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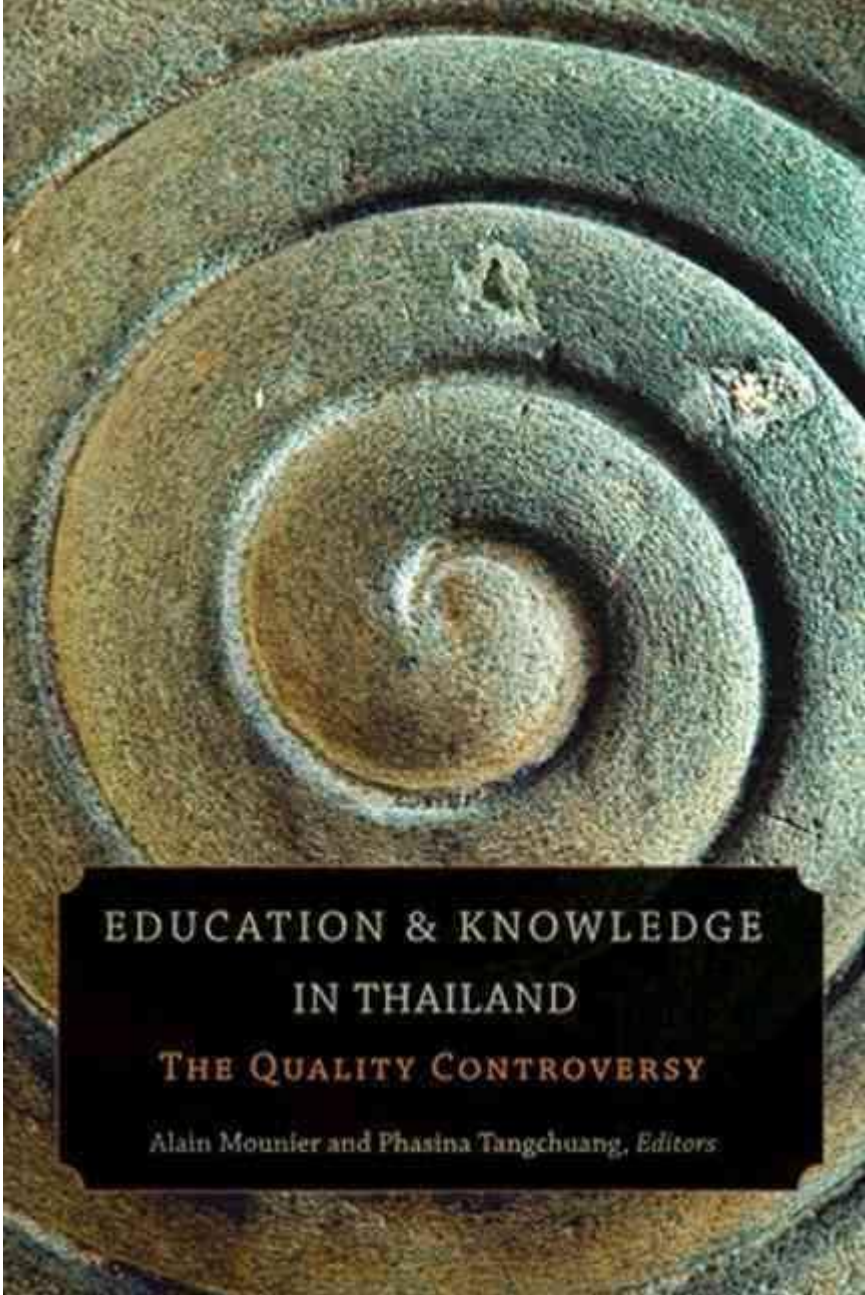
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EDUCATION & KNOWLEDGE
IN THAILAND

THE QUALITY CONTROVERSY

Alain Mounier and Phasina Tangchuang, *Editors*

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Chapter 1 The burgeoning of education in Thailand: a quantitative success

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The first studies on the contribution of education to the process of Asian growth stressed the extremely fast rates of development of national educational systems as well as of public expenditure (Tan and Mingat 1989; Psacharopoulos 1991; Warr 1993). The notion that Asian educational systems have performed well was gradually disseminated and gained favour (World Bank 1993; UNESCO Institute for Statistics 2004). Today, after forty years of continuous economic growth, it is possible to re-evaluate the growth process of an educational system (Khomman 2000) and thus to assess the role that education policies have played in the evolution of any national educational system.

From an historical point of view, the growth of the Thai educational system was shaped by two key factors, one political, the other economic. At the end of the 19th century, in response to colonising threats from the United Kingdom and France, the dominant Thai social groups, particularly the leading and cosmopolitan aristocracy, began a process of modernisation. This process was inspired by the European Enlightenment, based philosophically on individualism and economically on capitalism. However, it faced obstacles in the form of the pre-existing social relations, which were based on local and community membership. Education became a key element within this process of modernisation, as King Chulalongkorn (1868-1910) sought to establish a new social relation between himself and his subjects. This new relation was characterised by links between the monarch and the people as individuals and was forged at the expense of former social relations. Education was to play the role of creating a common culture while also producing the social elite needed to perpetuate the new social order. As a result, education became a very powerful element of homogeneity and identification at the national level. The individualism, on which the new social relation between monarch and

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subjects was established, was essential to the rise of a market economy (Wyatt 1969; Ministry of Education 1976).

While this political factor has not disappeared from the educational system, it is now joined by another factor based on economics. Within this framework, economic productivity, and particularly the productivity of labour, was seen to depend upon education. In turn, increased productivity was seen as essential to increasing personal incomes and economic growth more generally. In this view, the performances of an educational system, and their recognition as measured according to international standards, are central to national competitive advantage. On the evidence of such recognised performances, the Thai educational system is backward.

The political and economic factors have shaped the growth of the educational system during the last forty years. This period of time is usually recognised as the period necessary for the full realisation of the educational investment, which is by its essence a long term one.

In Thailand during this period, a complete transformation of school enrolment has occurred. Children have followed in the footsteps of their parents into school and thus now there are two educated generations within the one family. More and more frequently, the children reach initial training levels which are higher than those attained by their parents, yet both generations often share the same labour market sphere.

In this chapter, our analysis is based upon quantitative information over a long period of time. New time series, from 40 years minimum to 100 years maximum, were constructed, following the tried and tested methodology of quantitative history (Marczewski 1961). In section I, we draw a broad picture of the quantitative growth of enrolment, as a whole and by level. We bring out different periods or stages in the growth of the educational system. These stages are the result of structural transformations which periodically renew the structures of the educational system. In section II we analyse the impact of demographic changes on the structure of the educational system, exploring the issue of inequality as a way of understanding the transformations of the educational system. We make use of longitudinal analysis and study the schooling destinies of successive generations. In section III, we focus on the issue of quality of education linked to public resources allocated to education.

Nobody would deny that the educational system in Thailand today has performed well in some quantitative terms. However, the system itself is being sharply criticised. In this critique, two ideas are predominant: first, that the quality of education is poor and, second, that the system lacks the capacity to raise significantly the level of education of the population beyond compulsory education.

Our analysis of the performances of the educational system will throw light on this critique.

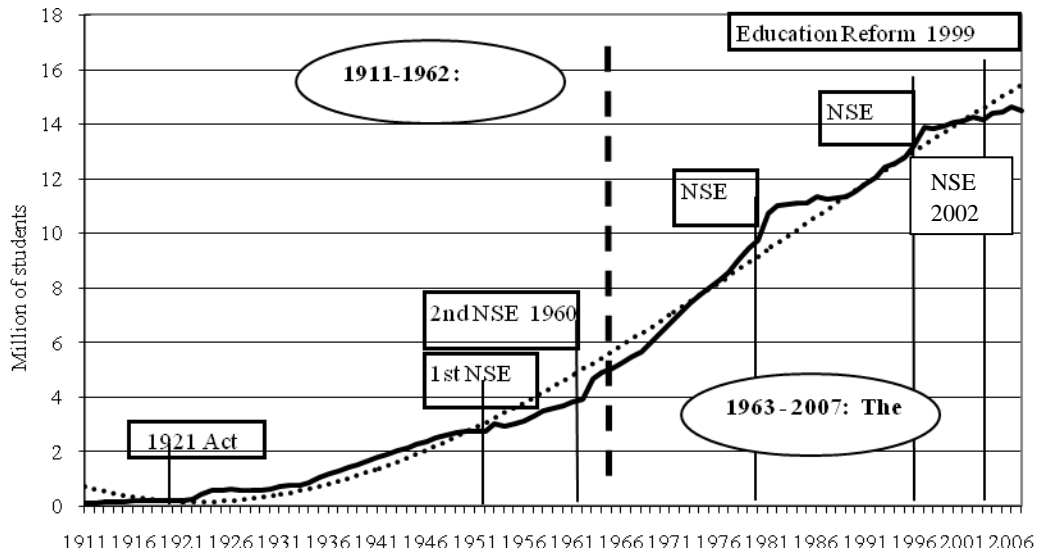
I. An historical panorama of the development of the educational system

The very fast growth of the Asian educational systems, including Thailand's, is first of all explained by the growth of mass education. Elitist at its beginning, the Thai educational system became an educational system for the masses within a few decades. In seeking to understand the mode of development of the educational system, therefore, we firstly present an aggregate series of all pupils and students from 3 to 25 years of age enrolled in the educational system, without taking into account the level they achieve, nor the type of education (general or vocational). The purpose of this panorama is to bring out the main periods in the development of the national educational system. Secondly we present enrolment by educational level to illustrate the main long term tendencies and transformations.

I.1 A global view of the Thai educational system development

At the end of the Ayuthaya period and in the first decades of the Chakhri era, the central Thai state developed markedly. The Chakri kings introduced an educational system to foster national identity. Education simultaneously aimed at strengthening the state apparatus and giving to the nation the means to be actively involved in the international arena. Not surprisingly, the history of the Thai educational system is one of state involvement.

Chart 1. Total enrolment in education from 1911 to 2007



Source : CELS Education Database

In a context of nearly uninterrupted growth, the Thai educational system today enrolls about 14 million students. With the new millennium, it seems to have reached a stage of stable numbers. This growth was significantly related to the evolution of the legal framework of education as shown in chart 1 above.

In one century, two comprehensive laws on education have been promulgated: the 1921 Act and the educational reform of 1999. The first public intervention as regards education goes back to the 1921 Act which relates to primary education. By establishing a three year compulsory education within the primary level of seven years, this Act generated the first significant rise of school enrolment in Thailand. During the 20th century, other pieces of legislation have been organising the educational system and in particular National Schemes of Education enacted in the framework of national plans. In 1951, the 1st National Scheme of Education (NSE) was adopted. It was to be implemented throughout three national five-year plans. The NSE of 1977 set compulsory schooling at six years or completed primary level and reorganised the end of primary as well as lower secondary level. The 1990 NSE brought compulsory education to nine years and the 1999 Education Reform proposed a further increase to 12 years.

All government initiatives - from Acts to Educational Schemes down to the smallest decrees and directives – appear to have accelerated growth in school enrolment, as can be seen in charts 1 to 4, leaving little doubt about the reaction of the administration of education to political injunctions. However, after an initial growth spurt, the rate of growth dropped back.

In Chart 1, two different periods in the development of the educational system can be distinguished. From 1921 to 1962, the growth of enrolment remained lower than seven per cent per annum; the absolute number in schools grew steadily from a few thousand to nearly 4 million students. From 1962 to 2007, the educational system tended to become universal, and enrolment rose from 4 to 14 million students or by an average of about twelve per cent per annum. These two eras of the educational system also reflect different rhythms in the development of the different levels of schooling. We call them the ‘political age’ and the ‘economic age’ of the educational system.

The political age of the educational system (1911-1962)

The first age of the educational system, the ‘political age’, spans the period from the early 1900s to the early 1960s. During this period, the main movements, either up or down, were due to education law and regulations (1921 Act and National Scheme of Education of 1951) which express, through the organisation of the public school system, the construction of a modern State.

Enrolment initially increased slowly, but then, from the 1920s, it grew steadily, although with fluctuations, until the end of the 1940s. Within a primary level of seven years, the law of 1921 established three years of compulsory schooling. According to law, all children were to be enrolled from age 7 up to 11-12 years, in the case of boys, and up to 9-10 years in the case of girls. In practice, however, both the starting ages and the compulsory duration of years at school were not enforced: in fact, children were able to start at between 6 and 9 years of age. The main reason for this laxity was the lack of schools. From the 1930s, this difficulty was temporarily solved by systematically incorporating Buddhist temples into the educational system. Such pragmatism remains an enduring characteristic of educational policy in Thailand.

Before the state decided to promote public education, Buddhist temples were in charge of educating the children. The law of 1921 integrated them into the educational system but provided financial support for only a few of them, those which taught the full curriculum, a requirement which was monitored by the ‘government schools’ created on this occasion. In less than 30 years, public education policy established an educational system in which Buddhist schools lost their prerogatives to ‘local schools’. Such schools were financed by the central state, by municipalities and by a moderate contribution from families.

In 1951, the National Scheme of Education (NSE) extended compulsory schooling to four years. It also specified the pedagogical methods to be employed. Although it was useful in reaffirming the requirement for compulsory education,

the NSE of 1951 went much further. It organised for the first time the curriculum for the post-primary years. The lower secondary level was established at the end of four years of compulsory primary education. However, this new provision was not successful in terms of enrolment growth. After the rapid rise between 1920 and 1947, school enrolment slowed down. Obviously, there were difficulties in implementing universal education at the primary level, but establishing a lower secondary level was not the best response. This new level was probably not adapted to the needs or the level of exit of compulsory primary education. With characteristic pragmatism, the reform of 1960 maintained the lower secondary level but also established an upper primary level of three years. This new organisational framework was a return to standard curricula and proved to be much better adapted to the needs of society.

During this political age, the laws and regulations for public schooling in Thailand represented one of the pillars of the modern state. Another age, which we are calling the economic age, succeeded the political age, though without supplanting it since a coexistence of political and economic factors has remained influential throughout this second period.

The economic age of the educational system (1963-2007)

During the 1960s, Thailand's economy entered a period of uninterrupted structural growth. Various shocks such as the 1997 Asian crisis, when they did occur were quickly overcome. During this period, employment in agriculture slowly decreased while employment in manufacturing industries and in services increased sharply. Economic growth became more and more export-led and foreign investment soared, reflecting a deep integration of Thailand into the world economy. Within this framework, universal primary schooling became well entrenched and a 'social demand' by families for education began to appear. These outcomes coincided with developments in public policy concerned with schooling. In summary, economic growth generated major social changes that constituted the matrix of this second age of education (Lopez *et al.* 1998).

During this economic age, school enrolment increased rapidly. In 40 years, from 1964 to 2003, enrolment jumped from 4 to 14 million. Over the same period, the national population increased from nearly 28 million inhabitants to 60 million. So, the share of the school population within the total population rose from 14 % to 23 %. While important in aggregate terms, this progress must also be evaluated in terms of demographic groups.

The economic age of education was the result of the rapid economic growth of Thailand and of population growth and demographic change. A closer look

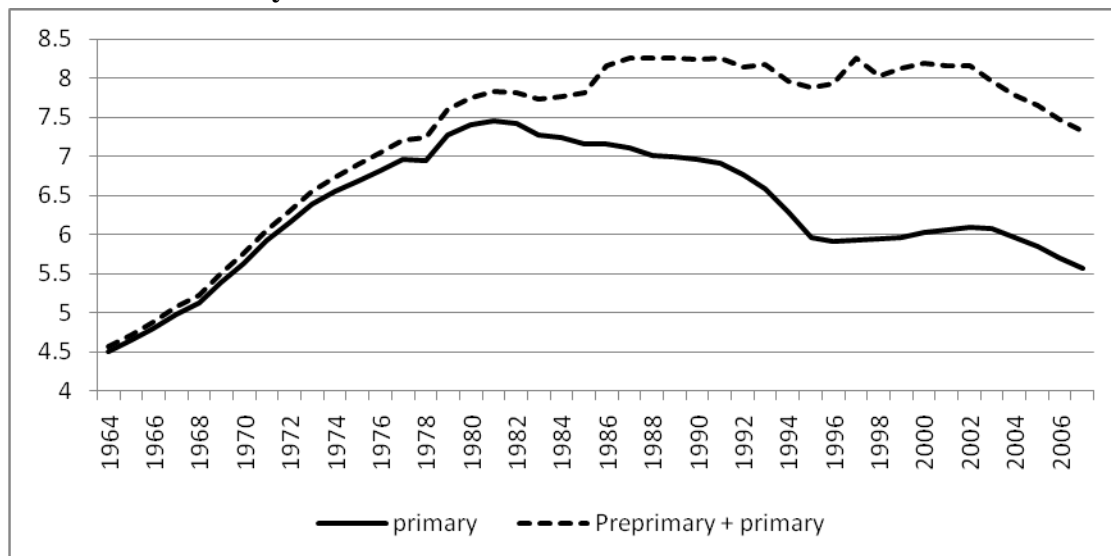
shows that this age can be divided into three sub-periods with different characteristics as far as school enrolment is concerned. Each period corresponds to the development of a particular level of education, but the development of the different levels was not in the conventional order. During the first period, which spanned 1964 to 1980, universal primary schooling for all children was attained. During the second period, an unexpected growth in higher education took place at the end of the 1970s. The third sub-period, which spans from 1990 to the present, is a period of growth in secondary education and, in most recent years, of renewed growth in higher education.

I.2 The three sub-periods of enrolment growth

The development of elementary education, 1964-1980

In Thailand primary education, which was established in 1921, as well as pre-primary education, constitute elementary education. As illustrated in the chart below primary education indicates a maximum enrolment of 7.5 million pupils at the beginning of the 1980s while pre-primary enrolled less that 0.5 million.

Chart 2. Elementary enrolment from 1964 to 2007



Source: CELS Education database

1982 was the peak year for primary education. After this date, the number of pupils decreased rapidly, at a rate of 1.8 % per annum on average. This decrease is entirely due to the demographic decline in the age-group from 6 to 11 years old

and is quite beneficial in term of public costs. It came in the wake of active and successful policy. Moreover, when the number of children started to decrease in primary schools, a strong surge in numbers in pre-primary education occurred to compensate for the loss of primary school pupils. The decline of enrolment in primary education allowed the use of its means and structures to develop pre-primary education, as well as to equip lower secondary education.

Although growth of elementary enrolment is impressive, it needs to be remembered that the achievement of universal primary education has taken a long period of time, from 40 to 50 years depending on the estimates (Tunsiri 1994; Tan and Mingat 1989). An 80 % enrolment rate had already been achieved by the early 1960s, and reaching 90% took another ten years, reflecting the difficulty of providing education for children living in remote areas. In the last 20 years, fluctuations in the primary enrolment rate have remained important, even though primary education has become universal and irreversibly compulsory.

The development of primary education has been promoted by state regulations concerning compulsory schooling. In particular, the National Scheme of Education of 1960 stimulated growth in this area. The Scheme of 1977, substantially modified the organisation of elementary education when it introduced pre-primary education and increased compulsory schooling from 4 to 6 years (that is, until the end of primary education). Once again, the process of education development was determined by a state injunction, something which confirms our argument regarding the institutional character of educational growth in Thailand.

The 1977 National Scheme of Education also established one year compulsory pre-primary education. This educational level, hitherto restricted to private provision and financially supported by families, was suddenly strongly promoted. The enrolment rate for the 3-5 years cohorts, which was about 10 % in the 1980s, soared to 70 % today, and the number of children enrolled increased from half a million in 1980 to 2 million today. The latest figures on pre-primary enrolment show a slight decline in the number of children enrolled since 2000, indicating difficulties in achieving 100% enrolment. However the achievement of universal pre-primary education, envisaged for the end of the 8th plan in 2001, is underway. The state gradually provided financial support in order to reach its objectives. At the beginning of the 1980s, private financing of pre-primary education was still dominant (56%); in the following decade it was equally split between public and private. Since then, public financing of pre-primary education has continued to increase (World Bank 1998).

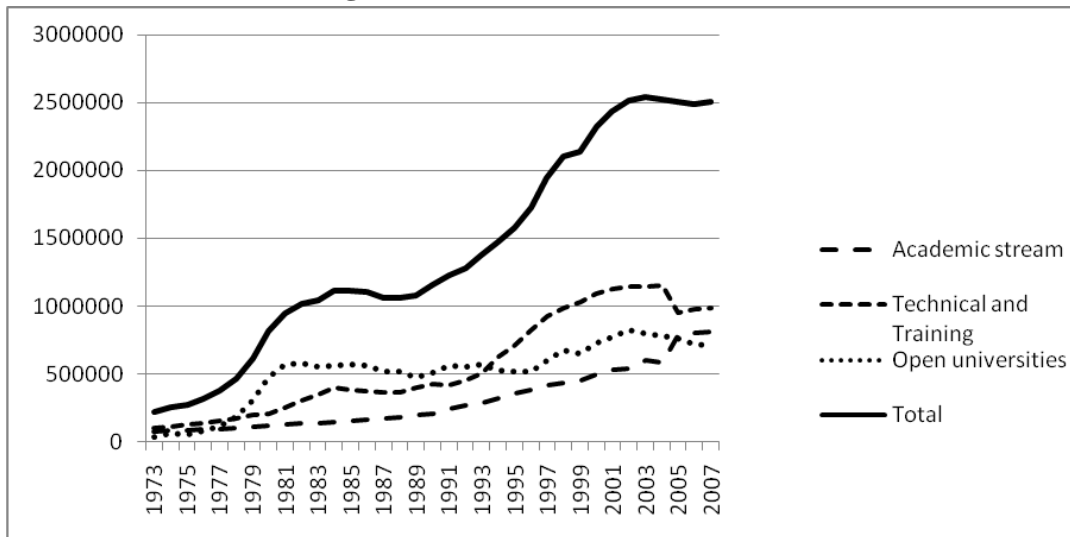
The development of higher education, 1980-2007

At the beginning of the eighties enrolment in higher education soared, particularly with the development of open universities; higher education took the baton from primary education in ensuring the growth of total national enrolment.

Higher education is a well established component of the educational system since the creation of the country's first university, Chulalongkorn University in as early as 1917. Its mission was to train higher level royal civil servants. In 2008, Thailand has 2.5 million students who attend 79 public universities (including 2 open, 41 Rajabhat and 9 Rajamangala universities) and 63 private higher institutions. 80 % of the students are in public structures. However since 2002, higher education is no longer a mission of public education.

Chart 3 presents the number of students in higher education in an historical perspective.

Chart 3. Enrolment in higher education from 1960 to 2002



Source : CELS Education database

Up to 1970, students mainly followed the academic stream within ten universities. During the 1970s, in an overall unfavourable economic and political context, the number of students increased suddenly and unexpectedly. Two kinds of explanation can be put forward: on one hand, the creation of open universities; and on the other, the diversification of curricula in higher education based on technical education and teacher training. The first factor was responsible for the strong growth of the number of students between 1977 and 1982, while the second factor was decisive for the subsequent evolution of higher education.

The creation of Open Universities was a ‘response’ to a strong social protest that shook Thailand at the beginning of the 1970s. Originally organised on the basis of evening courses, and subsequently of correspondence courses, open universities were distinctive in that no entrance exams were required to register for their courses. Both large open universities, Ramkhamhaeng University (established in 1973) and Sukhothai Thammathirat University (established in 1978), are located on the outskirts of Bangkok. A few other universities were created to compensate for the lack of a public university in some regions, such as Khon Kaen University in the Northeast, but they are statistically not very important. Open universities focus on academic curricula, and do not provide vocational training. The success of open universities was immediate, stunning and durable. In 1976, 3 years after their creation, they had 100,000 students—as many as the total number of students in traditional universities. Enrolment in open universities reached a peak of 700,000 in 1982, before stabilising. At that time, open universities were subject to an important rationalisation as they became equipped with campuses, professors, and authorised and standardised curricula. As the open universities became more similar to traditional universities, the number of students enrolled in them declined during the 1980s. Like all institutions of higher education, enrolment in open universities enjoyed a second phase of growth in the 1990s. The growth of technical streams has been quite significant over the period. In 2004, Rajabhat and Rajamangala colleges have been transformed into universities. This important institutional transformation can be seen in the disconnecting series of enrolment in academic and technical streams in 2005. The second period of growth during the nineties exhibits more classical patterns as it is explained by the prolongation of the expansion of secondary education at the same time. However total enrolment stopped increasing after 2002 as the academic stream could not compensate for the slowdown of technical streams and open universities.

The development of secondary education, 1990-2007

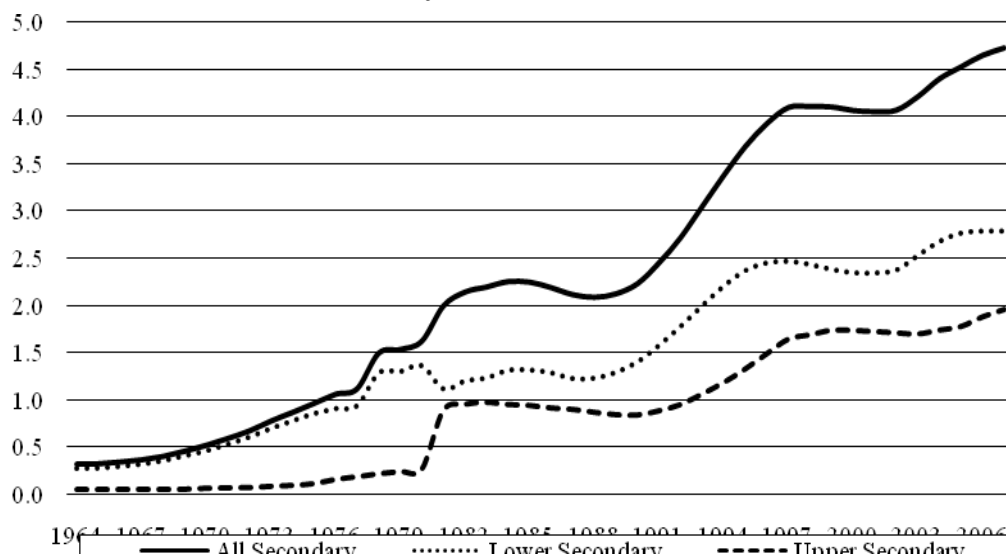
After the implementation of six years of compulsory education with the 1977 NSE, secondary education became crucial. The expansion of secondary enrolment accelerated in the 1990s, and has lasted to the present. It benefited from the completion of compulsory primary education, and buttressed subsequent progress in higher education enrolments. In fact, this phase of growth in enrolment was more ‘classical’ since it rested on the logical chronological sequence of schooling development from the lowest to the highest levels.

At the beginning of the 1960s, secondary education covered 300,000 pupils, 84% in lower secondary and 16% in upper secondary. Today, secondary education

has about 4.7 million pupils with a more even distribution: 59% in lower secondary and 41% in upper secondary.

Until 1977, secondary education was organized in lower secondary (4 years) and upper secondary (2 years) but this division was more virtual than real because of very low enrolments in upper secondary. At the beginning of the 1970s the acceleration of enrolment in the 4th year of lower secondary led policy-makers to reorganize secondary education by allocating 3 years to each division. In addition, the sudden growth of lower secondary schooling in 1977 and 1978 was the result of the suppression of the 7th year of primary education, and the integration of its pupils in lower secondary education. These organisational changes reform explains the disconnecting in the series in 1981.

Chart 4 Enrolment in secondary education 1964-2007



Source: CELS database

Between 1964 and 1977, enrolment in secondary education jumped from 300,000 to 1.5 million. In the 1980s, the growth in secondary education slowed down despite the fact that full compulsory primary education was supplying more potential candidates for secondary education. At the beginning of the 1990s, the growth of enrolment in secondary education accelerated again. Between 1988 and 1998, enrolment in secondary schools doubled from 2 to 4 million. These fluctuations in the past two decades deserve additional comment. The stagnation of the enrolment rate at a low level in the period prior to the mid eighties led to the conclusion that Thailand's achievements with secondary education enrolments were lagging behind similar countries by about twenty years. This lag was

diagnosed at the time of the assessment of the 6th plan 1987-1991 and was based on international comparisons. Such was Thailand's situation that in 1996 83% of the working population of Thailand had no more than a completed primary level of education, and only 3% in the age group 25 to 64 had completed a full secondary education.

The twenty year lag was seen as posing multiple risks for economic growth in Thailand. Fears were raised that there would be a loss of competitiveness in international markets due to Thailand's less efficient labour. In particular, it was feared that future technical and organisational alternatives might be restricted by the lack of a suitably educated labour force.

This analysis of the "20 year lag" reflects for the first time that economic factors intervened strongly in the evolution of the educational system. This was evident in the emergence of a very vigorous policy of enrolment in secondary education. A sharp rise in secondary enrolment rates began in 1989 and was a direct beneficiary of changes in school legislation in 1992-1993. Compulsory schooling was extended from 6 to 9 years, up to completion of lower secondary level. This meant that a pupil would need to complete the whole of their primary education, as well as three years of lower secondary, before they could apply for a job.

As had occurred before with primary education, the new regulations concerning compulsory secondary education stimulated at first schooling, but as enrolment rates rose, their further increase became more difficult to obtain. The 1999 Reform acknowledged that public education could not realise the objective of accelerating enrolment, either because it lacked resources or because it was not efficient and accepted the need for private initiatives.

Distinguishing the three sub-periods of educational expansion according to which level of the educational system was in the lead reveals coherences and ruptures, explanations and conundrums. The rise of each level depends firstly on internal determinants, and then on various cross-sectional factors which will be explored in the next section.

II. Development of education and structural changes

The first of the cross-sectional factors of the development of education is demography which defines the structural context for the evolution of schooling. This context can be described with the usual data, such as gross enrolment ratios or school-age dependency ratios. It can also be illuminating to extend the analysis to focus on trajectories of cohorts of students within the educational system.

II.1 The demographic context of educational growth

At the beginning of the 1970s, Thailand's GDP began a process of structural change which paralleled a period of demographic transition, when fertility had begun to decline rapidly. As a consequence of the latter, Thailand benefited from a favourable demographic structure² that spurs economic growth. At the same time, from the educational perspective, enrolment has to increase substantially to keep pace with the increase of the population of the age of schooling.

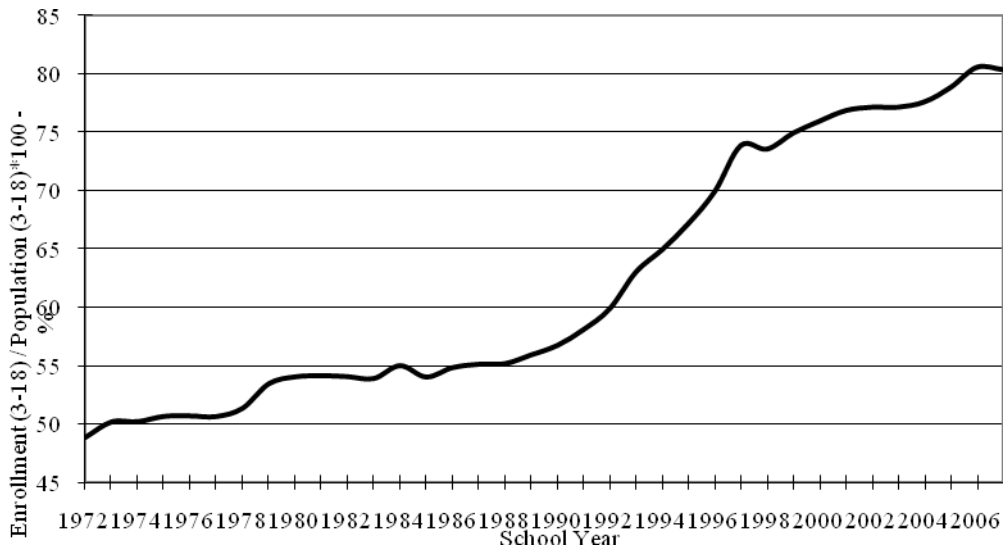
Schooling rates

The statistical indicator which connects enrolment with demography is the schooling rate. The gross schooling rate³ for 3-18 years describes, for a given year, the ratio between school enrolment for the population aged 3 to 18 years and the total population in this age bracket. This indicator shows progress - or decline - in schooling.

Chart 5 – Gross schooling rate (3-18 years old) – 1972 -2007

² The demographic transition is a time characterised by a decline of the death rate, which is followed with a time lag by a fall of the rate of fecundity. In Thailand, the demographic transition started during the 1960s and finished at the beginning to the 1990s. The demographic transition has the appearance of changing the ratio between young people at the age of schooling and the total population.

³ The gross enrolment rate is the ratio between total enrolment of a given level of education with the supposed population in age to attend this level. For instance the number of students who attend really the third year of primary education (Po4) and the 9 year old population of young people who are supposed to attend this level. If children who attend Po4 are younger or older than 9 year old, the gross rate ratio may be more than 100%. The net enrolment ratio would count only 9 year old children attending Po4; because this data is not available in most statistics it is very rarely calculated, except for micro studies.



Source: CELS database on Education

In 1972, less than one Thai child aged 3 to 18 years out of two was at school. In 2003, there were more than 3 out of 4 at school. Thus, the progress of schooling appears to be first of all a quantitative phenomenon. To understand this more fully, we need to place this growth within the demographic context. There are two ways of looking at this. We can view growth of schooling rates as based upon the dynamics of the educational system itself, using the theoretical maximum amount of all schooling for the population of the reference age group as our benchmark. Or we can view the evolution of the enrolment rate as external in nature, reflecting changes of the reference population itself. Because both factors can be at work simultaneously, each must be analysed separately. Progress in schooling rates occurs as the number of people of school age—the denominator in our schooling rate—goes into decline. Thus, in this case, demography facilitates progress in schooling rates. Moreover, the relative cost of progress in schooling also decreases because no additional investment in resources or infrastructure is needed for this boost in schooling rates. The opposite situation, when the number of people of school age grows faster than school enrolment, would necessitate additional investment just to keep schooling rates constant (Diouf and Fontvieille 2002).

In Thailand the evolution of schooling rates seems to be quite independent of demographic changes because schooling rates rise in periods of demographic expansion as well as in periods of demographic decline. Moreover, when schooling rates reach high levels, they are no longer responsive to demographic changes. It is evident that the extension of compulsory education to nine years was facilitated by

the demographic decline of the 12-14 year-old age group. However this decline had started a long time before without boosting the schooling rate at the lower secondary level. The period when the greatest effects of the demographic transition were felt on schooling rates was relatively short: from 1993/94 to 1996/97.

Except for this short period the demographic decline was not a strong determinant. In fact, the explosion of enrolment has been the major factor of the improvement of schooling rates. From 1972 to 2007 the schooling rate for primary education rose from 86% to 104%, for secondary education from 17% to 82%, and for higher education from 2% to 67%⁴. These figures offer a clear picture of the development of mass education over this period. Apparently, public planners anticipated the drop in the school age population but did not forecast soaring schooling rates, in particular at the secondary level (Janjaroen 1985).

School age dependency ratio

The school age dependency ratio is the ratio of the school age population (5-14 years) to the active population (15-64 years) and is useful for measuring the potential 'burden' entailed in full schooling for the country. The choice of age boundaries to calculate this ratio must reflect reality as much as possible. Our choice here is based on considerations of data availability, generally in five year cohorts. These ages are conventional in international comparisons purposes, but they lose meaning as the length of studies, which is mirrored by the increase of gross enrolment rates, increases. According to the definition of the school-age dependency ratio stated above, Thailand experienced a rapid decrease in school-age dependency between 1970 and 2007 - by more than half. Actually this measures only the demographic effect of the demographic transition which changes the proportion between these two populations defined by their ages.

A more useful definition of this ratio however is the ratio of the total number of students to the size of the working population. This measurement gives quite different results from the preceding one above. On the one hand, as time passes and children stay longer in school, smaller age cohorts reach working age, and the number of people who support the school age population tends to decline. Indeed, the school age population is now more likely to be 3 to 17 or 18 years than 5 – 14 years, and the working population is more likely to be 18 to 64 years than 15 to 64 years. Therefore the school age dependency ratio tends to rise. This ratio of 3

⁴ This exceptional enrolment ratio for higher education is misleading because it compares the real number of students to the population of 17-21 year people. Actually half of enrolled students are whether working and study part-time or/and are younger than 17 or older than 21. When adjusted for these biases the enrolment ratio is halved at a range of 30%; this percentage is comparable with developed countries.

to 17 year-olds in the population to the working population was about 30% in 1990 and 40% in 2001. Moreover the increase of gross enrolment rates accentuates this rise. The increasing burden of educational expansion may well be felt rapidly by the population in terms of a unfavourable proportion between the working population and the non-working population and in terms of the cost of public and private educational expenses.

But, beyond demographic factors, the development of the educational system has its own dynamic so that each generation of the population has its own educational patterns. Let us examine this dynamic by using a longitudinal analysis.

II.2. School trajectories: educational destiny of each generation

In the following section, we analyse the trajectories of pupils within the educational system in order to highlight the educational destiny of each generation. These trajectories describe the way by which the transformations of the educational system influence the educational history of each generation. This approach differs considerably from the previous analysis where the indicators reflected different levels of schooling during different periods of time. Moreover, the study of trajectories allows us to discern the impact of the rise in duration of schooling upon a single generation.

Unlike the earlier analysis, which was based on cross-sectional data, this section makes use of longitudinal data where events in the past are used to explain the present situation. We might, for instance, examine for one generation who entered the educational system in a given year the percentage completing their primary schooling. That is, instead of comparing the situation of the educational system year after year (cross-sectional analysis), we compare now the school trajectory of different cohorts distinguished by the year they started school (longitudinal analysis).

The consolidation of primary education

As indicated previously, the enrolment of all children in six years of primary schooling was supposed to have been achieved during the 1970s. It was not.

The rate of survival of one cohort of pupils to the next level (for the primary level, from grade 1 to completion of grade 6) is the number per one hundred who started grade 1 and reached the end of grade 6. Among those who entered grade 1 in 1963, 82% survived into grade 2 in 1964, 77% into grade 3 in 1965 and 68% into grade 4 in 1966. Then 21% survived into grade 5 in 1967 while only 19%

completed the primary level (grade 6) in 1968. By way of comparison, if we turn to the generation who entered grade 1 in 1981 we notice quite different results: 81% now reach the end of primary. Among those who entered grade 1 in 1997, 93% survived into grade 2 and 91% into grade 6.

The survival rate is also influenced by a number of other factors. Three factors can explain its rise: mortality, drop out and repeating. On average, demographic data show that mortality explains only about one percentage point. Dropouts have almost disappeared because of the extension of compulsory education and of the drastic reduction of the number of children at work. Repeating has also rapidly declined under the effects of a general practice of lax evaluation of educational achievements, of objectives of democratisation and of cost considerations. In other words, full primary education for children has become the legal and social norm, which is reflected by very high survival rates for recent generations.

Moves from one level of education to the other

In analysing schooling trajectories, a very useful indicator is the access ratio to the next level of education. This indicator is the percentage of each cohort having completed one level and then moving to the next level; it is the ratio of the number of pupils in the first year of a given level to the number of pupils in the last year of the previous level. It measures access to the next level of education in this sense. For example in 1958, out of 100 students who completed primary education, 68 took advantage of their access to lower secondary.

Our earlier discussion showed a steady consolidation of primary education, as a greater proportion of pupils completed their primary schooling. However, figures suggest that access to lower secondary education actually declined over the same period. This access ratio fell from 75% at the beginning of the 1960s to less than 40% in 1979-1980. From 1980, it rose again rapidly and stabilised at nearly 90% after 1989.

The access ratio which measures the movement between the two levels of secondary education indicates two quite distinct periods. For cohorts of the 1950s and 1960s, around 40% continued from lower to upper secondary education, and therefore about 60% dropped out at the end of the lower secondary level. From 1970 onward, the access ratio from lower to upper secondary education reached more than 80%, so that by the early 1990s, most of the children of one generation had completed secondary education.

As to the access ratio from secondary to higher education, it hovered around 40% before the open universities were established. It increased significantly thereafter.

Educational career

We are now in a position to consider the full educational career of each generation. This is considering the probabilities for each year and for each cohort of completing primary, lower secondary and upper secondary education and accessing higher education. Looking at the cohort of 1963, of 100 children who entered primary school in 1963, 20 completed primary education (in 1969), 14 completed lower secondary (in 1972) and 3 completed upper secondary (in 1975). By way of contrast, the children of the cohort of 1990 had a 80% probability of completing primary education, a 62% probability of completing lower secondary education, and a 42% probability of completing upper secondary education.

Until the beginning of the 1970s, Thailand was a country in which few children pursued education beyond four years of primary school. For most of the children belonging to these earlier generations, completing their primary education was their final horizon. Completion rates for primary and secondary levels were identical. In societies where only a happy few can access education, inequalities within the educational system are generally not pronounced. From the 1970s onwards, this pattern changed. Growth of the upper secondary level was more rapid than growth of the primary or lower secondary levels. Longitudinal data suggest another representation of the 'lag' in education at secondary level. Taking into account the number of years necessary to reach secondary level, the long stagnation of secondary education does not last the 20 years which the cross-sectional data suggests (Jones 2003), but rather about 8 years, or at most, 10. For cohorts who entered primary education between 1973 and 1980, and then started secondary education between 1980 and 1986, the completion rate for the secondary level increased very rapidly so that it tended to be as high as the completion rate for the primary level. For the cohort who started their studies in 1980, inequalities progressively reduced, based on simultaneous progress in the completion rates at all levels. A greater proportion of recent cohorts entered higher education. Therefore, allowing more and more people to access higher levels of education raises the issue of the quality of education, and particularly of how to finance education of the same or better quality. As Thai children follow longer and longer studies, huge resources are required just to maintain the existing funding per student. Quality cannot be maintained, let alone improved without additional financial resources.

III. Funding the development of education

We have seen several times, through the evolution of enrolment rates that educational policy was the main contributor to the building of a national educational system. This was evident, for example, in the close relationship between the data and the dates at which regulations concerning compulsory education were introduced. We also noted on several occasions that the surge in enrolments induced by educational policy was difficult to maintain. We now consider how the education policy has been financed, and what choices have been made.

So far, we have emphasised the quantitative development of the Thai educational system by focusing on the rapid evolution of enrolment at different levels. In this section, we introduce some indicators which arguably measure the quality of education, such as public expenses by student and by level and the student per teacher ratio.

III.1 Total public budget

Public expenditure on education in Thailand can be traced back to 1905. As a share of the national budget, it shows a long involvement by the state in support of education, though with some variations over time. As one could expect, the evolution of the educational share of the national budget follows the same trajectory as enrolment.

During the political age (1900-1964) the 1921 law on primary education was preceded by financial commitments that proved to be durable. During the 1930s making use of the schools within the Buddhist temples was initiated by a considerable growth in public expenditure on education. From the 1960s, education became the largest item in the state budget.

During the economic age (the 1960s onward), the evolution of public expenditure on education had two distinct periods which matched those of the evolution of enrolment. From the end of 1950s up to the middle of the 1980s, it progressed slowly. The financial effort of the nation evolved moderately in a context of fast growth in enrolment, mainly in primary education. At the end of the 1970s, when large cohorts reached the end of primary school, the problem of

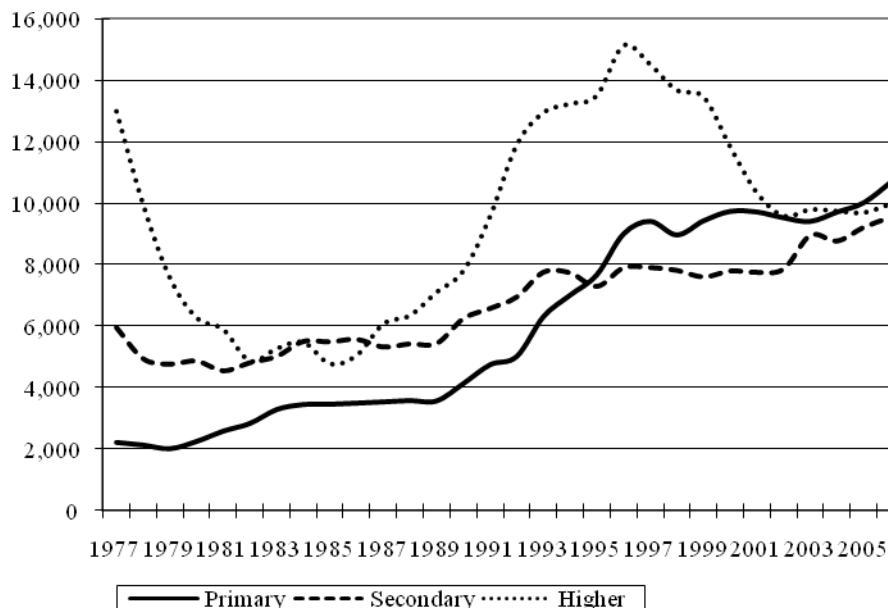
transition into secondary levels arose (Chirungsarpassok 1976). Increasing needs for the secondary level were met at the first stage by re-allocating resources from primary to secondary education. At that time, the cohorts in primary education began to decrease because of demography, but this transitory solution became exhausted quite quickly. While public expenditure in education stagnated between 1983 and 1989, it began to grow strongly from 1990 onward, until the shock of 1997 put an end to that. This period of growth between 1990 and 1997, was partly financed by inflation. After the crisis of 1997, the currency was devalued and structural adjustment was imposed. While public expenditure on education resumed growing in the first few years after the crisis, in the period between 2000 and 2003 this growth flattened, perhaps indicating new structural changes in the educational system.

For some economists who influenced international organisations on this matter, public investment as well as household investment in education has a high rate of return by boosting economic growth and household incomes (Blaug 1971). It can be shown that there are no conclusive demonstrations of this relationship, and that there is no necessity to use this unfounded and superfluous argument to justify the allocation of national resources to education. Actually Thai public expenditures on education increased very fast from 1987 onward. They represented 2.8% of GDP in 1967 and 4.2% and 23% in 2007. They reached 15% and 23% of the state budget for the same years respectively. These figures appear approximately to match international standards. As elsewhere nowadays, the percentage allocated to education within the total public budget is roughly the same as the share of the population of students within the total population. In 1970 this was not the case; the proportion of students represented about 50% of the total national population while the educational budget represented only 18% of the national budget. Both the end of the demographic transition and the increased effort of public finance in favour of education allowed catching up with international standards. From this point on, the public education budget could evolve with enrolment. As total enrolment will probably continue to increase in particular because of higher rates of enrolment in secondary and tertiary education, the public budget for education may continue to increase and to require more and more from the taxpayer. In the future, this of course will depend on the arbitration between public budgets and between public and private funding of education. It is interesting to note that the education budget as a percentage of the national budget reached almost 26 in 2000 and receded from then on to less than 23 in 2007. Recently governments have tried to shift more the financing of education to private sources. The problem remains of knowing where the money put in education is going.

III.2 Expenses by level of education

Growth in the education budget can be used for enrolling more students or/and for improving the endowment per student. Let us consider briefly the budget allocation to each level of education through the assessment of public expenditure per student for each level.

Chart 6 - Public expenditure per student and level of education from 1976 to 2007 at constant price (baht 1988)



Source: CELS database on Education.

Chart 6 shows remarkable evolutions. 1) Between 1980 and 2007, expenditure by student in primary education increased 145% while enrolment was decreasing by 25%. The government took the opportunity of decreasing enrolment to increase very significantly the financial endowment of primary level. This higher allocation to primary schooling could have contributed, of course, to improvement of the quality of education at this level, although a higher allocation is not a sufficient condition. 2) In secondary education during the same two decades and a half, expenditure by student increased almost twofold while enrolment increased by 67%. 3) In tertiary education including open universities the expenditure by student increased from 6000 to 10000 baht, that is by about 60% (but in the meantime had reached and then retreated from a peak of 15000 in 1997) while the rate of enrolment increased twofold. The convergence of public expenditure by student for the three levels of education reflects most of all the retreat in spending at the

tertiary level. In total, the important investment of the government in education has become more balanced as between the three levels. This could signal structural changes in progress for the whole Thai educational system.

In less than three decades, the Thai educational system has been able to accommodate successive cohorts of children for longer years of schooling increasing from four years in 1976 to almost twelve years by 2007. This massive growth of the educational system benefited from favourable circumstances. On the one hand, the demographic context saw a decline of the size of cohorts, which expanded the benefits of previous investments. On the other hand, economic growth also permitted greater expenditure on education. Thailand has financed the growth of its educational system through sustained economic growth. The demographic changes allowed Thailand to go beyond the limits of economic growth and the result was an impressive growth of enrolment at all levels. The achievement of the goal of nine years of compulsory education was particularly noteworthy, and ranks very well by international standards. However, there are dark sides to these remarkable achievements. Mass education has been achieved at the expense of quality. In particular, there is a noticeable increase of the student per teacher ratio at all levels of education since the beginning of the 1990s. This increase is an indicator of a declining quality. In this new situation, the emphasis of educational policies should now shift to achieving a significant rise in the quality of education across the board.

Figures do not establish clearly that a choice has been made by the government to concentrate its efforts on compulsory education - that is primary and lower secondary -, and to let families and private funds finance a growing share of educational expenses beyond the ninth year of compulsory education. Households' resources and the private sector are being drawn in increasingly so that the financial burden of education on the state can be alleviated and limited to the period of compulsory education. This evolution is taking place through the mobilisation of private sources both for funding public and private facilities. Actually the new organisation of public education – stamped with the euphemism “autonomy of educational institutions”- is a rampant privatisation of the educational system. This choice – quite clear since the Educational Act 1999 and even more since the educational scheme 2002-2016 - has currently huge consequences. Among these some are negative - in particular the adverse effects on equality of opportunity to study and on the quality of education. The chosen strategy nurtures credentialism and vocationalism. These adverse consequences will be extensively explored in the next chapters of the book.

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