japan, the establishment of the public primary education system was ideologically led by the state as a strong demand from the government. During its evolution, the state gradually enhanced pressure for schooling on the people through village offices that were effectively functioning as the smallest units of the state administration (Hijikata 1994, pp. 61-69; Amano 1997, pp. 51, 57), and it also controlled the education system by timely introducing policies responding to different issues in each stage. Yet, financially, public schools were built and managed mainly by local resources from villages and municipalities, in addition to tuition fees and donations, even after the schooling became obligatory. The state only started to shoulder part of the financial burden in 1918 when the enrollment rate was already at a near universal level. The current system, where the state and the provincial governments covering half of the public education finance each, is traced back to the form established in 1940.

In the case of Chile, the state's leading role in establishing public primary education was stipulated in the Law of Primary Instruction of 1860 (Egaña 2000, p. 57), and since then the state assumed major responsibilities both in policy implementation and in education finance (PIIE 1984, p. 27). The enrollment rate of primary education was as small as 13.9%⁴, when it was made free, albeit not compulsory, in 1860. Thus, during its early evolution, the education system faced a stumbling block in the state's limited finances coupled with the heavy burden of school construction costs and teacher salaries. Interestingly, municipal finance played an important role in financing education until the 1850s. After the legislation of free primary education, however, municipal governments gradually withdrew from school management and finance⁵. In 1880, with the exception of large cities, the state financed primary schools in most of the

⁴ Unlike Japan, education services in Chile were very limited during the colonial period and after achieving independence (Soto Roa 1997, pp. 13-16), and therefore there was no major base upon which a modern education system could be built.

⁵ When the volume of municipal finance is compared with that of the state finance which is set at 100, the balance between the two in 1853 was 73:100. It sharply declined to 29:100 in 1860 (Egaña 2000, p. 84).

municipalities (Egaña 2000, pp. 84-87).

Second, there has been a political and ideological conflict between reformers who aspire to promote the universalization of primary education and conservatives who wish to thwart it. This is one of the major reasons why it took as long as 80 years in Chile to legalize compulsory primary education since the system was established in 1842⁶. Historically, being a country of many small parties representing different supporters and ideologies competing for political power, Chile could not eschew tensions and conflicts among groups of different interests in establishing the public education system.

Behind such a conflict lie two concepts of different orientations widely recognized in Chilean society, which are “teaching state (estado docente)” and “freedom of education (libertad de enseñanza).” These represent two different orientations in the process of universalization of primary education, as pointed out by Kaneko (Chapter 1), one being oriented toward universalization and the other toward selection. “Teaching state” refers to the idea that the state should not only regulate education, but also provide resources, administer and directly intervene in education activities (PIIE 1984, p. 27). Major adherents to this concept were the middle class who gained power in the late 19th century, and the centralist and rising Radical Party supported by them. For instance, Valentín Letelier, a member of the radical party, asserted through his slogan of “to govern is to educate” that development of public education will guide the country to create virtuous citizens, promote liberal democracy, and attain social cohesion and harmonious development of society (Barr-Melej 2001, p. 149). On the other hand, “freedom of education” is the notion that parents have the preferential right and freedom to provide their children with education they wish, which should be guaranteed by the state. Major advocates of this concept were conservatives and the Catholic Church, which were opponents of the “teaching state.” The church was strongly against the establishment of compulsory education by the state, which appeared to pose a question on the church’s role in education as the moral standard. Similarly, conservative party supported by those in the upper income bracket affirmed that not the state but parents and private bodies hold the right of education, and rejected the bill of compulsory education submitted by the radical party several times (Barr-Melej 2001, pp. 153, 156-158).

Third, it was difficult for Chilean society as a whole to raise people’s strong demand for education due to clear divisions among different social classes and gaps

⁶ In Japan, primary education became compulsory 14 years after the system establishment.

between urban and rural areas. From Table 1, two peaks of an enrollment increase are observed during the first 30 years of the 20th century and the 20 years after 1950. The former corresponded to a rise of educational demand by the middle class, whereas the latter to that of the working class. In other words, educational opportunities have been expanded in response to fragmented demand from a partial segment of society.

Furthermore, the schooling system itself, being developed in reflection of those gaps embedded in society (PIIE 1984, p. 29), made it even more difficult for a rise of national demand for education to take shape. In the political and ideological dispute mentioned above, for example, the existence of private schools has been used as a point of compromise for the wealthy and the upper middle class by sending their children to those schools. In effect, the presence of private schools cannot be overlooked in the evolution of the Chilean education system⁷. From the late 19th century to the 1970s, the percentage of students in private schools represented 16.6% at the lowest and 33.9% at the highest (Egaña 2000, p. 101; PIIE 1984, p. 552).

2. 3. Toward Universalization of Basic Education: Reform from 1965 to 70

Implemented under the government of Frei Montalva from the Christian Democrat Party, a centrist party supported by the middle class, education reform from 1965 to 70 was a large scale symbolic development that marked a shift in the national efforts toward the universalization of basic education. It must be noted that this reform successfully introduced policies regarded as necessary for making such a shift, such as assurance of entry into the system for all and relaxing standards for grade promotion as described by Kaneko (Chapter 2).

Massive school constructions and an increase of teaching staff were quickly arranged to guarantee an access to education for all, while extending social assistance to disadvantaged children by furnishing them with free school meals, uniforms, and stationery through JUNAEB (National Board of School Assistance and Scholarships). The extension of primary/basic education from 6 to 8 years was also carried out during this reform. An important change was seen in the promotion and evaluation system⁸.

⁷ Private schools also played an important role in the evolution of the public education system in Japan, though in circumstances different from those in Chile. Since public schools were built and managed by locally raised fund in Japan, children of wealthy families studied at those public schools, where high tuitions were charged (Hijikata 2002). Private schools, which apparently charged less with lower quality facilities and educational contents, were for those who could not afford public schools. Nevertheless, as public schools became popularized while institutional advancements such as the abolition of tuition fees were made, private schools were gradually absorbed into the public education system.

⁸ Having analyzed the education statistics, education experts who led the reform revealed that the repetition

Automatic promotion was introduced for the first two years of basic education, and the use of several data such as attendance rates and test scores was encouraged for the judgment of repetition (Fischer 1979, p. 48). A new curriculum based on the theories of Bloom and Tyler was established, and the newly founded center for in-service training and educational research offered training for about 50,000 teachers.

2. 4. Non-graduates of Basic Education in 1980

What kind of children were among the remaining 10% of the population 6-13 years of age not being in school and among the last 20% who could not complete the basic cycle as of 1980? Some images can be sketched from the results of a longitudinal study conducted in the 1970s by Schiefelbein and Farrell, following 3,500 students who were then 8th graders (Schiefelbein and Farrell 1982). Estimates of cohort survival rates of the 8th graders as of 1970 showed a strong correlation with their father's occupations and years of education (Schiefelbein and Farrell 1982, p. 64). These figures were 100% for the children of professionals or managers, 71% for those of other white collar occupations, 48% for those of urban industrial workers, and only 18% for those of the lowest status occupational group such as farmers and miners. Similar gaps were observed in the survival rates classified by the father's years of education. While 72% of the children of fathers with secondary schooling completed the basic cycle, only 43% did so among the children of fathers with only primary education. It further declined to 10% in case of the children of illiterate fathers. Based on the assumption that these figures were improved in the following decade while maintaining the same patterns of selectivity, those who were out of the schooling system in 1980 among the population 6-13 years of age were most likely the children of fathers in the first industry or in urban industrial occupations, with little education either being illiterate or having only primary schooling.

3. Education Vouchers in Chile

Having been through the processes described above, basic education in Chile was found at the final stage for universalization, which was the time when the voucher system was introduced. In this section, after describing the education reform of 1980

rate of first graders was as high as 40%. Their findings corrected the conventional wisdom that the central issue of basic education constituted the high drop-out rate of lower graders, which was actually one of the negative consequences of the high repetition rate (Schiefelbein and Schiefelbein 1999)

and people's reactions thereto, the meaning of the voucher system in relation to the universalization goal will be explored by pursuing questions from three perspectives, namely, education finance, freedom of school choice, and education quality. As stated above, financing education is so vital in the universalization process that changes observed under the new system should be examined. Next, an inquiry shall be made as to whether school choice truly enabled disadvantaged children in rural areas or of low socioeconomic status an access to schools of higher quality, as theoretically was claimed. Finally, we will see if improvement of education quality, another crucial agenda during the last stage, occurred as a result of the voucher system.

3. 1. Education Reform based on Neoliberalism

Educational reform based on neoliberalism was undertaken by the military government in 1980, following neoliberal principals such as decentralization, active use of the private sector, privatization, competition, and deregulations. The reform drastically altered the education environment in Chile.

The reform took off by transferring national pre-basic, basic, and secondary schools that had been directly managed by the Ministry of Education to about 300 municipalities throughout the country. This decentralization was intended to minimize functions of the Ministry and to make more efficient use of resources by entrusting the management of schools to the government administrative units closest to their locations. With an incentive mechanism of a special state subsidy for expediting the transfer, 5,724 schools, equivalent to 84% of national schools, were quickly transferred to more than 250 municipalities between December 1980 and April 1982 (PIIE 1984, p. 132). Though once suspended by an economic crisis, all the transfers were completed at the end of 1986. While most mayors assigned the managerial responsibilities of schools to DAEM (Administrative Department of Municipal Education) of the municipal government, some opted for a nonprofit private corporation outside the municipal administration⁹.

The school transfer to municipalities brought about a significant change to teachers' working conditions. With retirement allowance paid from the government, teachers were no longer considered as public employees, and were directly employed either by municipalities or private schools. This meant that they were all subject to the

⁹ Initially, nonprofit private corporations were thought to have an advantage in making more flexible use of resources available for education. However, difficulties in auditing and keeping high accountability meant no further establishments of these corporations in 1988.

private labor code, with no chance of collectively negotiating salaries with the government. The job stability considerably declined, as theoretically mayors could adjust the number of teachers at their own will. These working environments continued until 1990 when a new teachers' law reversed some policies.

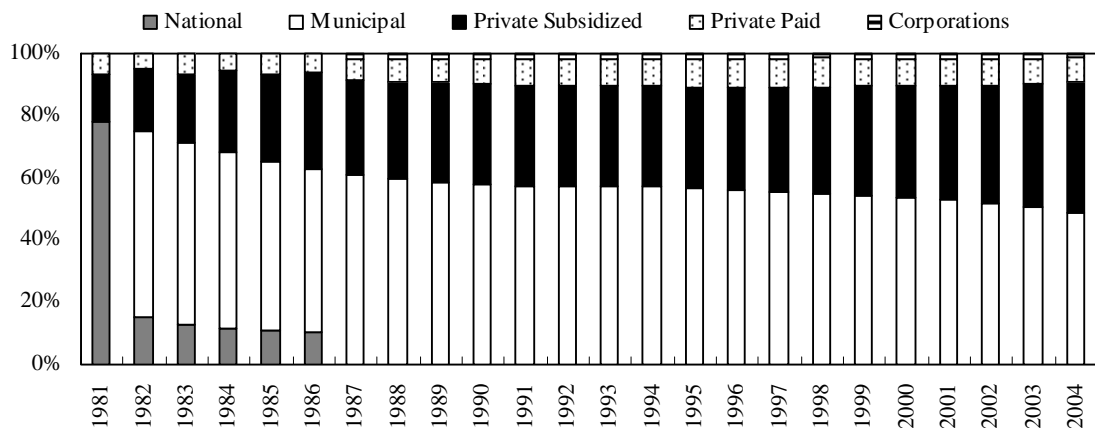
Another pillar of the 1980 reform was the innovation of the education voucher system, which resembled Frieman's original proposal in some ways. The system covered the entire country, applying the same voucher amount per student to all participating schools whether public or private. Chilean basic schools thus consisted of the following three types: municipal schools and private subsidized schools, both of which are voucher schools competing for students, and private non-voucher schools of a self-supporting accounting system mainly serving the children of wealthy families (referred to as "private paid schools" hereinafter). Instead of distributing coupons to parents, state subsidies corresponding to the monthly reported number of students attending in each voucher school were distributed to a school operator, which was the municipal government for municipal schools. For private subsidized schools, it was the Church, individuals, or private entities. In terms of deregulations, teachers were all turned into private employees, and the 1980 reform made curriculum simpler and more flexible. Added to these, a policy change in 1993 materialized Friedman's controversial proposal by allowing private subsidized basic schools to charge tuition fees, though with some restrictions.

How did people react to the change? Figure 1 illustrates the transfer of national schools to municipalities since 1981, and changes in the distribution of students among the different types of school until 2004. Although the data are not confined to basic education, shares among the school types are similar to what is shown in Fig. 1¹⁰. A speedy school transfer to municipalities is evidenced by 76% of students previously studying at national schools already classified as municipal school students in 1982. Since then, the share of municipal schools has been gradually and constantly decreasing, whereas that of private subsidized schools rapidly swelled by doubling in the first five years from 15.1% to 30.8%, and has been continuously increasing to the present. The share of private paid schools, which was 6.9% in 1981, kept declining until 1986, but was restored in 1987 and has been gradually, though marginally, increasing. Another data source on changes in the number of schools reveal that the number of private paid

¹⁰ A proportion of each school type in basic education in 2004, for example, municipal schools (52.3%), private subsidized schools (40.5%), and private paid schools (7.2%) (Ministerio de Educación 2005a, p. 40).

schools decreased from 802 in 1980 to 668 in 1985 (a loss of 134 schools), while that of private subsidized schools increased from 1,627 to 2,643 (a gain of 1,016 schools) in the same period. (Ministerio de Educación 1999, p. 55)¹¹. It implies that quite a few private paid schools submitted themselves to the voucher system, but they were outnumbered by newly founded private subsidized schools. Prior to the voucher system, almost half of private schools were run by the Catholic Church, some by protestant churches and others by profit-making organizations, whereas many of the private subsidized schools mushrooming after the introduction of the system belonged to profit-making entities (Aedo 1997, p. 15).

Fig. 1 Distribution of Student Enrollment by School Type
(Preschool, Basic, Secondary, and Special Education, Years 1981-2004)



(Note) Data correspond to the number of students enrolled on April 30 of each year. Preschool data do not include JUNJI or INTEGRA, two major service providers in low-income areas. “Corporations” refer to those high schools of technical and vocational tracks managed by corporations of a delegated administration, which are non-profit private organizations composed by local business enterprises.

(Source) Ministerio de Educación (1999, p. 118) for Years 1981-89, Ministerio de Educación (2005a, p. 40) for Years 1990-2004.

Concepts of “libertad de enseñanza” and “subsidiariedad” obviously played a significant role when drawing new policies for the reform. “Subsidiariedad” was a notion quoted by the military government to propagate an idea that the state, by assuming a subsidiary role, should support initiatives of the private sector instead of superseding them. Foundations of the 1980 education reform are traced to the Presidential Directive of Education (PDE) announced in 1979 with specifications of

¹¹ This includes data on pre-basic, basic, secondary, and special education.

some neoliberal policies of education (Cox 1989, pp. 59-60; PIIE 19884, pp. 90-95)¹². Stakeholders with different interests in education such as officers from the Ministry of Finance, the Planning Office, and the Ministry of Interior were involved in drawing concrete policies based on PDE, in addition to the President and the Ministry of Education. They shared, however, one common value in the principle of “libertad de enseñanza,” and many made much of “subsidiariedad.” In effect, “subsidiariedad” has long been practiced in Chilean education since 1876 when the state started to subsidize tuition-free private primary schools, though only in a small magnitude. In 1951, however, the per-student amount of such subsidy was raised to half of the cost of a public school student (Soto Roa 1997, p. 50). The newly introduced voucher system made such tradition rooted in Chilean society ready for further expansion.

3. 2. Education Finance

Changes brought about in education finance after the voucher system will be looked at from the state, municipality, and school levels, respectively.

Table 3 summarizes changes in the total expenditure of the Ministry of Education, the breakdown, and the amount of a monthly subsidy per student during 1980 and 1998. The first point to notice is a continuous decline of the total expenditure from 1981, the year in which the voucher system was established, to 1990. The shrinkage occurred by 27% in this period. Nevertheless, a large increase is uninterruptedly observed after 1993 when the level of 1981 was regained¹³. Thus we see that the Ministry’s expenditure on education considerably decreased during the 1980s under the military regime, whereas it recovered the loss and marked a sharp increase in the 1990s under the civilian government.

Which areas were most affected by the decreased expenditure of the Ministry in the 1980s? Table 3 indicates a sharp drop in the share of personnel costs during the few years after 1980, in contrast to a sudden increase in the share of subsidies. The former attributes to both the teacher transfers to municipalities or private schools and the shrinkage in the number of the Ministry’s staff by 55% between 1980 and 1989

¹² It is worth noting that a reference was made to national efforts geared toward universalization of basic education in PDE, and yet no concrete strategies were specified other than some indirect measures such as an increased coverage of preschool education and more curricular flexibility.

¹³ The Ministry’s expenditure on education in 2002 augmented by 140% compared with the 1993 data (Ministerio de Educación 2004, p. 137).

(Winkler and Rounds 1996, p. 371)¹⁴. The latter is obviously due to the voucher system. A percentage of subsidies as small as 7.3% in 1980 steeply rose to above 50% in only two years, and yet steadily decreased for the next three years. Concomitantly, the real value of monthly subsidies per student continued to decline to their lowest level in 1985. These drops were mainly caused by the severe economic crisis that hit the country. We should not overlook, however, that the value of subsidies remained low in the late 1980s even after the country's economy was restored to stability. The level of 1982 was reached again only in 1994. Reduced subsidies caused a large decline in the real value of teacher salaries, by more than 30% in the 1980s, because they are the main source of revenue in the voucher system. Faced with a serious expenditure cut, quite a few voucher schools were operating in double shifts, and some were authorized to reduce the number of class hours (Espínola 1989, p. 61).

A diminishing share is also observed in the transfer to higher education in the 1980s from 37.5% in 1980 to 18.8% in 1990, reflecting the expansion policy in this level of education based on cost recovery and a use of the private sector. Although shares for the lower levels of education increased instead¹⁵, the total expenditure for basic education still declined throughout the 1980s because of the reduced amount of the vouchers. Lastly, the expenditure for textbooks also saw a constant decline in the 1980s.

¹⁴ An increase of expenditure between 1980 and 1981 was caused by both the payment of retirement allowances to the teachers who lost public employee status and special state subsidies expediting the school transfer to municipalities.

¹⁵ The distribution of expenditure for the lower levels of education in 1980 was 4.1% for preschool, 39% for basic, 14.3% for secondary education, which was increased to 8.2%, 52.7%, and 17.6% respectively in 1990 (Ministerio de Educación 1999, p. 207)

Table 3 Expenditure of Ministry of Education, Years 1980-98

Year	Total Expenditure ^a		Breakdowns of Total Expenditure (%) ^a							Monthly Subsidy per Student ^b	
	Million Pesos of 1998	1981 =100	Operation Costs			Transfer			Investment	Million Pesos of 1997	1982 =100
			Person - nel	Text-Books	Others	Subsidies	Higher Edu.	Others			
1980	612,549.6	---	50.3	0.3	3.2	7.3	37.5	0.4	1.0	---	---
1981	689,004.3	100	38.3	0.2	11.5	24.1	24.5	0.6	0.9	---	---
1982	689,214.5	100	16.0	0.2	7.1	50.3	25.5	0.7	0.3	11,582	100
1983	639,155.6	93	12.7	0.2	6.8	47.9	30.9	1.3	0.2	9,955	86
1984	622,220.8	90	12.5	0.2	7.4	47.4	30.0	2.5	0.1	9,351	81
1985	621,598.6	90	12.9	0.2	1.6	45.2	27.6	12.4	0.2	8,784	76
1986	565,351.5	82	11.8	0.2	1.8	57.1	21.5	7.3	0.3	9,827	85
1987	519,939.7	75	5.1	0.2	1.0	64.8	21.5	7.2	0.1	9,226	80
1988	537,981.2	78	5.5	0.1	1.1	63.6	20.9	7.3	1.5	9,329	81
1989	525,094.3	76	5.5	0.1	1.0	64.5	19.7	8.5	0.7	9,345	81
1990	500,657.4	73	5.3	0.1	1.2	63.8	18.8	10.5	0.2	8,874	77
1991	544,827.3	79	5.3	0.3	1.3	60.2	19.8	12.5	0.6	9,159	79
1992	616,988.9	90	5.5	0.3	2.6	58.9	18.4	13.4	0.8	10,016	86
1993	689,517.5	100	5.8	0.3	2.0	57.7	17.3	15.9	1.0	10,904	94
1994	748,379.7	109	5.7	0.3	1.7	60.3	16.5	14.7	0.8	12,145	105
1995	863,578.0	125	5.3	0.3	1.4	63.3	15.5	13.9	0.3	14,346	124
1996	979,359.3	142	5.0	0.3	1.9	63.1	14.5	14.9	0.3	15,936	138
1997	1,090,485.4	158	4.8	0.3	1.9	64.2	13.8	14.7	0.4	17,214	149
1998	1,201,500.6	174	4.8	0.4	2.5	62.6	13.5	16.0	0.3	---	---

(Note) Monthly subsidy per student is calculated as the total amount of subsidies divided by the number of annual average enrollments registered in the subsidy system, according to González (1998).

(Source) a: Ministerio de Educación (1999, p. 203), b: González (1998, p. 175)

Meanwhile, municipal governments saw large deficits accrue from managing local schools. Total deficits in 1986, for example, amounted to 2.1 billion pesos in 201 municipalities, much of which was covered later by the Ministry of Finance (Castañeda 1986, p. 39). There were some causes behind these municipal deficits. First, the subsidy per student introduced in 1980 was indexed to consumer prices and weighted by education levels, grades, operation in day or night, and the presence of disabled children. No consideration was given to small-scale rural schools or those with boarders at that time, so that areas having a large number of these costly schools suffered from a lack of resources. Second, the economic crisis of 1982 induced a reduced voucher amounts and a replacement of indexing with another adjustment method linked to public employees' wages, both resulting in a large decline in the real value of subsidies. Third, municipal schools transferred from the government were generally inefficient in terms of lower

teacher-student ratios compared to those of private subsidized schools¹⁶. Inefficiency was further exacerbated by a continuous outflow of students to private subsidized schools, and by mayors who were instructed not to dismiss teachers due to the government's concerns over the high unemployment rate during the serious economic recession (Gauri 1998, p. 35). Lastly, some affluent municipalities may have intentionally opted for generating deficits for their high fiscal capacity.

After 1989 when the Ministry of Finance ceased covering municipal deficits, inequality of education expenditures became more evident among municipalities of different fiscal capacities. For instance, when education expenditure per student, including state subsidies and the municipality's own resources, is compared between the top 10% and bottom 10% of municipalities measured by the municipal revenue per resident, municipalities of higher fiscal capacity received state subsidies about 1.5 times higher than those of lower fiscal capacity, and when including municipal resources, the gap rises to double (Winkler and Rounds 1996, p. 370)¹⁷. Municipal contribution to education expenditures accounted for 4-6% of the total public expenditure on education during the 1980s and 90s (Ministerio de Educación 1999, p. 205).

Let us now turn to the financial situation at the school level. As pointed out by González (1998, p. 165), the voucher system has an advantage of increased transparency and objectivity in the distribution of the national budget among schools, which is particularly important in a developing country context, where funds are not always allocated to schools in accordance with the services they render. Although political intentions may still intervene in the distribution of subsidies among municipal schools at municipal governments, subsidy per student attendance is certainly a clearer system than the traditional method¹⁸.

Resources available at the school level differ between municipal and private subsidized schools. Municipal schools receive state subsidies through vouchers and additional municipal resources, while relying on the Ministry of Education or the National Fund for Regional Development for capital investment on school infrastructure.

¹⁶ The average teacher-student ratio in 1984 was 24 for municipal schools, and more than 40 for private subsidized schools, close to the ceiling of 45 set by the Ministry of Education (Castañeda 1986, p. 17).

¹⁷ "Municipal Common Fund" is a mechanism for correcting these municipal inequalities by collecting and redistributing municipal revenues. The magnitude of its effect is, however, rather small since a relatively small proportion of municipal revenue is redistributed; for example, only 13% in 1993 (Gauri 1998, p. 44).

¹⁸ According to González (1998, p. 165), another advantage of the voucher system is found in that the Ministry of Education need no longer negotiate with the Ministry of Finance every year over an increased coverage of the system.

Private subsidized schools, on the other hand, only receive subsidies from the voucher system. Both types of school collect parent center fees and receive donations in cash or in kind, as well as free labor from individuals and companies, or from churches in the case of religious schools. In general, teachers' salaries are lower at private subsidized schools where funds for capital investment have to be squeezed out of the subsidies¹⁹.

To determine the amount of a voucher in the 1980s, no significant consideration was initially given in the formula to compensate for disadvantaged children such as those with learning difficulties or from low-income families studying at a small rural or an urban peripheral school with or without boarders. The only extra weight was that of "zone assignment factor," which was roughly given to isolated provinces and territories with high poverty incidence. A system of USE (Education Subsidy Unit) was introduced for the calculation of vouchers in 1987²⁰, and only in 1988 did small rural schools become subject to an extra weight. Still, it was only from 1995 when this "rurality subsidy" carefully designed in consideration to equity started to apply (González 1998, p. 170)²¹.

In 1993, an important change occurred in school level finance. "Shared financing" was launched for the purpose of generating more private resources for education, which allowed all voucher schools, except for municipal basic schools, to charge tuition fees in exchange for the proportionally reduced voucher amount²². The percentage of private subsidized schools participating in this scheme corresponded to 14.6% of all students studying at these schools in 1993, but increased to 50% in the following year, and rapidly up to 71.8% in 1998. The total amount collected in 1998 was 59,898 million pesos, and average monthly tuition fee of private subsidized schools was 5,959 pesos

¹⁹ A study conducted in 1990 showed that teachers' salaries accounted for 90.5-95.4% of the subsidies in municipal schools, and only 67.2% in case of private subsidized schools (Latorre et al. 1991, p. 73).

²⁰ The basic formula for calculating the voucher amount is: (Average monthly attendance)*(USE base value)*(USE factor), to which multiplied are various factors appropriate to the characteristics of each school such as "zone assignment" or "rurality subsidy." Currently, "USE base value" corresponds to the value set in 1998 (9,785.477 pesos), which is adjusted every December in line with the changes of public employee wages. "USE factor" takes different values by education levels, grades, tracks in secondary education, full-day schooling, special education, and adult education. Average attendance of the last three months is used for "average monthly attendance" in order to minimize fluctuations. There are currently about 20 additional rules for an increase or a decrease of the voucher amount (Ministerio de Educación 2005, p. 217).

²¹ It applies to schools with less than 90 students, located in more than 5 kilometers from the nearest urban boundary according to a decree of 1996 (Ministerio de Educación 2002, p. 8).

²² The maximum monthly tuition fee is four times the USE base value (about US\$80). A reduction of the amount of a voucher is 0% when tuition fees are between 0-0.5 times USE base value, 10% for 0.5-1 times USE, 20% for 1-2 times USE, and 35% for 2-4 times USE. Before the introduction of shared financing, voucher schools were discouraged from charging tuition fees, because they were subject to a 40% tax. Thus, most schools did not charge tuition (Winkler and Rounds 1996, p. 374).

(Ministerio de Educación 1999, p. 209). The overall share of private expenditure on education rose from 1.8% as percentage of GDP in 1992 to 3.3% in 2002 (Ministerio de Educación 2004, p. 37), for which this scheme undoubtedly made a significant contribution.

Shared financing nonetheless produced a negative consequence by limiting access to private subsidized schools for children from low-income families with no capacity for paying the tuition fees, and thereby promoting stratification of schools²³. An illustration was given in the results of a household survey in 2000 showing a clear difference among different socioeconomic groups in the proportion of students studying at private subsidized schools with shared-financing. It was 35.9% in the lowest 10% income group, but more than 80% in each income group from the eighth to the highest 10% (MIDEPLAN 2001, p. 21).

A study analyzing costs per student at school in 1996 revealed that parent contributions accounted for a relatively large proportion of costs through the payment of tuition, parent center, uniform and materials fees (McEwan 2000, p. 225). The average annual amount of subsidy per student was the highest for municipal schools under DAEM (185,882 pesos), and the lowest for non-religious private subsidized schools (158,848 pesos). However, by adding other costs like private contributions, municipal expenditure, annual costs for the use of school infrastructure and land, and partial costs of programs of education reform, the total costs were the highest for Catholic private subsidized schools (492,501 pesos), and the lowest for non-religious private subsidized schools (393,115 pesos). The proportion accounted for by parent contributions was the highest for non-religious private subsidized schools (59.1%), followed by Catholic private subsidized schools (51.2%), and the lowest for municipal schools under DAEM (38.2%).

To summarize, the Ministry's education expenditure considerably decreased in the 1980s, but increased greatly in the 1990s. The decline in the 1980s was accompanied by a sizeable reduction of the real value of vouchers, substantially decreased teacher salaries, less spending for educational materials, and large municipal deficits, all of which negatively affected educational activities. Unequal levels of education expenditure were also evident among municipalities of different fiscal capacities, and the design of a voucher formula lacked consideration regarding compensation for

²³ Since 1999, schools with shared financing have been obliged to set up scholarship funds for low-income families by allocating 5-10% of the collected tuition fees and an additional financial support from the government. However, they do not appear to be strong enough to overcome its negative effect.

educationally disadvantaged children. Although shared financing introduced in 1993 successfully boosted private investment for education, yet it also promoted stratification of schools without powerful countermeasures of concern for equity.

3. 3. Freedom of School Choice

We will inquire into two issues regarding freedom of school choice: 1) Is this freedom equally bestowed to all parents in practice; and 2) By what criteria do parents select a school?

To begin with, people in rural areas with a small number of school-aged children have no alternative of private subsidized or private paid schools, because unlike urban areas the principle of competition supporting the voucher system simply does not work in such areas. Table 4 shows the distribution of basic school students among the three types of school separately by region and urban and rural areas in 2004. The data prove that a rapid expansion of private subsidized schools after the voucher system is an urban-biased phenomenon. The enrollment of private subsidized schools is as high as that of municipal schools in urban areas, and the former already overwhelmed the latter in the Metropolitan Region. In rural areas, however, municipal schools dominate the total enrollment with a share of 80%, which rises to 90% when excluding the exceptional case of the Region IX. Other data classified by municipalities in 1998 disclose that not a single private subsidized school existed in 102 out of the 346 municipalities nationwide (29.5%), and private paid schools were found in only 96 municipalities (Ministerio de Educación 1999, pp.323-385). Even when rural private subsidized schools exist, their academic performance is generally known to be lower than that of rural municipal schools (Mizala and Romaguera 1998, p. 40).

**Table 4 Distribution of Enrollment in Basic Education
by School Type, Region, Urban and Rural Areas, Year 2004**

Region	Urban				Rural			
	Total Enrollment	Distribution by School Type (%)			Total Enrollment	Distribution by School Type (%)		
		MUN	PS	PP		MUN	PS	PP
I	62,706	42	55	3	4,409	89	11	0
II	77,761	66	25	9	424	100	0	0
III	39,361	75	21	4	2,126	88	2	10
IV	75,662	55	40	5	19,099	91	9	0
V	203,719	46	45	9	20,092	91	8	1
VI	90,080	58	36	5	30,432	94	4	2
VII	98,046	61	34	5	42,755	95	5	0
VIII	240,056	60	35	5	46,035	87	13	0
IX	103,853	50	47	4	35,803	44	55	1
X	121,060	61	34	5	50,613	74	25	0
XI	11,619	63	36	1	2,418	98	2	0
XII	19,719	64	27	9	670	100	0	0
RM	823,125	36	52	12	47,745	73	24	3
Total	1,966,767	48	44	8	302,621	80	19	1

(Note) Chile is divided into 13 regions, numbered from Region I located in the northern end, to Region XII in the southern end. Metropolitan Region is denoted as "RM." "MUN" denotes municipal schools, while "PS" is for private subsidized schools and "PP" for private paid schools.

(Source) Ministerio de Educación (2005a, pp. 35-36)

Next, for some parents, practice of school choice is seriously inhibited by their children's enrollment being denied by their school of choice. That is to say, the voucher system provides incentives not only for parents to select a better school, but also for schools to select a better student, so as to easily improve their performance. Municipal schools, administered by municipal governments to which the state delegates the constitutional guarantee of basic education services, are obliged to unconditionally accept applicants as long as vacancies remain, whereas private subsidized schools are not necessarily restricted by such rules (Aedo 1997, p.17). Although the Ministry of Education does not officially allow voucher schools to select or expel students, still it is difficult to fully control observance by each school. Student selection is widely practiced among private subsidized schools and some high-performing municipal schools with high demand for enrollment. In a randomly selected survey of 50 basic schools in the Metropolitan Region in 1993, for example, 15% of municipal schools and 63% of private subsidized schools selected students through an entrance exam, an interview with parents, or by setting a minimum grade for enrollment (Rounds Parry 1996, p. 827). Grade repeaters are often denied their enrollment even at municipal

schools²⁴.

Lastly, precise information on school quality, a crucial basis for making a sound decision when choosing a school, was not made available in Chile until the mid-1990s. Although national achievement tests, known as PER between 1982 and 1984 and as SIMCE from 1998 to the present, were applied nationwide, the results of school-average scores were widely disclosed only from 1995. Nor was there a system to broadly provide parents with other quality-related information. Under the circumstances, better-educated parents with a keen interest in their children's education were in general better informed of school quality. A household survey in 1993-94 of 726 families in Great Santiago attested to the fact that parents of private paid and high-achieving private subsidized schools had more information on school quality, and parents of private paid schools had better quality information than parents of voucher schools (Gauri 1998, p. 121).

By what criteria do parents select a school? Parents with higher socioeconomic status tend to select schools on academic grounds. The afore-mentioned household survey, for example, showed that 86.2% of parents of private paid schools and 60% of private subsidized schools gave those reasons for selection. Other criteria, mostly concerning the distance to school, were used by 57.8% of parents of municipal schools, (Gauri 1998, p. 113-115). According to Espínola (1989, pp. 65-67), school selection criteria ordered by their relative importance are as follows: 1) Good access to school; 2) availability of social assistance services such as school meal and free stationeries; 3) discipline and order; 4) status symbols as seen in private paid schools; 5) credentiality; and 6) availability of compensatory education services for children with learning difficulties.

Reflection on these makes clear the following three points. First, parents of lower middle or low socioeconomic status have criteria they see as more important than those directly related to school quality. The first two criteria of good access to school and availability of social assistance services mainly come from economic limitations of the household. Viewed in the same light, a free provision of school bus services or the availability of boarding facilities in rural areas may appeal more to parents than school quality itself. Similarly, acquiring virtue of good discipline and order is of much importance for the foreseeable production work those children may engage in one day.

²⁴ Provincial Departments of Education received a total of 7,949 official claims during December 1996 and March 1997, 4,008 of which related to enrollment denial, and 1,195 were about enrollment cancellation (La Epoca, May 19, 1997).

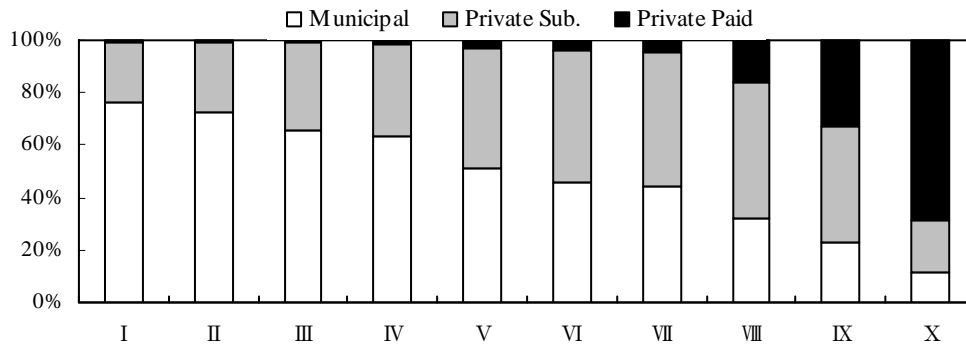
Second, those criteria related to school quality are superficial and therefore misleading. Examples of status symbols as seen in private paid schools are school names in English and school uniforms of their own. As for credentiality, parents ask if schools have computers or extracurricular activities without asking how they are used or implemented. These are part of important marketing methods for some private subsidized schools to attract more students.

Finally, one may notice that parents from low-income families end up selecting a school from limited choices by following these criteria. Since some private subsidized schools, for instance, do not furnish social assistance services like free school meals or compensatory educational services, low-income families in need of such support should exclude them from their options.

In short, it seems reasonable to conclude that not all parents benefited from freedom of school choice. Some parents, particularly rural residents and low-income families, faced serious limitations in exercising choice in practice. Furnished with more and better information on school quality, well-educated parents with deep interest in education enjoyed selecting a school from a wide variety of options, whereas other parents, mostly from rural and low-income areas, were obliged to practice choice under socioeconomic, spatial, and informational limitations, often based on criteria not directly related to school quality.

Accordingly, the voucher system caused more intense stratification of schools. Figure 2 provides evidence of a stratified basic schooling system in Chile as of 2000, by showing distribution of enrollment by income group and school type. While 76.1% of children from the lowest 10% income group study at municipal schools, 68.5% of those from the highest 10% do so at private paid schools. A comparison of these data with the results of the 1987 survey confirms enhanced stratification of schools by the fact that 29% of the children from the top 20% income group studied at municipal schools in 1987, whereas only 11% did so in 2000 (OECD 2004, p. 64).

**Fig. 2 Distribution of Enrollment by Income Group and School Type
(Basic Education, Based on CASEN Household Survey, Year 2000)**



(Source) MIDEPLAN (2001, p. 20)

3. 4. Impact on Quality of Education

Did the voucher system improve the quality of basic education in Chile? The question can be broken down into the following three points. To begin with, one should inquire if academic performance of basic schools has improved as a whole. As discussed before, the financial situation was so dissimilar between the 1980s and 90s that it deserves separate consideration. Next, a question is posed whether private subsidized schools are more effective and efficient than municipal schools, as voucher advocates argue. Lastly, we should see if competition generated among schools has brought about an enhancement in the quality of municipal schools.

Let us consider the first point from indicators of internal efficiency and student achievement levels. Table 5 indicates dropout rates, quasi-repetition rates, retention rates of cohort, and percentages of graduates from 1981 to 2002. Quasi-repetition rates fluctuated in the 1980s, but marked a constant decrease since 1990, with significant improvement from 7.8% in 1990 to 2.8% in 1999. Quasi-dropout rates, on the other hand, plunged between 1981 and 82 from 8.1% to 2.7% with a subsequent small rise and fall in the 1980s, and steadily kept declining in the 1990s. Dropout rates, though reaching higher values than the quasi-dropout indicates, show a relatively low incidence in the latest data.

Was the sudden drop in the quasi-dropout rate in 1982, equivalent to a reduction of 120,000 dropouts, attributable to the voucher system?²⁵ It may be assumed that special efforts to prevent any dropouts were made by the school staff which became more sensitive to the existence of dropouts under a system where reduced enrollments are

²⁵ A fall in the quasi-dropout rate, though in a smaller magnitude, is observed in secondary education, from 8.4% to 6.2% in the same period.

directly connected to decreased school revenue. Although one cannot deny the possibility that changes in the administrative organizations may have caused confusion in the data collection, we may still safely state that the voucher system contributed to a reduction of dropouts at least to some extent. Nevertheless, the fruits of such efforts at the school level have their own limitations, for no further improvement was observed after 1982.

Cohort-related indicators also confirm improved internal efficiency, as both retention rates and percentages of graduates steadily improved during the two decades. Differences in these indicators among cohorts indicate a little more improvement in the 1980s than that of the 1990s. Yet, a simple comparison between the two decades in this context may be misleading, since the higher the rates, the more difficult it is to make a larger improvement. In order to judge whether these improvements accrued from policy manipulation such as lowered standards for graduation or from truly enhanced student learning, let us then consider changes in student achievement during the period.

Table 5 Indicators of Internal Efficiency of Basic Education in Chile (1981-2002) (%)

Year	Quasi-repetition Rate ^a	Quasi-dropout Rate ^a	Dropout Rate ^b	Cohort	Retention Rate ^c	Proportion of Graduates in 10 Years ^c
1981	8.1	8.1		1975-85	54.6	50.3
1982	7.9	2.7		1976-86	57.8	52.7
1983	6.9	3.1		1977-87	60.0	54.8
1984	8.5	3.2		1978-88	62.7	58.0
1985	7.8	3.1		1979-89	68.2	60.3
1986	6.7	2.9		1980-90	69.9	64.9
1987	6.1	2.7		1981-91	70.7	64.4
1988	7.0	2.5		1982-92	76.2	68.6
1989	8.4	2.7		1983-93	76.7	70.1
1990	7.8	2.3		1984-94	78.6	72.5
1991	7.4	2.0	2.9	1985-95	80.9	75.0
1992	7.2	1.9	2.6	1986-96	81.7	75.8
1993	6.9	1.9	3.6	1987-97	82.5	76.7
1994	6.9	1.9	3.7	1988-98	83.1	77.8
1995	6.0	1.7	4.0	1989-99	83.3	78.4
1996	5.7	1.8	3.9	1990-2000	84.0	79.8
1997	4.4	1.6	2.2	1991-2001	85.2	81.7
1998	3.5	1.5	3.0	1992-2002	86.6	83.5
1999	2.8	1.4	2.1			
2000	2.9	1.4	1.7			
2001	2.8	1.3	2.3			

(Note) a: Quasi-repetition rate is a failure rate showing the percentage of unsuccessful examinees of the grade promotion test. Quasi-dropout rate is the percentage of students who did not take such a test, without confirming whether or not they are officially dropouts. b: Data on dropout rates calculated by the official formula are available only from 1991. c: Data on cohorts from the 1975-85 to the 1979-89 groups come from Ministerio de Educación (1999), while the rest from Ministerio de Educación (2004). Minor differences were found in the data for those cohorts from the 1980-90 to the 1988-99 groups overlapping in both sources.

(Source) Ministerio de Educación(1999, pp. 259, 276; 2001, p. 173; 2004, p. 80)

Past studies assert no confirmation of the improvement of student performance in the 1980s (Prawda 1993, p. 258, Cox and Lemaitre 1999, p.159). Table 6 summarizes school average scores of basic school 4th graders measured by national achievement tests after 1982, categorized by school type and by school-averaged socioeconomic status. The first point to observe is an overall low level of achievement during the 1980s. Since these are multiple-choice tests having four alternatives in each answer, net scores after excluding those correct answers by chance reveal a more serious situation. For example, the net score of the total average in 1982 is as low as 32.1 points. The average achievement level rose in the following two tests after 1982, but it fell in 1988 close to the initial point of 1982. This was partly because many rural schools, at which performance is generally low, were newly included in the 1988 sample, as evidenced by their larger sample size. Still, a study that compared the data of schools participating in

both tests in 1982 and 1988 confirmed a score decrease between the two, though with a smaller difference (Morales 1991 cited in Cox and Lemaitre 1999, p. 160). Attention should also be drawn to enlarging score gaps between municipal and private subsidized schools, as well as among schools of different socioeconomic background in the 1980s.

Test results in the 1990s continuously improved. Not only did scores rise by 11.8 points between 1990 and 96, but score gaps also shrunk among the school types and among different socioeconomic levels. Of particular note are larger gains spotted for municipal schools and schools of the lowest socioeconomic status. These advances were well founded, given the big growth in the education finance of the 1990s. Still, there remains ample room for further progress. Schools from the lowest socioeconomic group, for instance, received a low net score of 47.1 points even in 1996.

Additionally, a chronological observation of standard deviations discloses a large variation of achievement among private subsidized schools in both decades. Similar increases, though less in volume, are also found for municipal schools and schools from the low or lowest socioeconomic levels, whereas declines are evident for the private paid and schools of higher levels. Diversity at private subsidized schools is confirmed by the recent test results, as shown in Table 7. Private subsidized schools serving children of low socioeconomic status scored less than municipal schools, while those for the children of middle or higher status almost equaled private paid schools.

Table 6 Student Achievement in Basic School 4th Grade in Chile (1982-1996)

Year	Total	School Type			Gap PP- MUN	Socioeconomic Status				Gap High- Lowest
		MUN	PS	PP		High	Middle	Low	Low- est	
1982 (N=2,474)	49.1 (9.7)	45.9 (6.5)	50.6 (8.6)	67.4 (8.8)	21.5	66.7 (9.7)	50.4 (8.9)	44.3 (6.0)	---	22.4
1983 (N=3,002)	54.3 (10.7)	51.0 (8.1)	55.4 (10.0)	73.2 (7.6)	22.2	74.1 (8.3)	57.4 (9.3)	49.4 (7.0)	46.8 (8.9)	27.3
1984 (N=3,287)	57.9 (11.3)	54.3 (8.8)	59.4 (10.5)	78.6 (6.4)	24.3	79.2 (7.1)	62.7 (9.6)	53.6 (7.9)	49.8 (9.6)	29.4
1988 (N=5,460)	51.4 (12.4)	47.6 (9.8)	54.5 (11.6)	75.0 (8.6)	27.4	76.4 (8.0)	63.5 (8.8)	49.7 (8.8)	43.3 (10.5)	33.1
1990 (N=5,257)	56.8 (12.6)	53.3 (10.6)	60.0 (12.1)	78.3 (6.3)	25.0	78.7 (5.8)	69.2 (10.6)	59.1 (10.5)	51.6 (10.4)	27.1
1992 (N=4,858)	64.3 (12.9)	60.5 (10.6)	66.3 (12.8)	84.1 (7.4)	23.6	84.3 (7.2)	72.4 (10.4)	64.8 (10.2)	57.5 (10.9)	26.8
1994 (N=4,588)	66.1 (11.5)	62.2 (9.2)	67.8 (11.1)	83.6 (5.8)	21.4	83.3 (6.5)	73.3 (8.2)	62.4 (8.7)	54.3 (11.1)	29.0
1996 (N=5,543)	68.6 (11.3)	65.5 (9.6)	70.0 (11.3)	84.1 (6.5)	18.6	84.3 (6.4)	76.1 (7.8)	66.7 (8.6)	60.3 (11.7)	24.0

(Note) Standard deviation in parenthesis. Abbreviations of MUN, PS and PP are the same as those used in Table 4. Classification of socioeconomic status is based on each school director's perception.
(Source) Bravo, Contreras, and Sanhueza (1999, pp. 71-78)

**Table 7 Student Achievement in Basic School 8th Grade in Chile
(2004, and a score difference from 2000)**

Socio-economic group	Mother's years of education (Years)	Household income (Thousand pesos)	Language			Math		
			MUN	PS	PP	MUN	PS	PP
High	16	1,509	---	297 (10)*	301 (2)	---	306 (14)*	312 (6)*
Middle High	13	554	290 (4)	279 (3)	271 (-1)	296 (7)*	280 (4)	274 (5)
Middle	10	254	248 (0)	258 (3)	---	248 (1)	257 (4)*	---
Middle Low	8	154	233 (0)	234 (3)	---	235 (3)	236 (4)	---
Low	7	104	231 (3)	221 (1)	---	234 (4)	223 (5)	---

(Note) School average scores and other socioeconomic indicators are shown. Differences between SIMCE 2000 (Basic Education 8th grade) and 2004 are shown in parenthesis. The sign “*” indicates that the difference is statistically significant.

(Source) Ministerio de Educación (2005b, pp.16-17)

This brings us to the second point concerning the effectiveness and efficiency of private subsidized schools. Scrutiny of the effectiveness is confronted by two difficulties: how to precisely control for students' background; and how to deal with a bias caused by parents' school selection and some schools' student selection practices.

Availability of more minute measures of school socioeconomic levels since 1996 has largely overcome the former difficulty²⁶. In analyses using such data, the positive effects of private subsidized schools over municipal ones previously observed in the model having no control variables are turned negative with or without statistical significance, or slightly positive but not significant (Mizala and Romaguera 1998, pp. 18-19; Bravo, Contretas, and Sanhueza 1999, pp. 33-41). The problem of school selection can be dealt with to a certain extent by value added approach, using student gain scores between pre- and post-test as the dependent variable. Due to unavailability of such data, however, some analyses added past test scores in the model, based on the assumption that students studying at the same school in different years bear similar characteristics. No significant difference was found between private subsidized and

²⁶ The vulnerability index developed by JUNAEB sets the value between 0 and 100 for each school through a questionnaire survey conducted yearly on the parents of all first graders.

municipal schools in their results (Rounds 1994, pp. 199-200; Mizala and Romaguera 1998, p. 23).

Given the diversity among private subsidized schools, some studies further classified them by their characteristics. Relative effectiveness was then found for non-profit religious voucher schools, mostly Catholic, over municipal and other private subsidized schools (Rodriguez 1988, p. 85; McEwan and Carnoy 2000, p.221), and for schools that existed before the voucher, again mostly Catholic, over municipal schools (Bravo, Contretas, and Sanhueza 1999, p. 41). Also verified was the slightly lower effectiveness of non-religious voucher schools as compared to municipal ones under DAEM (McEwan and Carnoy 2000, p.221)²⁷. Similarly, private subsidized schools located in rural areas are found not as effective as municipal schools (Mizala and Romaguera 1998, pp. 38, 40), and the negative effects of non-religious voucher schools are more pronounced outside the Metropolitan Region (McEwan and Carnoy 2000, p. 223).

As for the efficiency of private subsidized schools, the slightly higher cost effectiveness of these schools compared to municipal ones is reported by an analysis of 70 large cities with per student expenditure data by school type included in the model explaining school performance (Winkler and Rounds 1996). The small sample size, however, calls for cautious interpretation of such findings. Another study with more elaborate information on costs at school concluded that non-religious voucher schools, with their lower costs and lower effectiveness, were more efficient than municipal ones under DAEM, and that the Catholic voucher schools, with their higher costs and higher effectiveness, were on the same efficiency level as municipal schools (McEwan and Carnoy 2000, p. 227).

Finally, the effects of competition on improving the performance of municipal schools were confirmed only in a certain context (McEwan and Carnoy 1999). According to their findings, competition proxied by the enrollment share of private subsidized and paid schools in each municipality yielded small score increases in municipal schools in the Metropolitan Region, particularly among schools of middle and lower middle socioeconomic status, but slight declines in the other regions. As the authors clearly state, however, the analysis does not consider the effects of cream skimming promoted through competition. An outflow of better endowed students may

²⁷ A possible upward bias toward religious voucher schools still remains in these findings due to school selection by parents and student selection by some schools.

negatively affect the output improvement of municipal schools, provided peer-group effects are important in determining student achievement. Peer-group effects are positive effects of a student's achievement and socioeconomic level on other students studying either in the same class or school. Two examples suffice to show the presence of such effects. School average scores were the factor explaining most of the variance in Chilean 8th grade student-level achievement (Farrell and Schiefelbein 1982). In the value-added analysis for comparing public and private school effectiveness in Thailand and the Dominican Republic, peer-group effects accounted for a large part of the score differences between the two types of school (Jimenez and Lockheed 1995, pp. 80, 100)

Put briefly, the points made in this section are as follows. Despite the improved internal efficiency, student achievement did not improve in the 1980s, and score gaps increased among different school types and schools of different socioeconomic status. In contrast, both internal efficiency and student performance improved in the 1990s with notably higher score increases for voucher schools and for schools serving children from lower segments of society. There still remains much room for further improvement, however. No evidence supports the statement that private subsidized schools are more effective than municipal ones when student background and school selection are controlled for. Particularly, non-religious profit-making voucher schools, many of which mushroomed after the voucher, are found slightly less effective than municipal schools, though more cost-effective. Moreover, private subsidized schools in rural areas are found less effective than municipal ones, and competition produced slightly negative effects in municipal schools outside the Metropolitan Region.

4. Basic Education Reform after the Democratic Transition

In March 1990, the democratic center-left coalition government known as "Concertación" assumed power under the Aylwin administration (1990-94). Concertación basically followed the inherited education policies like the voucher and municipal school management. Although there were several reasons behind this, one deserves more attention: the role of the state in education had to be reconsidered. Neither the heavily centralized administration system of "estado docente" in the past, nor a total reliance on the market principles under the military rule seemed appropriate for the purpose of quality and equity improvement, which was a new focus of education policies after democratization (Cox and Lemaitre 1999, p.161). Thus, a state and market complementary to one another were deemed necessary, for which the state should take a

more active role than those of the “subsidiariedad” for quality and equity enhancement, while maintaining neoliberal education policies (OECD 2004, p. 20).

The only policy reversal against neoliberal orientations was the teachers’ law enacted in 1991. New regulations included minimum wage, an incremental salary scale, strict conditions for dismissal, all of which substantially improved teachers’ working conditions. Although it meant for the government to restore troublesome salary negotiations with the teachers’ unions, revival of teacher morale was more important for proceeding with the reform²⁸.

Among basic education programs under the Aylwin administration were P-900, which was an equity-oriented program targeting about 900 basic schools of low performance, and large-scale MECE Básica (Equity and Quality Improvement of Basic Education) supported by the World Bank, which included PME for supporting school-based projects, MECE Rural for targeting multigrade rural schools, and Enlaces for promoting computer education at schools.

Education reform became one of the national priority policies under the Frei administration (1994-2000). An important report was submitted by the technical committee in 1994 to the newly created National Commission for Modernization of Education²⁹. The report, a chief source of subsequent reform plans, asserted that two fundamental seeds of problems were found in the legal and administrative context failing to offer incentives for quality and equity improvement, and a very low level of investment in education (Comité Técnico 1994, p. 29).

Frei’s basic education reforms were manifold. In 1995, the teacher’s law was revised. Relaxed conditions for dismissal enabled mayors to adjust human resources based on their annual education plan. The revision also brought more salary increases³⁰. An incentive mechanism for quality improvement at school named SNED was also initiated in 1995, where a bonus for the teaching staff is provided to basic schools

²⁸ The new government could not ignore teachers’ demands, since teachers’ unions cooperated in the campaigns against Pinochet for the plebiscite of 1988, and many of the union leaders were members of the Concertación parties. After 1992 when mayoral elections started, even right-wing opposition parties could no longer be indifferent to teachers’ interests, as community councilmen posts are often held concurrently by teachers (Gauri 1998, pp. 86, 92).

²⁹ All political parties having seats in the congress signed “Action frames for the modernization of education in Chile” based on this report in 1995, which served as basic political agreement for reforms in the ensuing years.

³⁰ The average salary of municipal school teachers who work 30 hours per week rose by 165% between 1990 and 2004. The minimum wage of teachers in private subsidized schools increased by 446% between 1990 and 2004, leveling off the difference between that of municipal school teachers (Ministerio de Educación 2005a, p. 127).

highly evaluated through biyearly school evaluations. In 1996, a couple of important reforms were launched. The government made a decision to apply full-day schooling to all basic and secondary schools³¹, and let schools plan by themselves how to utilize the increased hours for study. Other programs included curricular reform, and overseas in-service teacher training that annually sent some 800 teachers abroad.

Education reform under the Lagos government (2000-06) is marked by the following: 1) notable efforts in universalizing an access to secondary education; 2) a teacher evaluation system among other quality improvement programs; and 3) enhancing equity-oriented programs by utilizing the voucher system. In 2000, about 400 secondary schools serving children from low-income families were targeted to reduce dropouts and improve performance. In 2003, the Chilean constitution guaranteed the free provision of 12-year compulsory education for all, composed of basic and secondary education. This was accompanied by the “differentiated pro-retention subsidy,” a new voucher-based mechanism to improve the completion rates of 7th to 12th graders from low-income families by giving increased subsidies to the schools where these children continue to study.

As for quality improvement strategies, a new incentive was added to SNED to provide a bonus to individual teachers with high performance. The LEM campaign, where P-900 and MECE Rural with an expanded coverage are included, aimed to improve the 3R’s of lower-grade pupils. In 2003, the introduction of a teacher evaluation system was officially agreed upon among the Ministry, the teachers’ union, and the municipalities, under which all municipal school teachers are subject to evaluation every four years³².

To make advances in equity improvement, Lagos announced that he would submit a bill on “preferential school subsidies” in his presidential message on March 21, 2005. It will be another voucher-based mechanism to benefit children below 4th grade from low-income families by giving them an unprecedented amount of increase in their subsidies³³. A total of 400,000 children are projected to be covered. It took 25 years

³¹ Financial resources for full-day schooling are generated by keeping the value-added tax at 18%. National application of full-day schooling should be completed by the end of 2010.

³² Evaluated through various methods, teachers are rated according to four grades, namely, distinguished, competent, basic, and unsatisfactory. If rated unsatisfactory, they are evaluated again in the following year, and if rated unsatisfactory continuously three times, they are dismissed. The results of 1,719 volunteer teachers evaluated in 2004 indicate 10%, 53%, 34%, and 3% in descending order. Although 16,000 teachers were subject to evaluation in 2005, about 5,000 people reject being evaluated (El Mercurio on July 19 and November 3, 2005, <http://diario.elmercurio.com> accessed on the two corresponding dates).

³³ The proposed monthly increase per student reaches 18,000 pesos at maximum. Given that a student in

after the introduction of the voucher system for such a large-scale mechanism of significant equity concern to finally be on the horizon.

Concluding Remarks

We have followed the universalization process of Chilean basic education, with a focus on the characteristics of evolution and the significance of the voucher system introduced in the last stage. The points that have been made in this paper are the following.

Basic education was expanded in a relatively tardy manner in Chile, despite the early establishment of the system. Factors delaying the expansion were found in: the state being loaded with a heavy burden of education finance from an early stage of development; ideological and political conflict between reformers promoting the universalization and conservatives and churches wishing to thwart such an intent; and urban-rural gaps and social class differences embedded in Chilean society curbing the uplift of a national demand for education. The country became universalization-oriented only beginning in 1965, and the voucher system was introduced in 1980 when about 10% of the school-aged population were not in school and about 20% of them did not complete the basic cycle. These were mostly poor children from rural or urban peripheral areas with parents being illiterate or with only primary/basic education.

The impact of the voucher system on the remaining 10-20% of people was then explored through reviews on education finance, school choice, and quality of education. The Ministry's expenditure declined throughout the 1980s, even after recovering from the great recession. Small rural schools and those in low-income areas suffered most from the reduced finances, due to the lack of extensive compensatory designs in the voucher formula. The limited fiscal capacity of municipalities in those areas exacerbated the situation further.

Freedom of school choice conferred on them by the voucher system was limited for rural residents and families of low socioeconomic status. Competition was mostly absent in rural areas, and even if it existed, unequal distribution of information and different criteria used for selection prevented these disadvantaged parents from fully

1st-6th grade at a full-day basic school receives about 30,000 pesos monthly, the increase will be by as high as 60%. "Discurso el 21 de Mayo de 2005" (http://www.gobiernodechile.cl/21mayo2004/indice_discursos.asp) accessed on August 4, 2005.

benefiting from the right of choice. They also had fewer options for selection, since the system also encouraged high quality schools to select better students for an effortless improvement of their outputs.

A situation unfavorable to these groups of people was also observed in terms of education quality in the 1980s. Score gaps widened between municipal and private paid schools, and between schools of high and low socioeconomic status. Private subsidized schools in rural areas were found to be not as effective as municipal schools. Competition outside the Metropolitan Region generated slightly negative effects in municipal schools for improving their performance.

With the government re-assuming a more active role, important efforts have been made to correct these situations since 1990. Examples of this are the considerably increased education expenditure, and a number of reform programs including equity-oriented plans and mechanisms that target schools serving disadvantaged children.

In view of the above, let us consider again the meaning of the voucher system in relation to the universalization goal. Did the voucher bring any positive effects to the remaining 10-20% people? Two points will be made. A positive effect of the voucher system may be hinted at by the large decline of dropouts observed right after the system introduction, in creating pressure for schooling to potential dropouts at the school level. Yet, such efforts have their own limitations, as evidenced by the fact that no successive declines in the dropout rate are observed. When the voucher amount is equal between students with higher and lower propensity for dropout, schools do not have a strong incentive to persistently work on the former students. Another positive effect of the introduction of the system is found in enhanced transparency and objectivity of resource distributions among schools. This seems particularly important for those rural and urban peripheral schools serving the poor, since they usually do not have strong political voices, and thus are often neglected.

On the other hand, the following three points are given as negative effects of the introduction of the system in relation to the universalization goal. First, the Chilean voucher system failed to provide better quality education services to rural residents and low-income families in urban peripheries who needed it most. In some rural areas where no single private subsidized school was established, municipal schools remained without being exposed to competition. In other rural areas where such schools are created, they tend to offer services of lower quality than municipal schools. Despite the freedom of school choice, access to high-performing voucher schools was almost

non-existent for many of the parents of disadvantaged children.

Second, the national application of unregulated vouchers like the one in Chile consequently promoted the stratification of schools, and thus made it even more difficult to improve the achievement and the completion rates of the remaining 10-20% group. The logic of school stratification leading to such consequences can be explained by two popular factors affecting student performance: peer-group effects and teacher expectations. As discussed earlier in the paper, peer-group effects are evidenced in the past studies. Likewise, it is also widely known in education psychology that teachers form expectations for the student's ability to learn, and such expectations sensed by the student condition his or her performance. Since both factors are strongly influenced by the student's socioeconomic level, when school-average socioeconomic status is lowered as a result of stratification of schools and cream skimming, the negative effects of these factors complicate the pending tasks for the remaining 10-20% group.

Lastly, as noted earlier, the Presidential Directive of Education of 1979, one of the key documents of the 1980 reform, made a clear reference to national efforts geared to the universalization of basic education. If that is truly the case, the design of a voucher system containing compensatory devices for the disadvantaged group should have been a more coherent policy to attain the purpose, since voucher plans may take various forms according to different needs. No such consideration was made, however, in the initial formula, or in the ensuing years. Only in 2003, was the differentiated pro-retention subsidy targeting the population in question added to the voucher system.

On these grounds, we therefore conclude that the voucher system introduced in 1980 caused stagnation in achieving the universalization goal, both by not applying policies appropriate in the last stage and by complicating the pending tasks of the remaining 10-20% group through enhanced stratification of schools.

It is still astonishing that an unproven and highly innovative system like the voucher was massively introduced in a country where basic education had not yet been universalized, even under the peculiar circumstances of the military regime. Behind the reasons that made possible such a massive experiment lay the fact that the primary concern of conservatives headed by Pinochet was the protection of "libertad de enseñanza," and their generally low interest in matters of public education. In other words, selection-oriented conservatives who disrupted the establishment of the public schooling system in the late 19th century also cast a shadow on it during the last stage of universalizing basic education.

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