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Education in Thailand: When economic growth is no longer enough

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After fifty years of almost continuous economic growth in Thailand, it is now possible to re-evaluate the developmental process of the education system. Until now, the structural indicators of education development that have been mainly used are the level and pace of the increases in public expenditure on education, the effect of increasing enrolment on social mobility, and the private and public distribution of investment in education. The impact of these factors undeniably offers a better understanding of the quantitative advances in education. However, the dynamics of the education system nowadays encounter structural limits related to both the integration of what is now widespread education within the social structures and Thailand's contribution to globalization. As a result, the contribution of education to the growth regime is increasingly questioned. The aim of this paper is to use a historical approach to explore this evolution. Theoretical and historical perspectives are combined within a quantitative history methodology, drawing on new time-series.

Keywords: educational model; economic growth; long-run analysis; Thailand

Introduction

The growth pattern of the emerging countries in South-East Asia is well known (World Bank, 1993). In the mid-1960s, a restrictive consumption model permitted substantial domestic savings, in a context of increasing household incomes. At the same time, public incentive measures allowed a high rate of domestic investment in consumer goods industries using an abundant, low-cost labour force. These countries gained access to technology transfers, albeit at a high price, through the import of capital goods. Their integration into the international division of labour was thus based on an export-driven growth regime and expanding domestic markets. Over the long run, this extensive growth is sustainable only to the extent that it generates and maintains growth in productivity and ensures a certain redistribution through higher incomes. Under these circumstances, in most of the countries concerned, the processes of recovery from crises (Stiglitz, 2002) always raised the question of a modification of income distribution to support growth (Witte, 2000; Khoman, 2005).

Education was, and still is, at the heart of the debates concerning the dynamics of growth creation and distribution. Pioneering studies of the contribution of education to the Asian growth process have thus stressed the extremely rapid development of national education systems as well as the role of public spending (Tan and Mingat, 1989). The idea of the good performances of Asian education systems was gradually disseminated and gained favour (Psacharopoulos, 1991; Pholphirul, 2005). This article contributes to bringing to light the way that the Asian growth

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regime has generated a specific educational development model and to considering the long-term sustainability of such a model, focusing on a national case study.

In Thailand, after fifty years of almost continuous economic growth, it is now possible to re-evaluate the developmental process of the education system. This article looks at the structural changes in the relationship between education and the economy. Until now, the level and pace of increases in public expenditure on education, the social mobility associated with education, and the updated income of both private and public investment in education have all been studied separately. The impact of these factors on the development of education provides undeniable quantitative results. This impact also offers a better understanding of the quantitative progress in education (Watson, 1982; Sinnathambu, 2003; Michel, 2010). However, nowadays, the dynamics of the Thai education system encounters structural limits related to both the integration of what is now widespread education into the social structures and Thailand's contribution to globalization. Consequently, the contribution of education to the growth regime is increasingly questioned. The aim of this paper is to explore this evolution by developing a historical approach.

To achieve this goal, theoretical and historical perspectives are combined within a quantitative history methodology (Marczewski, 1961; Feinstein and Thomas, 2002). This methodology uses the collection of data based on a wide range of aspects of education and its organization in order to provide a historical understanding of educational development and to apply these indicators to key macroeconomic variables. In order to provide time series, relevant data on education have been collected. They have been extracted from the annual state budget (since 1905) and the national accounts (since 1959), also using the archives of the Office of the National Education Commission regarding different national schemes of education; the macro data came from the historical database of the National Statistical Office. Primary data were then combined to build qualitatively homogeneous and continuous time series that enable the comparison of different variables across space and time. As a result, a new database with new time series on the Thai education system was built, from a minimum of forty years to a maximum of one hundred years. The aim of this database is to discover how and why the Thai education system changed over time.

A historical perspective on the development of the education system

The growth of the Thai education system is first of all explained by the rise of mass education. To understand the development of the education system, in Figure 1 we present an aggregate series of all pupils and students from 3 to 25 years old enrolled in the education system. The purpose of this panorama is to bring out the main periods of the development of the national education system.

1900–late 1950s: The political phase – education and the modernization of the nation

The first phase in the history of education in Thailand begins at the end of the nineteenth century (Ministry of Education, 1976) and develops through to the late 1950s. During this period, the development of education obeyed a political determinant. During that time, dominant Thai social groups, essentially the cosmopolitan ruling aristocracy, began a process of modernization in response to colonial threats from the United Kingdom and France. This process was inspired by the European Enlightenment and was based philosophically on individualism and economically on capitalism. However, it faced obstacles in the form of pre-existing social relations, which

were based on local and community membership. Education became a key element within the process of modernization. King Chulalongkorn (reign 1868–1910) sought to establish a new social relationship between the monarch and the people as individuals, forged at the expense of former social relationships.

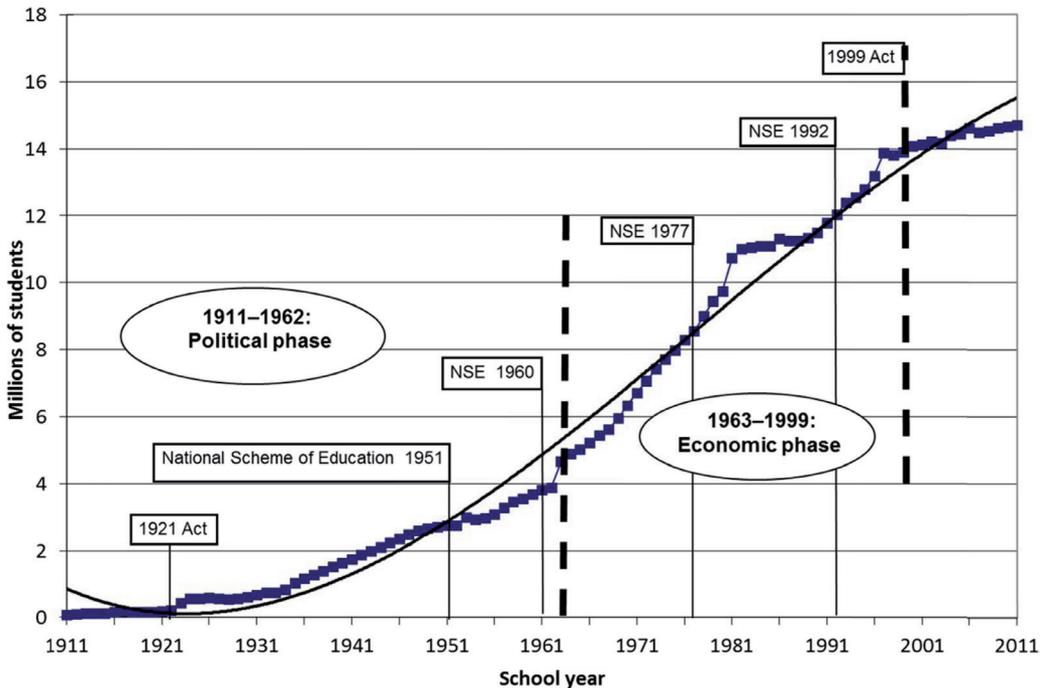


Figure 1: Total enrolment in education from 1911 to 2011

Source: Author – CELS database

Through a resolute and meticulous public policy, education then became a key element within the process of modernization and a powerful device for forging national homogeneity and identity. Built upon social structures of an individualistic nature, the national homogeneity was indispensable to the rise of a market economy (Wyatt, 1969). It concerned mainly primary education, but involved tertiary education as well. The first institution of higher learning, Chulalongkorn University, was created in 1917 with the mission to train the social elite needed to perpetuate the new social order.

Within this context, enrolment increased slowly at first, then grew steadily from the 1920s until the end of the 1950s. During this period, the main impulses, upward or downward, were due to laws and regulations regarding education. The law of 1921 established a period of three years of compulsory education within a primary level of seven years. In 1951, the National Scheme of Education extended compulsory schooling to four years. The scheme also organized the curriculum after primary school for the first time. The lower secondary level was established at the end of the four years of compulsory primary education. When this phase ended at the beginning of the 1960s, public policy gradually spread education throughout society through the organization of the public school system. From that point, four million students attended school and the gross enrolment ratio of the population between 3 and 18 years old had reached

40 per cent. While this political determinant continues to have a role in education, it has now been joined by another factor.

1960–99: The economic phase – education as a support for growth

The second period, extending from the beginning of the 1960s until 1999, was marked by the very rapid growth of the education system, increasing from four to fourteen million students over forty years. Enrolment multiplied by 3.5 while the total population doubled. The main determinant was largely economic (Kotkam, 2000; Navaneetham, 2002).

Since the 1960s, Thailand's economy has been through a process of structural growth. Employment in manufacturing industries and in services has sharply increased at the expense of agriculture. Growth has been led more and more by exports as foreign investment dynamics show that Thailand is deeply integrated in the process of globalization. Within this framework, primary schooling is in the course of completion and there is a 'social demand' for more education from families. This coincides with the fact that education supported the growth of labour productivity and, in this way, contributed to the dynamic maintenance of Thailand's comparative advantages on the international markets.

Three structural factors play a particularly uncommon role in these historical processes.

A very supportive demographic situation

Thailand's process of economic growth coincided with its demographic transition. The rapid expansion of schooling has benefited from two highly favourable demographic influences. The first one concerns the number of students enrolled. By the end of the 1970s, the declining birth rate resulted in a decrease in the number of children attending school. At the same time, a growing number of children had access to a longer period of schooling, first through primary education, and then through secondary and higher education.

The second influence relates to the population bearing the burden of the cost of schooling. During the rapid expansion of the education system, children in the cohorts from the early period of sharp demographic growth had become working adults financing the educational effort. As a result, for about twenty years the costs of extended schooling for increasingly smaller numbers of students were borne by a larger number of adults. However, since the beginning of the 1990s, the ratio between students and the working population has stopped declining, meaning that any additional financial effort for education was more difficult.

All things considered, the advances in schooling were achieved within an exceptional demographic context. However, this context was ultimately a passive framework and the opportunities it offered were not exploited (Janjoren, 1985). From the end of the 1970s, the subsequent reversal of the demographic trend raises the question of the financial sustainability of the present expansion of the education system. This is indicated by the slowdown in the growth of certain indicators, such as the number of students at secondary level.

The educational destinies of different generations: A walk towards greater equality

We propose to shift away from the usual reading of enrolment, which uses the school year as the time unit, by developing a longitudinal reading of schooling focusing on the trajectories of each generation of students. To achieve such representation, we first define a generation (or cohort) by the year of entry into primary education (Figure 2 shows the cohort entering in 1963), before calculating the schooling trajectory of each generation through the different

levels of education by controlling the enrolment by school demography. Such longitudinal data on the schooling paths of the cohorts bring out the transitory nature of the inequalities in access to education.

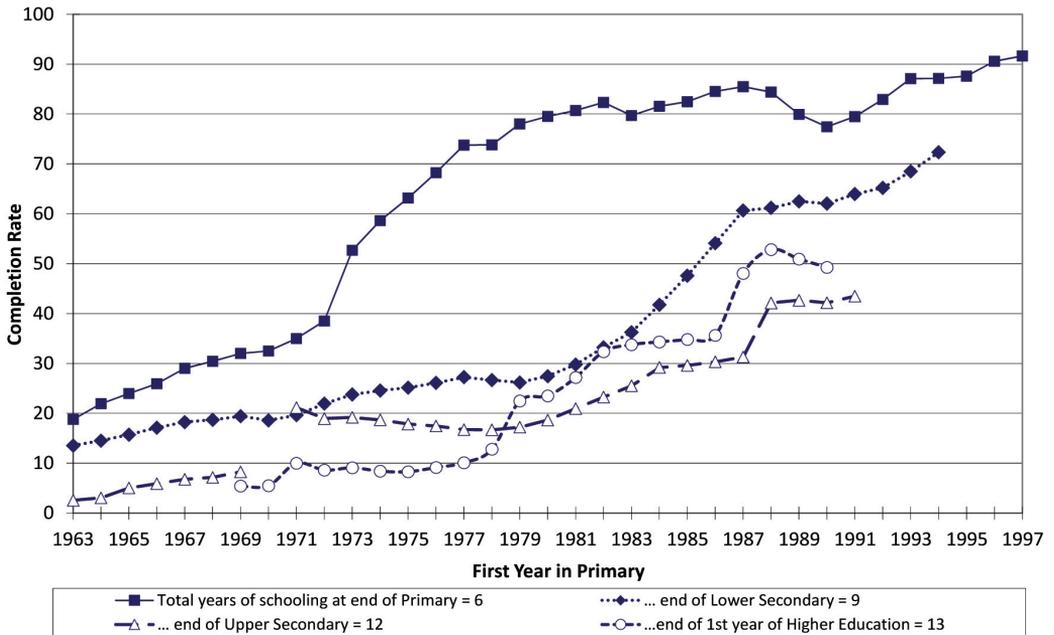


Figure 2: Rates of completion by education level and full generation of entrants into primary schooling

Note: Of children entering primary education in 1963, 19 per cent completed primary school (in 1969), 14 per cent completed lower secondary (in 1972) and 2.5 per cent completed upper secondary (in 1975).

Source: Author – CELS database

The maximum extension of educational possibilities for a small number of students (cohorts from 1963 to 1972) was followed by a period during which a large number of students (cohorts from 1973 to 1980) gained access to primary schooling only. The inequality of educational possibilities was at its highest as the proportion of a given cohort going on to secondary education remained the same while the number of students completing primary education was increasing dramatically.

Beginning with the cohorts of the 1980s, inequalities in educational opportunities began to decrease. It is interesting to note that this trend is mostly based on a continuous increase in the completion of the two secondary cycles and higher education, rather than on sequential increases from one cycle to another, as is most often the case. However, for the last complete generations whose data are available, the egalitarian dynamic is less active. Today, high rates of completion at secondary level make any new advances more difficult. This situation raises the question of the cost of equality.

The evolution of public expenditure: A strengthening of public policies on education

Through enrolment data, we have seen that education policy has been the main contributor to the building of the national education system. This is evident in the close relationship between

enrolment figures and the introduction of regulations governing compulsory education. We have also noted that the surge in enrolment caused by education policy has been difficult to maintain. We now consider how education has been financed and the choices that have been made by the state in this regard.

The long-term context for the development of education in Thailand has been that of economic growth. Public expenditure on education, like state budgets, is thus tied to economic prosperity. Since the 1960s, economic growth has provided the means for the development of education. Sustained economic growth favours educational advances through a proportional increase in government levies. Conversely, economic difficulties lead to educational cutbacks. Indeed, counter-cyclical public funding in education as a supporting policy in a phase of economic difficulties does not suffice to implement a policy change.

In these circumstances, the scale of public expenditure on education makes it a structural component of growth. Consequently, the extension of access to education makes any additional gain more costly and increasingly dependent on the vigour of growth. For these reasons, the question of the sustainability of public educational policy seems unavoidable, given the undeniable quantitative schooling achievements.

Since 1999: A transition, but in which direction?

The 1999 National Education Act modified the Thai education system. First of all, it integrated the lower secondary into compulsory education, which was extended from six to nine years. This means that, in principle, every student attends school until the age of 15. Secondly, it reduced the scope of the public education system. Although the economic context was still favourable, the state opted to continue its support. However, in order to maintain the pace of the increase in the number of enrolled students, public educational funding was concentrated into primary and lower secondary education. Since 2002, the additional financing of access to the other levels (upper secondary and higher education) has been transferred to individual families. This change has generated a rapid expansion of private education, especially at upper secondary level (UNESCO Bangkok, 2013).

Given the schooling levels attained in the entire secondary and higher education sectors, maintaining the enrolment rates and, even more, increasing them, requires considerable private financing in the present, based on an expectation for high future income (Blaug, 1971). Such a funding model, which consists of letting households (presumed to benefit from increasing income) invest a share of their extra earnings in the secondary education of their children, was already tested in the 1980s (Chinnapat, 2005). Due to the lack of results, this option was abandoned in favour of sustainable public expenditure, setting off the rapid expansion of secondary schooling.

Last of all, we note that the choice of concentrating public funds on a limited remit can constitute a method for improving the quality of education at primary and lower secondary levels. These levels of qualification still correspond to the dominant profile for available jobs (Jetin, 2012).

By redefining the scope of the public financing of education, the 1999 National Education Act generated more fundamental debates. The first one concerns the possibility for private funding to substitute for public financing (Bridges and Jonathan, 2003). For households – the first private funders concerned – this position is justified by the fact that economic growth continues to represent an increase in the average income with no regard to the dynamics of inequalities. The second debate concerns the common problem of the individualization of the relationship to knowledge and its critical dimension against the hierarchical society (Brummelhuis, 1980).

An assessment of the educational development model: Many quantitative achievements but gaps on qualitative issues

The achievements of Thai educational development are in line with those of other Asian countries (Khoman, 2005). In Thailand, as elsewhere in the region, enrolment rates, whether overall or by level, have significantly expanded in very short periods of time. The considerable achievements of Thailand's educational development model (Collins and Rhoads, 2008) can be illustrated comparatively by the fact that, other things being equal, Thailand has accomplished over some forty years what it took high-income countries nearly a century and a half to achieve. It should be recalled that the Thai education system provided successive cohorts of children in the 1970s with increasingly long periods of schooling for the greatest number within a very short period of time, and such mass provision of education benefited from exceptional demographic conditions.

More fundamentally, Thailand has financed its educational growth by its economic growth. The rhythm of the latter has determined that of the public funding of education through the state's pro-cyclical budget measures (see Figure 3). The demographic context has favoured this effort by generating margins that economic growth alone would not have permitted. Indeed, from the 1960s to the mid-1980s, the nation's financial effort in the area of education showed a moderate increase within a context of rapidly rising enrolments. At the end of the 1970s, this effort was no longer sufficient as the transition from primary to secondary education became an issue. The growing needs at secondary level (ONEC, 2001) were initially covered by transferring resources from primary education, where the number of enrolments was beginning to decline because of demographic trends. However, this temporary solution quickly reached its limits.

Alongside such circumstantial forms of adaptation, which abound in the history of Thailand's education system, public spending began an unprecedented rise in the early 1980s. All levels of the education system benefited from it. However, this growth masks gross disparities. Thus, the consistent effort in primary education made this level a robust base for the whole education system (World Bank, 1998).

The Thai secondary level of education needs to be analysed more precisely. The low secondary enrolment ratio prior to the 1990s led to the conclusion that Thailand's secondary education was lagging behind. This lag was diagnosed at the time of the assessment of the sixth development plan of 1987–91, and was based on international comparisons.¹ This lag was seen as posing multiple risks for the Thai economy. Concerns were raised about its less efficient labour force leading to a loss of international competitiveness. Similarly to the situation with primary education, the new regulations (in 1992/3) stimulated enrolment at first, including in upper secondary education (Jones, 2003). At some point, growth became more difficult to sustain (Tunsiri, 1994; World Bank, 2001). Compulsory schooling was extended from six to nine years, up to the completion of the lower secondary level. However, the expenditure per student did not follow this rapid expansion. With the financial and economic crisis of 1997, the slight increase in spending per student came to a halt, despite public policy trying to avoid any financial cut and attempting to maintain enrolments at secondary level. The 1999 reform acknowledged that public education could not reach the goal in terms of enrolment because of resource constraints. This led to the acceptance of the need for private initiatives, changing an economic problem into a political choice.

In higher education, the increase in spending per student went beyond its demographic growth. Two factors come to the fore. On the one hand, higher education underwent sudden massification at the beginning of the 1970s in response to political protests by Thai youth. The underlying principle remained that of a profound social selectivity. Access to the open universities was unlimited and inexpensive but with no guarantee of academic quality or subsequent

recognition of the credentials obtained. The standardization of the open universities began only in 1982, raising the problem of the value of academic credentials (Collin, 2002).

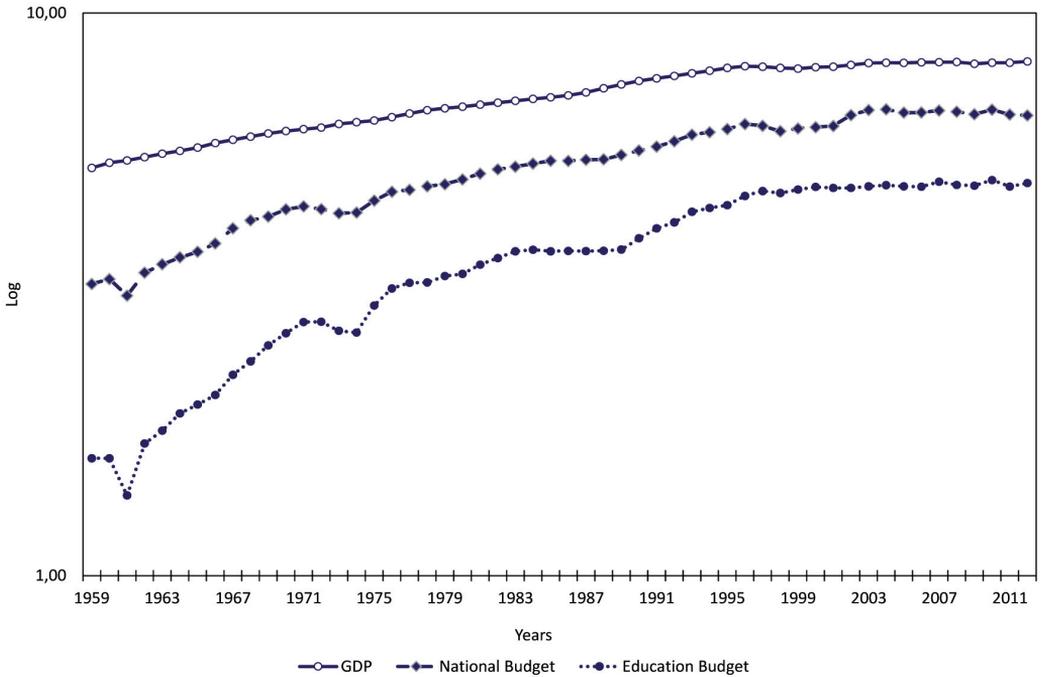


Figure 3: Increase of GDP, national budget and education budget in real terms – Log*

* Note: Semi-logarithmic landmark can be used to evaluate the growth rate of a variable which evolves over time. Whatever the level of the variable, identical growth rates will be represented by segments having the same slope. Growth rates can thus be compared disregarding scale effects.

Sources: Author with National Accounts for time series and author with Bank of Thailand and World Bank for the consumer price index

On the other hand, higher education, which was better organized, became more diversified. The tremendous need for training teachers diminished in favour of other specializations, even if very slowly. Studying abroad remained important for the wealthiest strata of the population (Annop, 2006). With two million students, however, the classical continuation of studies from secondary level to national higher education was confronted by issues governed by determinants other than massification, such as elitism, limited numbers, and specialization in the mass training of teachers.

In addition, the debates on the quantitative performance of the education system have given way to a widespread re-examination of qualitative issues. Thus, the analyses of the quality of education have focused on the content of curricula (where the political dimension is never too far away) and on pedagogy (which is usually reduced to learning by rote and to the domination of the Thai language over local languages) (Phasina and Mounier, 2010). The high student–teacher ratio completes the diagnosis of the weakness in terms of the quality of education. Indeed, except for primary education, this ratio presents a noticeable increase on secondary and higher levels since the early 1990s. In such a situation, the emphasis of education policy should shift to increasing the quality of education across the board.

Today, while primary education constitutes a robust base for the education system as a whole, threats are emerging. In fact, owing to the lasting difficulties with completing secondary schooling and to the poor transition to higher education, the growth of the education system has been interrupted. It thus seems necessary to raise the question of the sustainability of this mode of development.

Limited public spending? One limit can conceal another

The financial history of Thai education highlights the fact that the country has taken up the old economic debate over the existence of a *maximum tolerable public expenditure* (Peacock and Wiseman, 1961) and applied it to education. According to this hypothesis, regularly reformulated (especially in periods of economic or financial crisis), there exists a sustainable government size for a given economic situation. Extending the public sphere beyond that limit would slow down growth (Flavin *et al.*, 2014).

In Thailand, during the 2000s, the current average scope of public education was fixed at around 4 per cent of GDP, the equivalent of 24 per cent of the national budget. These rates were converging to actual international levels among similar countries. These contribution levels have been interpreted as limits, considering their stability despite the ever-increasing quantitative and qualitative needs for education. In order to deal with such needs other solutions have been tried out given the supposed existence of this limit on public expenditure. The most significant of these solutions are institutional in nature, such as the 2002 decision to exclude any additional financing of upper secondary and higher education from the scope of public education. In doing so, public policy has countered the limits of present educational development through two institutional mechanisms, breaking with the political principles guiding the promotion of education in Thailand until now.

The first break, introduced by the reform of public educational policy, concerns the development of education as a public good. Such a definition of education is central to the correction of social inequalities. Education, as a modern scheme, developed from the end of the nineteenth century. Access to the highest levels of initial education and training, now privatized, is borne by the nation's founding pact, since education, despite its limitations, emerges as a robust means of providing access to better social positions.

The second break concerns the scope of public financing of the education system, now mainly concentrated on primary and lower secondary levels. This solution aimed to maintain the growth rate of enrolments for these levels and to transfer the choice of continuing studies and their financing to parents. The restriction of the public sector in education is not just a consequence of the economic crisis of 1997. In fact, the need to increase the quality of lower secondary education and the enrolment levels in upper secondary and higher education already presumed a substantial increase in public financing. The decreasing share of education financing in the national budget showed that policymakers did not choose the way of requiring more of the taxpayer's money. Indeed, this share went down from 26 per cent in 2000 to 20 per cent in 2012. In doing this, Thailand follows governments worldwide that have tried to finance a larger part of their education expenditures through private sources.

However, for the time being, the financing of the development of upper secondary and higher education depends on parents, justified by their anticipation of high gains in the future. Already tested by the Thai education system for the development of secondary education notably in vocational streams, this strategy failed to succeed in the 1990s (Thammarak and Worswick, 2003). In a context of rising income, but also sharp inequalities, the income level of

the households concerned did not allow them to finance these studies (Dahl and Lochner, 2005). More generally, the strategy of intertemporal optimization of private investment in education (Pholphirul, 2005) comes up against the low-wage regime underlying Thailand's international specialization.

As indicated above, these government choices highly depend on the hypothesis of a maximum tolerable public expenditure. But in Thailand, as elsewhere, this hypothesis reflects structural conditions that go beyond the education system itself. These conditions include the more balanced share of national income, the dynamics of the labour market providing more positive trajectories for workers, and the increasingly comprehensive nature of the wage–labour nexus (Boyer, 2002).

Consequently, the widespread advances in access to schooling come up against the low-skills regime that constitutes a significant disincentive for raising the educational level. The low-wage differentiation regarding initial education and training and the state of quasi-full employment lead to high job mobility (some industrial firms have an annual turnover rate equal or close to 100 per cent), as well as high mobility between salaried and self-employed status (Michel and Oudin, 2003). In addition, the low-skills regime generates a threshold effect limiting growth in productivity (Kobsak *et al.*, 2006). This situation penalizes Thailand's competitive position on the international markets, as well as the dynamism of its domestic market. The enduring nature of such structural limits relative to the growth regime raises the question of the transition to a new labour regime with better wages, and the role the education system could play within it.

Conclusion

In less than three decades, the Thai education system has been able to accommodate successive cohorts of children for increasing duration of schooling, from four years in 1976 to almost twelve years by 2007. This massive growth of the education system was facilitated by favourable circumstances. Firstly, the demographic transition saw a progressive decline in the cohort size, which thereafter allowed investments to be spread further. At the same time, economic growth permitted higher expenditure on education. In fact, Thailand has financed the expansion of its education system through sustained economic growth. Demographic changes have allowed it to go beyond the limits permitted by the growth of the economy. The result was an impressive rise in enrolment at all levels of education. The achievement of nine years of compulsory education is particularly noteworthy, ranking the country in a good position by international standards.

However, there are dark sides to these accomplishments. Firstly, mass education has been achieved at the expense of quality. In particular, there is a noticeable increase in the student–teacher ratio at all levels of the education system. Secondly, a substantial increase in public spending is needed to improve enrolment and quality of education at the upper secondary and higher education levels, which are the weakest levels of the actual education system. However, available data suggest that policymakers have chosen to concentrate the national efforts on compulsory education – that is, primary and lower secondary – and left families and private funds to finance a growing share of educational expenses beyond the ninth year of education. This evolution is taking place through the mobilization of private sources to fund both public and private educational facilities. In this reorganization of public education – euphemistically referred to as ‘autonomy of educational institutions’ – there is actually a rampant privatization of the education system. This choice – which became quite obvious with the 1999 Education Act and even more with the NSE 2002–16 – will have huge consequences, some of which will be negative,

such as the loss of educational equality as well as quality. This strategy encourages credentialism and vocationalism.

The last limiting factor for the further development of education results from the low value placed on an educated labour force and the restrictive treatment faced by such a labour force in terms of present or anticipated income. What is at issue are the narrowness of the niches with regard to international specialization and the absolute containment of wages. At the same time, education as a support for growth is promoted by a sustainable public policy. Nowadays, this policy is confronted by the need to revise the contribution of all income levels in supporting education development in order to maintain the economic momentum.

Translated from the French by Miriam Rosen

Note

1 This lag has been shown by the World Bank (2001: 12–13) using a methodology that is not without weaknesses. First, Thailand was compared with heterogeneous countries (Korea, USA, UK, Australia, Malaysia, and Indonesia). Second, the comparison used static data, suggesting the perfect temporal comparability between all countries. Third, no attention was paid to the funding of secondary education. As a result, the lag of the development of secondary education in Thailand is smaller than suggested by the World Bank analysis

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Sandrine Michel is Senior Lecturer in Economics at the University of Montpellier. In her PhD research she studied the relationship between education and economic growth over the long run, drawing on European quantitative studies. Her research showed how education, alongside other social expenditures (such as health care, pensions, etc.), has contributed to overcoming economic crises over the long term. After analysing the situation in Europe, she has expanded her research using the quantitative history methodology to study the Asian economic growth context over the long run.

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