

Understanding the Changes in Education and Health

In general, the education and health status of the entire population has improved, but inequality has worsened. The richest segment of society seems to have made the largest gains. Incomes, especially among the nonpoor, have risen faster than the rise in costs. Despite changes in the quality of services, the poor have seen little improvement. Private-sector providers are important but less so for the poor. Social safety nets, such as insurance and fellowships, are being introduced but they still have not reached many in the poorer groups.

Doi moi is a comprehensive package of reforms affecting most aspects of life in Viet Nam, ranging from how people work and how the economy is organized to how the social sector is structured and financed. As explained in Chapter 2, the levels of human capital are not the consequences of random forces nor are they solely the result of the Government's commitment to the social sector. Households play an important role in determining investment in human capital both through their actions and through their omissions.

Although *doi moi* was initially introduced to stabilize the macroeconomic situation and promote economic growth, its reforms have had a profound effect on the demand for and the use of social services. This has been as much the result of the social sector policies of the Government of Viet Nam as it has been the result of changes in the household incentive structure resulting from changes in the overall economy, including a greater reliance on the market to allocate goods and growing income levels and inequality.

Doi moi has radically changed the people's relationship with the State and with work. The transition from a centrally planned to a market economy has drastically altered the labor market. The end of collective agriculture, through Khoan 10 of 1988 and the 1993 Land Law, has also had a major effect on the work patterns of the rural population. These reforms have led to increased incomes, and hence to better nutrition and sanitation and more money for school inputs.

Likewise, the reforms introduced under *doi moi* have seen major changes in the organization of social services in Viet Nam. Users are now expected to pay for a large portion of the cost of social services even as the Government has pledged to better target its resources. While many users are able to pay these additional out-of-pocket costs, the poor may find their options even more limited. The new opportunities that *doi moi* has created for social service providers are likely to have encouraged many of these to stop serving the poor and to focus instead on wealthier clients.

The education and health levels of the population of Viet Nam have improved in recent years, after a period of decline and stagnation in the 1980s. Although most of the population has benefited to some degree, in most cases the largest gains seem to have accrued to the richest segment of society

Education

Doi moi has led to widespread changes in the role of the education system in Viet Nam. The country has radically revised its policy toward the organization of education and

education financing. However, beyond these important changes on the supply side, major changes in the economy have also led to changes in the way in which the society relates to the school system and perceives the importance of education.

Table 4.1 summarizes the probable effects of *doi moi* on the education status of the poor and the nonpoor and presents working hypotheses regarding the factors that explain the changes in knowledge-seeking behavior in the decade of the 1990s.

The effects of *doi moi* on education are divided into two categories: supply shifts and demand shifts. Supply shifts refer to changes in the number of education providers and how they are organized to serve the public. Demand shifts refer to decisions that households make in response to changes in their income, new opportunities, and changes in the costs of education.

The overall budget for education has increased in real terms after declining in the early part of the *doi moi* process. This increase may have spurred a corresponding increase in

Table 4.1: Effects of *Doi Moi* on Education

Item	Effects on the Nonpoor Population	Effects on the Poor Population
Supply shifts		
<i>Better quality of education</i>	Positive. <i>The quality of education has improved for the nonpoor, especially in the urban sector, because of increased resources.</i>	Indeterminate. <i>While Government investment in education has increased, the quality of education in rural, remote, and poor areas may not have improved because (i) resources have not increased enough in these communities and (ii) qualified teachers are difficult to recruit and retain.</i>
<i>Greater role for the private sector</i>	Positive. <i>Higher-quality nonpublic schools have probably benefited the children of those who can pay.</i>	No effect. <i>Nonpublic schools remain largely limited to urban areas and are beyond the reach of the poor.</i>
Demand shifts		
<i>Higher costs</i>	Mildly negative. <i>Since the cost of education constitutes only a small proportion of the total expenditure of the nonpoor, higher education costs will have only a minimal effect on this population.</i>	Negative. <i>The effect is likely to be less for primary education, where costs are lower, than for lower secondary and upper secondary education.</i>
<i>Increased household income</i>	Positive. <i>Higher incomes would more than compensate for higher costs.</i>	Positive. <i>But the effect on the poor is less since their incomes are likely to have risen less than the incomes of the nonpoor.</i>
<i>Better employment opportunities and higher wages</i>	Positive. <i>Returns to education have increased and, therefore, so has the motivation for sending children to schools and for higher education.</i>	Indeterminate. <i>Despite increased incentives to send children to school for better opportunities (i) parents are not likely to have the access to credit to pay for education; (ii) new opportunities motivate children to drop out of school early to supplement the household income; or (iii) opportunities may simply not have increased in remote and poor areas.</i>

The greater emphasis placed on the market and the monetary exchanges implies that households must work harder. Children, especially from poor households, may be taken out of school and made to work in a household enterprise, such as a farm or a small store

the quality of education.¹ However education (especially at the primary level) has a strong element of local financing and poorer communities may not have the necessary resources to invest in education. What is worse, education in the poorer communities may actually have deteriorated in quality as teachers left and there were not enough resources for maintenance.

Education reforms approved in 1992 allowed the establishment of nonpublic schools. Nonpublic schools may be able to provide children with better-quality learning since they can be more flexible than State schools and may have more resources. However, given the fact that nonpublic schools are essentially businesses, they are likely to concentrate on urban children who can afford to pay tuitions.² Thus, it is quite likely that the nonpublic schools have had no effect on the education of the poor.

Consistent with the overall goals of *doi moi*, the public education system introduced fees for students in 1989, although in principle no school fees are charged for primary education. In practice, fees are only a small part of the total out-of-pocket cost of education. Charging fees is part of the general desire of the Vietnamese State to use monetary incentives instead of central planning. It is also consistent with the goal of targeting subsidies to the poorest segments of society. However, the poor will react negatively to fees much more than the nonpoor.

The greater emphasis placed on the market and the monetary exchanges implies that households must work harder.³ Children, especially from poor households, may be taken out of school and made to work in a household enterprise, such as a farm or a small store.

At the same time, however, changes in the labor force will also heighten the demand for education. First, increased disposable income among many households will permit them to send their children to school. This would be true even if school were completely free; as households get richer, they will have more resources to invest in the future of their children (Becker 1991). In addition, the changes in the labor market may make education a more valuable investment in the future of their children. In a centrally planned economy, wages are set by the State and do not reflect the demand for services. As the market sets wages, training and education will become more valuable and hence more in demand. Although poor households are likely to benefit, without a doubt the biggest beneficiaries are wealthier households. Not only have their disposable incomes increased more than that of the poor, they also have more access to credit, which can facilitate a relatively costly investment in a child's education.

¹ The quality of education is a complicated and hotly debated topic. Quality here refers to having more and better educational inputs such as teachers, textbooks, and desks.

² It is worth pointing out that in Latin America, quite a few private schools focus on providing services to poor children. In the future, as Viet Nam develops, this may become an option for more poor households.

³ It is important to keep in mind that *doi moi* has greatly expanded the amount of goods and services available to the average Vietnamese household and allowed many households to improve both basic necessities, such as nutrition and housing, and their overall living standard.

Before 1945, illiteracy was quite high and enrollment was low. President Ho Chi Minh launched a major effort in 1945 to eliminate “the enemy of ignorance.” Despite the major ongoing conflicts, a significant part of the State’s budget was devoted to education

Doi Moi and Education

Vietnamese society has traditionally placed a high value on education; however, education was normally limited to a small and elite urban group until the August 1945 Revolution (Marr 1993). The colonial Government that existed before 1945 dedicated few resources to education and, as a result, Viet Nam had one of the lowest education levels in Southeast Asia (Bryant 1998). All evidence suggests that until 1945, levels of illiteracy were quite high and, with public schools being so few, enrollment was quite low. President Ho Chi Minh launched a major effort in 1945 to eliminate “the enemy of ignorance.” Private schools were merged into the public school system and, despite a series of conflicts, a significant portion of the budget of the Socialist Republic of Viet Nam was devoted to education (Pham 1996).

From a very low base, literacy and education levels have improved remarkably in Viet Nam since 1945. A number of campaigns have focused on bringing children into the school system and educating adults. Secondary schools and universities have been built to meet the demand for education, and adult training programs have built on the gains from literacy campaigns. At least in the North, the army played a major role in teaching people to read and write and making knowledge more widespread among all age groups.

Before *doi moi*, the education system went through a series of reforms, culminating in the unification of the education systems of the North and the South in 1979 after the reunification of the country in 1975. A national system that unified the two existing systems was established and a new national curriculum was introduced. The pre-university system (primary and secondary education) was organized into 12 grades; this required a period of transition in the North, where general education was traditionally shorter. The end of fighting also put new strains on the system as demobilization led to increased demand for secondary and university education. At the same time, much of the education system in the South had to be rebuilt.

Since *doi moi*, a variety of laws, acts, and decrees setting the legal framework for educational activities in Viet Nam have been passed. Of particular importance are the Law of Universal Primary Education and the Law on the Protection and Care of Children, both approved in 1991. The country has moved away from providing fully subsidized social services (by charging fees, particularly at the postprimary level) toward a greater role for nonpublic schools.

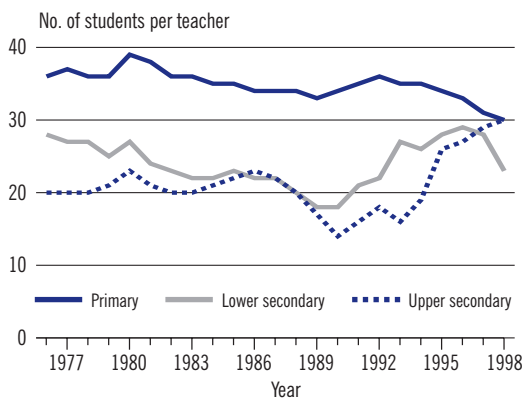
Under the current system, basic education consists of five grades of primary education (starting at the age of six) and four grades of lower secondary education. Then come either three years of upper secondary education or from six months to four or more years of vocational and technical education and training. Higher education can range from three to six years and the university system offers graduate and postgraduate education as well. There are also a variety of preschool options for children under the age of six. From 1954 to 1981, students in the North had only ten grades in the general education system. To match the education system in the South, the number of grades was increased to 11 in 1981 and to 12 in 1989.

The public school system exhibits quite a bit of horizontal decentralization, with communes, districts, and provinces operating schools at the local level. The central Government operates some universities (through the Ministry of Education and Training and other line ministries) but its role is largely limited to financing local education (through transfers to local authorities), and regulating and supervising the system.

The Quality of Education

Improving the quality and relevance of education has been an important goal of recent policy initiatives in Viet Nam. The Law on Education sets minimum levels of training for teachers at different levels. The Government has also started a number of efforts to upgrade the teaching staff through training.

Figure 4.1: National Student-to-Teacher Ratio



Source: General Statistical Office (2000b)

Many variables can be used to measure the quality of education in Viet Nam. The caliber of teachers and the number of students per teacher are important determinants of quality. In general, a teacher is more effective in a smaller classroom. At the national level, the ratio of students to teachers has varied greatly as a result of fluctuations in the number of teachers and students. Figure 4.1 shows the trends in the student-to-teacher ratio from the 1976–1977 to the 1998–1999 school year.

At the start of the *doi moi* period, there was a major improvement in the student-to-teacher ratio. In the 1990s, the ratio deteriorated among secondary schools but remained relatively constant at the primary school level. This change reflects the stable enrollment in primary schools and the ability of the primary school system to adjust the number of teachers to increases and decreases in enrollment. Secondary schools, on the other hand, have been inflexible in hiring teachers and have been slow in adjusting the number of teachers to the number of students. The number of secondary school teachers contracted much more slowly than the number of students at the start of *doi moi*, and the education system was unable to recruit and retain the teachers necessary to meet the increase in student enrollment in the 1990s.

There are not enough data on the distribution of quality to the poor and the nonpoor and the changes that have taken place in the distribution over time. The community surveys of the two VLSSs included questions on school quality; however, the community surveys were not conducted in urban communes and were therefore biased toward the poorer communities. Table 4.2 presents the average student-to-teacher ratio and the percentage of teachers in primary schools.⁴

⁴ The focus in the table is on primary school because there was at least one primary school in most of the communes surveyed. For each commune, the average student-to-teacher ratio and the average percentage of teachers who were trained (or “qualified” to teach) were calculated. The results were merged with a data set of households and the average for each quintile was computed. It is worth pointing out that all communes have individuals of different quintiles living within their boundaries. It is also important to keep in mind that in the absence of community and school surveys in urban communities, these results are heavily biased toward poorer, rural communities and may not capture the true distributional picture of the quality of education. Higher expenditures are systematically excluded.

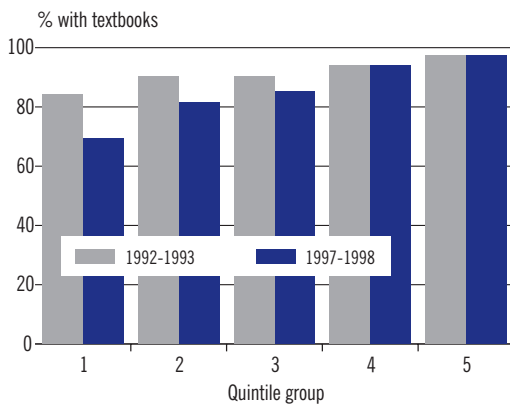
Table 4.2: Estimated Student-to-Teacher Ratios and Percentage of Trained Teachers in Primary Schools

Quintile	VLSS 1992–1993		VLSS 1997–1998	
	Student-to-Teacher Ratio	% of Teachers Trained	Student-to-Teacher Ratio	% of Teachers Trained
1	33.5	87.9%	28.9	71.5%
2	34.2	86.8%	29.5	75.9%
3	34.2	86.7%	30.7	78.5%
4	35.4	83.1%	30.7	78.8%
5	35.7	79.8%	31.1	78.3%
Total	34.5	85.2%	30.2	76.7%

Sources: 1992–1993 and 1997–1998 VLSSs

While teacher-to-student ratios tend to be somewhat better in poor communities than in communities that are financially better off, the percentage of trained teachers has dropped in poorer communities. Worldwide, schools in remote areas commonly have lower student-to-teacher ratios than more accessible schools simply because fewer students enroll in rural schools while the number of teachers is generally fixed by administrative requirements (usually a minimum of one teacher per grade). What is surprising is that while poorer communities had a slight advantage over other communities in terms of the number of trained teachers in 1992–1993, this advantage was completely reversed in 1997–1998, when better-off communities tended to have better-trained teachers. This reversal suggested a migration of trained teachers toward wealthier communities.

Figure 4.2: Percentage of Primary School Students with All the Required Textbooks



Sources: 1992–1993 and 1997–1998 VLSSs

Textbooks are an important input in the learning process because students should reinforce the learning they receive in the classroom with homework and study at home. However, in the late 1990s, there were more choices in textbooks and students were also required to purchase more textbooks. The Government is in the process of improving the design and procurement of school textbooks. Figure 4.2 shows the percentage of students in primary school who have all of the required textbooks.

Access to the necessary textbooks has decreased among the poorest students. The richest quintiles already had significant access to textbooks in 1992–1993 and were able to maintain this access in 1997–1998. However, access to textbooks decreased by about 15 percent among the poorest students (in the first quintile). This was probably due to the higher cost of textbooks and other educational expenses, such as fees and uniforms, and the greater number of textbooks required. The pattern is quite similar among students in lower secondary school, with children from the poorest quintile having fewer textbooks while other students had about the same access. Even taking into account the change in the availability of textbooks, it is clear that inequality in access to textbooks has risen.

However, there is an important positive development: although the number of students who do not have all the required textbooks has increased, the number of students who do not have any textbooks at all has declined noticeably. In 1997–1998 only .7 percent of primary students in the first expenditure quintile did not have textbooks, compared with 2.1 percent in 1992–1993. The other quintiles also saw similar declines in the number

Box 4.1: Quality of Education

The quality of education has many aspects ranging from the availability of textbooks to the interaction between teachers and students. How a student learns is at least as important as what the student learns.

The quality of education in the commune has improved and is now quite good. The education program is closely monitored. The relationship between teachers and parents is quite good.—A women's group in the Mekong River delta

Even in the 5th grade, my students still make many spelling mistakes. About 50 percent of my students cannot write their names correctly. School hours in the morning are not enough for them, and at home their parents do not pay much attention to their children's studies.

Textbooks are also a big problem. We do not have enough textbooks. Only about 5 out of 20 students have enough textbooks. The students bought textbooks only for math and Vietnamese. For the other subjects they borrow textbooks from one another.—Ms. Voung, a 24-year-old primary-school teacher in an ethnic minority village

of students without any textbooks, albeit starting from a low base. Although the vast majority of primary students have at least some textbook, policymakers should be concerned about the growing number of students who do not have access to all of the required textbooks.

Wealthier students are far more likely to receive outside tutoring and additional courses. Tutoring and private courses are other options that students have to improve the quality of their education. Following the 1997–1998 VLSS, nearly 20 percent of lower secondary students from the fifth quintile took outside foreign language or computer classes, compared with less than 2 percent for the first and second quintiles.

From the available evidence, it appears that the quality of education has deteriorated for the poor. The number of trained teachers has declined and more and more of the poor are studying without textbooks. The cost of quality education has been rising as more textbooks are required and students are increasingly expected to receive outside tutoring.

Although the vast majority of primary students have at least some textbook, policymakers should be concerned about the growing number of students who do not have access to all of the required textbooks

The Role of the Private Sector in Education

A decision by the Central Committee of the Communist Party in 1992 formally introduced the possibility of nonpublic education. The nonpublic sector includes mixed schools (*ban cong*), sponsored schools (*dan lap*) under the leadership of an NGO or an official organization, and purely private schools (*tu thuc*).

Private education has been quite important at the preschool level and, in 1996, it accounted for more than 40 percent of total enrollment at this level (World Bank 1997). There are a number of nonpublic universities and much of the vocational sector caters to “full price” students, whose fees cover the entire cost of operation. Table 4.3 shows the enrollment in nonpublic general education schools by expenditure quintile for 1997–1998.⁵

⁵ Although nonpublic schools were permitted from 1992 onward, the data on nonpublic school enrollment from the 1992–1993 VLSS are confusing and are not presented here.

By law, public primary school is free and official tuition fees for the other levels are regulated by the Government. In practice, however, tuition fees are only part of the monetary cost associated with schools as students are expected to contribute to a variety of funds and have to bear other costs such as uniforms, textbooks, and transportation

Table 4.3: Enrollment in Nonpublic General Education Schools, 1997–1998 (%)

Expenditure Quintile	Primary School	Lower Secondary School	Upper Secondary School
1	0.2	0.8	4.0
2	0.5	1.5	10.3
3	0.3	2.2	11.7
4	0.7	3.3	15.5
5	2.2	5.5	25.4
Total	0.6	2.8	17.7

Source: 1997–1998 VLSS

Nonpublic schools clearly focus on the upper half of the income distribution and play a major role at the upper secondary level. At the primary level, nonpublic schools play only a minor role and then only for the richest quintile. However, at the secondary level, they are increasingly important providers of education, and nearly 1 in 5 students in upper secondary school are enrolled in nontraditional schools. In all cases, enrollment in the nonpublic sector is definitely geared toward the rich. This raises the possibility of an increasing gap in quality, especially at the higher grade levels. In the worst case, many of the best teachers will move from the public sector to the private sector and contribute to the deterioration of quality in the public sector.

Relationship Between Education Costs and Income

Costs and income are closely related in determining the demand for education. The out-of-pocket cost of education in Viet Nam has notably increased following the introduction of reforms associated with *doi moi* in the late 1980s. From 1989 onward, parents were expected to pay tuition fees and other costs of education. However, this occurred at a time when incomes were on the rise and the average expenditure level of Vietnamese people from all quintiles was substantially increasing.

For the vast majority of students in Viet Nam, education is not free. By law, public primary school is free and official tuition fees for the other levels are regulated by the Government. In practice, however, tuition fees are only part of the monetary cost associated with schools as students are expected to contribute to a variety of funds and have to bear other costs such as uniforms, textbooks, and transportation. In rural and remote areas with their low incomes, education costs may be even higher as students must either travel to far-away schools or stay in boarding houses near the schools.

It remains an empirical issue whether incomes have increased enough to offset the increase in cost and which groups have benefited and which have suffered. There is also the question of timing: quite possibly the additional costs came into existence before many households had the additional income to pay them. If this is so, the poorer families may have been affected more than the richer families since the poor have fewer disposable resources that they can use for education. This may explain a good part of the fall-off in enrollment seen in the early years of *doi moi*. There are not enough data on the level of

household expenditures before the 1992–1993 VLSS to measure the distributional effects of the introduction of fees for education.

Table 4.4 shows the cost of education as a percentage of total household expenditures and of nonfood household expenditures. In order to make up for inconsistencies between the two surveys, the reported figures are based on expenditure data that are relatively consistent across the two surveys.

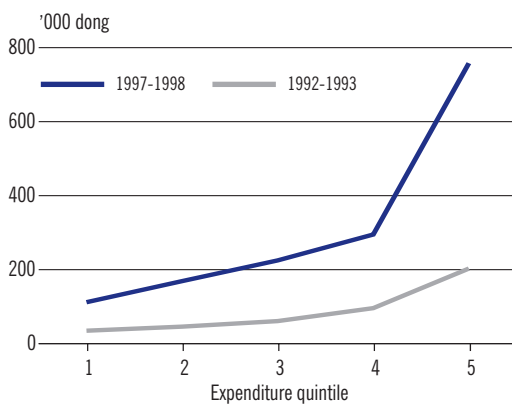
Table 4.4: Education Expenditures as a Percentage of Total Household Expenditures

Quintile	VLSS 1992–1993		VLSS 1997–1998	
	% of Nonfood Expenditures	% of Total Expenditures	% of Nonfood Expenditures	% of Total Expenditures
1	5.1	1.4	9.3	3.0
2	4.5	1.5	9.4	3.5
3	4.4	1.7	9.7	4.0
4	4.5	2.0	9.2	4.5
5	5.3	2.8	10.8	6.5
Total	4.8	1.9	9.8	4.4

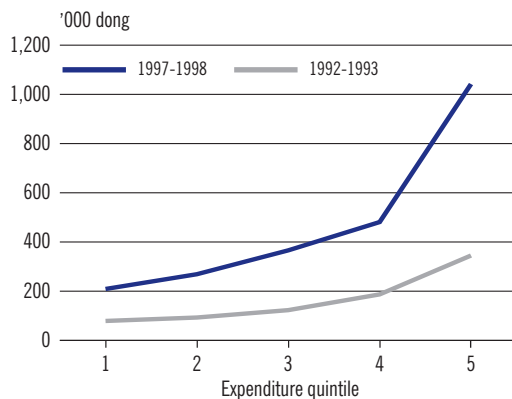
Sources: 1992–1993 and 1997–1998 VLSSs

Figure 4.3: Average Cost of School, by Quintile

(a) Primary School



(b) Lower Secondary School



Sources: 1992–1993 and 1997–1998 VLSSs

Even taking into account the higher incomes and smaller size of households, education takes up an ever-growing share of the household budget. As a percentage of nonfood expenditures, it brings out few important differences between the quintiles—generally the wealthier quintiles spend more than the average, and the poorer ones, less than the average. In terms of total expenditure, wealthier households spend a greater proportion of their incomes. This is not surprising since they have a greater proportion of children enrolled at all levels, especially in higher education (upper secondary and tertiary education). As a percentage of total expenditure, education is taking an increasingly important role and has more than doubled its share in the household nonfood budget.

The cost of a year of education varies from quintile to quintile, because of differences in the subsidy received by the school, in quality, and in the wages of teachers. Figure 4.3a shows the average total cost of primary education, by expenditure quintile, and Figure 4.3b, the cost of lower secondary education. The cost figures are given in 1998 dong. The total cost includes all education expenses such as mandatory school fees, textbooks, uniforms, and other costs.

The cost of education has increased substantially for all expenditure quintiles although the increase is especially large for the upper quintiles. In 1992–1993, lower secondary and especially primary education had a relatively flat cost profile, with the first through third quintiles spending similar amounts for education and the fourth and fifth quintiles spending gradually increasing amounts. In 1997–1998, the cost profile became much steeper, with the fifth quintile paying substantially more than poorer households.

It is clear from Table 4.4 that all households are spending more on education; clearly, therefore, the increase in costs has far outpaced the increase in incomes. Table 4.5 gives the cost of one year of education as a percentage of per capita nonfood expenditure using

Box 4.2: Education Can Be a Major Expense for the Poor

Since 1989, parents have been expected to contribute financially to the education of their children beyond primary school. However, at all levels, education requires money, both for school fees and for other contributions and school materials. Government programs target resources to the poor, but many poor people are nonetheless unable to continue schooling because of the cost.

Because of their poverty, many households have no money for tuition. It is common for children to drop out of school when they finish the 4th or 5th grade. Girls drop out more than boys.—Ms. Vuong, a 24-year-old primary-school teacher in an ethnic minority village

The Government is paying more attention to education for the poor. This year, the District People's Committee had a plan to distribute textbooks to students from poor families. We are working to find fellowships for poor students as well. So far, we have distributed 28 sets of textbooks for primary-school students, 6 sets for lower-secondary-school students, and 1 set for upper-secondary-school students.—Mr. The, local education official

I want my children to learn further but having a child in school is getting more and more expensive. There are many expenses: uniforms, pens, books, notebooks, building fees, security fees, and many others. Sending a child to school costs as much as the value of a large pig.—Ms Pham, 42 years old, Northeast region

I raise three chickens to cover school expenses. There is an annual building fee for primary school and books are expensive. My sisters and brothers gave me some books, but I have to buy three sets of clothes per year. Most of my classmates also raise chickens to pay for their education although some students are given money by their parents.—Hoang, a 12-year-old girl and member of the Nung ethnic group, Northeast region

In the past, it was easier for children to go to school. Now things are more difficult because we have to pay for many education expenses. Compared with 10 years ago, the cost of education is much more expensive.

Uniforms are also a big problem for the poor. Girls are required to wear the ao dai (a traditional dress for women). The cost of a uniform is around 300,000 dong and students cannot study without a uniform. So many dropped out of school because they could not afford the cost.—A women's group in the Mekong River delta

Table 4.5: School Cost as a Percentage of Per Capita Nonfood Expenditure

Quintile	VLSS 1992–1993			VLSS 1997–1998		
	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary
Quintile Cost Estimate						
1	23.1	51.8	n.d.	53.1	130.7	266.9
2	17.9	36.3	n.d.	31.8	78.2	159.6
3	16.0	32.6	59.3	21.6	53.1	108.4
4	16.2	31.4	56.6	13.7	33.6	68.7
5	12.8	21.7	32.8	5.1	12.6	25.8
Total	13.0	31.9	65.2	13.0	31.9	65.2
Population Cost Estimate						
1	26.4	49.1	135.3	60.5	116.9	255.9
2	23.8	38.0	86.4	36.4	70.3	154.0
3	22.7	36.8	76.0	25.9	50.1	109.6
4	19.2	31.3	55.4	16.8	32.4	71.0
5	18.8	25.9	40.1	6.4	12.4	27.1
Total	16.8*	32.4	70.9	16.8	32.4	70.9

Sources: 1992–1993 and 1997–1998 VLSSs

n.d. = data not sufficient to calculate

*The total is lower than its components because of the fact that different weights are used to calculate the denominator (average nonfood expenditure) and numerator (primary education expenditure)

two different measures of cost. The first measure, the *quintile cost estimate*, takes the actual costs paid by the students in the quintile and divides it by the average per capita nonfood expenditure of the quintile. The *population cost estimate*, on the other hand, takes the average school expenditure across the population and divides it by the per capita nonfood expenditure of the quintile. The population cost estimate has the advantage of holding some aspects of quality constant across the quintiles. However, it is important to note that differences in school costs reflect more than simply differences in quality; they also reflect differences in subsidy levels and cost of living.

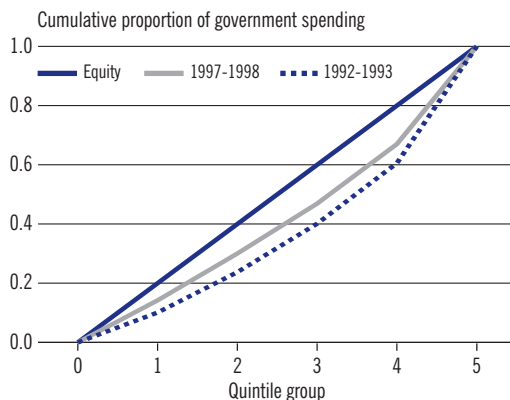
For the poor, even primary education is quite expensive and despite increases in income, the proportional cost of education continues to rise. In 1997–1998, for each individual from the first quintile going to upper secondary school the household would have to spend the equivalent of 135 percent of its per capita nonfood expenditure. This is clearly a real burden and it is not surprising that until quite recently so few of the poor were able to attend lower and upper secondary school.

The State can help increase the opportunities of the poor through its subsidy and taxation policies. Given the importance of education in reducing poverty and promoting economic growth, it should be a priority sector for Government investment. Viet Nam is in the process of targeting its subsidies more directly to the poor. Like most countries, Viet Nam has traditionally had an urban bias in education, focusing resources on the secondary and university education systems.

Education finance is governed by a series of laws in the areas of education as well as decentralization; these laws consolidate past reforms in education finance. The Government of Viet Nam allocates resources to provinces using a capitation formula based on the total population; the capitation grant is higher for poorer provinces (based on geographic and socioeconomic conditions). In practice, the national Government uses the grant formula in negotiating the actual transfer with the province (Brooke et al. 1999).

Table 4.6 shows the distribution of education costs between the Government and households. Included here are direct household expenditures for school fees as well as indirect payments for textbooks, uniforms, and other expenditures.

Figure 4.4: Distribution of Public Subsidies for Education



Source: Based on data in World Bank (2000a)

Although there has been some progress in refocusing subsidies to education levels with a high enrollment rate for the poor, the higher levels of education still receive a high level of subsidies. Between 1993 and 1998, the share of Government subsidies increased for primary and lower secondary education while it decreased for upper secondary and higher education. This trend is progressive because the poor tend to send their children to primary school and increasingly to lower secondary school. However, in relative terms the subsidy for higher education is still quite large; university students have a larger portion of their education expenditures covered by the Government than other students. Since most students in university are from the fourth and fifth quintiles, the poor rarely benefit from this subsidy. Figure 4.4 presents a benefit analysis of Government spending, using a modified Lorenz curve. It shows the percentage of Government (including commune) spending on education that accrues to each quintile. It shows the percentage of total public subsidies that reach the poorest 20 percent, the poorest 40 percent, and so on. In a society where there is perfect equity in the distribution of subsidies, the Lorenz

Table 4.6: Share of Government Subsidies and Household Contributions in Education Costs (%)

Level of Education	VLSS 1992–1993	VLSS 1997–1998
<i>Primary</i>		
Public subsidies	43	61
Fees	3	1
Other costs to household	52	38
<i>Lower Secondary</i>		
Public subsidies	34	42
Fees	9	7
Other costs to household	57	51
<i>Upper Secondary</i>		
Public subsidies	40	33
Fees	10	13
Other costs to household	50	54
<i>Tertiary and Vocational</i>		
Public subsidies	71	46
Fees	9	18
Other costs to household	20	36

Source: Adapted from World Bank (2000)

curve will be a straight diagonal line. If the poorer households receive proportionally more of the subsidies than the richer households, then the line will be above and to the left of the diagonal line. Likewise, if richer households tend to receive more than their proportional share of the subsidies, then the line will be below and to the right of the diagonal line. The distribution of subsidies is less equal the farther the actual line is from the diagonal line.

Despite improvements, education subsidies still proportionally favor the wealthier segments of society. The reasons for this are clear: there have been subsidies for primary education and more poor people are enrolled in primary school, but there has also been a major increase in the enrollment of the nonpoor in upper secondary school and in higher education. Although the distribution is more progressive, there is much room for improvement.

For the poor, even primary education is quite expensive and despite increases in income, the proportional cost of education continues to rise

Fellowships and fee exemptions are another way of making the education system more equitable. Students from poor families and from families with special conditions (orphans, the disabled, etc.) are supposed to receive total or partial exemptions from fees. These exemptions are already factored into the school costs in Table 4.5; Table 4.7 shows the percentage of students who have received partial or total exemption from school fees.⁶

Although the award of partial and total fee exemptions tends to favor students from the poor quintiles, a surprising number of students from the fourth and fifth quintiles receive some sort of exemption. This is because the policy granting partial and total fee exemptions targets not only poor students but also children from other households, which are

⁶ In 1992–1993, pupils apparently received only full exemption from school fees or no exemption at all.

Table 4.7: Percentage of Students with Partial or Total Exemption from School Fees

Quintile	Primary		Lower Secondary		Upper Secondary	
	Partial	Total	Partial	Total	Partial	Total
VLSS 1992–1993						
1		0.4		4.5		0.0
2		0.0		0.0		7.1
3		0.4		1.3		3.5
4		0.3		1.0		5.7
5		0.5		0.9		2.4
Total		0.3		1.2		3.7
VLSS 1997–1998						
1	11.5	16.3	14.1	7.3	7.1	1.6
2	11.9	8.0	14.4	5.4	14	6.1
3	12.0	4.4	16.4	5.6	14.1	3.9
4	11.9	2.8	10.9	4.9	10.8	2.8
5	8.4	1.5	9.1	1.7	6.9	0.6
Total						

Sources: 1992–1993 and 1997–1998 VLSSs

Like most countries, Viet Nam has traditionally had an urban bias in education, focusing resources on the secondary and university education systems

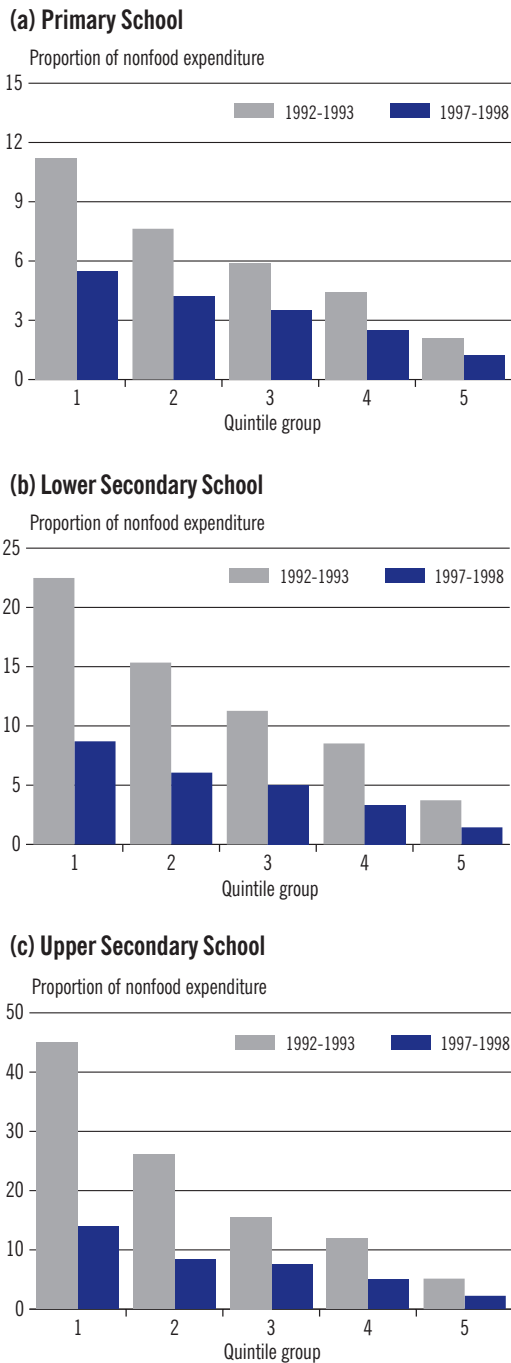
not necessarily poor. In 1992–1993, very few exemptions were given and those that were available were generally targeted to the poor in secondary school. By 1997–1998, exemptions for all students had significantly increased. Among primary-school students, nearly 20 percent of the exemptions were going to students from the two richest quintiles. The fourth and fifth quintiles account for an increasingly large percentage of the enrollment in secondary school, and therefore receive an even larger share of the total exemptions given. In lower secondary school, students from these quintiles receive about one third of all exemptions; in upper secondary school they receive nearly half of all exemptions. In contrast, at the upper secondary level, students from the first quintile receive less than 3 percent of all exemptions.

Fellowships are also an important means of encouraging students to stay in school. Currently scholarships are awarded according to students' academic results. As analyzed above, students from wealthier households often get better academic results. It seems, therefore, that children from poor families have less access to scholarships. Most fellowships are given at the secondary and university level. Table 4.8 reports the percentage of students from each quintile who have received a fellowship for general education studies.

The distribution of fellowships could be improved to ensure that more of the benefits reach the poorest students. In lower secondary school, while students from the first quintiles receive most of the fellowships, a surprisingly large number of students from the fifth quintile also receive fellowships. In terms of money distributed, in 1997–1998, virtually the same quantity was given to students from the fifth and first quintiles. In upper secondary school, students from the second quintile were the largest recipients of fellowships although students from the fifth quintile received almost as much money.⁷

⁷ It must be pointed out that the design of the survey excludes many students who are studying at boarding schools. These students tend to be poorer and to receive both fee exemptions and monetary support.

Figure 4.5: Cost of Textbooks as a Proportion of Nonfood Expenditure



Sources: 1992–1993 and 1997–1998 VLSSs

Table 4.8: Percentage of Students Who Have Received Fellowships

Quintile	VLSS 1992–1993		VLSS 1997–1998	
	Lower Secondary	Upper Secondary	Lower Secondary	Upper Secondary
1	4.5	0.0	13.0	0.0
2	0.0	7.1	1.3	26.3
3	1.3	3.4	1.1	11.2
4	1.0	5.7	1.8	0.5
5	0.8	2.4	6.6	4.9
Total	1.2	3.7	4.0	6.6

Sources: 1992–1993 and 1997–1998 VLSSs

Textbooks are a major education expense for all students. Figures 4.5a, 4.5b, and 4.5c show the cost of typical textbooks as a proportion of per capita nonfood expenditure in primary, lower secondary, and upper secondary school.

Although the situation has improved, textbooks are a major expense for the poor in terms of disposable expenditure. Spending on textbooks increases with school level, and in secondary school it can take up a large proportion of the income of the poor. Fortunately this proportion has decreased for all quintiles, although the fastest decrease has been for the wealthier quintiles.

Opportunity Costs for Children

In addition to the monetary cost of education, school has a significant time cost. Children can make positive economic contributions to their households, working on family farms and in other family-owned businesses. In all likelihood, this time cost (the wage and extra income lost by not working) far exceeds the monetary cost of schooling. The fact that a growing number of students stay in school means that households and children themselves see education as a good investment and as an important way to reduce poverty.

In a market economy, education is likely to become a more valuable investment than in a centrally planned economy. However, at the same time, in a largely unregulated labor market, time is also a more valuable commodity. It is quite possible that poor families need to take advantage of the labor of their children and either remove them from school or reduce the intensity of their studies. Loans may permit students to stay in school longer since they can pay back the loans with their higher incomes when they graduate, but access to credit may be restricted for the poor.

There is little evidence of the size of returns to additional schooling in Viet Nam. From the 1992–1993 VLSS, Mook, Patrinos, and Venkataraman (1998) estimate that the rates of return in secondary school (compared with leaving after primary school) are 5 percent for each additional year of study. University study (compared with stopping at the secondary level) has a somewhat higher rate of return of 11 percent. These rates are quite low; this is common in countries going through economic transition, as Viet Nam did in 1992 and 1993. These low rates of return to education as an investment, along with the large

Box 4.3: School and Work

School is expensive in terms of money as well as time. Students have less time to work and therefore contribute less to their households. For the poor, this can be a real sacrifice that is worthwhile only if education truly is an investment in the future.

Although our family situation is very difficult, we still send all our children to school except for the oldest child. He left school after the 5th grade to help us with farming.—Ms. Be, 34, Central Highlands

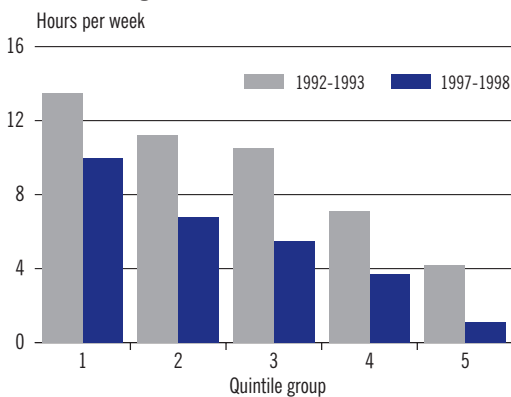
I go to school in the morning and work in the field in the afternoon, planting rice and sugarcane, hoeing, and adding fertilizer. I do homework in the evening. I know that learning provides me with knowledge. But I do not know whether I can use that knowledge in the future.—Hoang, a 12-year-old girl and member of the Nung ethnic group, Northeast region

We have to do our children's work at home when they are in school. I believe that studying is the main task of our children when they go to school. If they are free, they can help us with something but I never force them to work when they are learning.—Ms. Dam, Central Highlands region

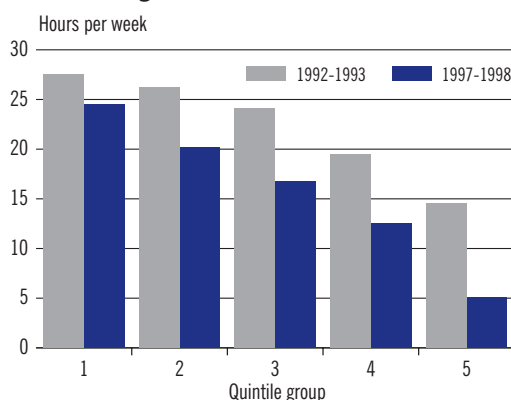
In a family with three children, the first child should not go to school but should rather stay home to help the household earn more money so that the other children can go to school.—A women's group in the Mekong River delta

Figure 4.6: Hours Worked per Week by Children

(a) Children Aged 11 to 14



(b) Children Aged 15 to 17



Sources: 1992–1993 and 1997–1998 VLSSs

increase in cost, may be largely responsible for the decline in enrollment in the late 1980s and earlier 1990s.

A study done by Glewwe, Gragnolati, and Zaman (n.d.) shows that the education of the household head was an important factor in raising families out of poverty between 1992–1993 and 1997–1998. Although it is not possible to generalize this to the individual level, it seems quite likely that the return to investments in education increased in the 1990s as the market economy took greater hold in Viet Nam.

Figures 4.6a and 4.6b show the work patterns of children of lower-secondary-school age (11 to 14) and upper-secondary-school age (15 to 18). The weekly work includes agricultural and market work both for wages and in a family-owned business.

For all children, the amount of work per week declined from 1992–1993 to 1997–1998, as students dedicated more time to schoolwork. The decline was much sharper for children from the richest quintile. Children in the fifth quintile now hardly participate in the labor force and are mostly full-time students. Children in the poor quintiles, on the other hand, are quite a bit more likely to be working while they study.

The pattern for upper secondary students is quite similar. While all children in this age group have reduced their work hours, by far larger gains (in both an absolute and a relative sense) can be seen among children from the higher quintiles.

Health

Although health and education are often grouped together, there are fundamental differences in the nature of the investment that households make in them. Good health

requires continuous investments in nutrition and preventive care, along with a small number of discrete interventions such as visits to a physician, the purchase of drugs, and hospitalization. While the monetary cost of education is quite predictable, health-care expenditures are often unexpected and can be large, with a catastrophic effect on the household income and expenditure.

Table 4.9 summarizes the probable effects of *doi moi* on the health of both the poor and the nonpoor and presents some key hypotheses regarding the factors that accounted for the changes in health-seeking behavior in the decade of the 1990s.

Table 4.9: Effects of *Doi Moi* on Health

Item	Effect on Nonpoor Population	Effect on Poor Population
Supply shifts		
<i>Better quality of health services</i>	Positive. <i>The quality of health has probably increased for the nonpoor because of greater investments by the Government, especially in the urban sector.</i>	Indeterminate. <i>While the Government has invested more in health, the quality of health services in rural, remote, and poor areas may not have increased because of the following: (i) inability of communities to provide additional resources; (ii) a greater market incentive for health providers to gravitate to urban areas; and (iii) weaker community supervision.</i>
<i>Increased availability of private-sector providers</i>	Positive. <i>The nonpoor are able to take advantage of the presence of the private sector.</i>	Negative. <i>The private sector may have driven up health costs beyond what the poor can afford. The increased availability of drugs may have encouraged the poor to self-medicate without proper medical supervision.</i>
Demand shifts		
<i>Higher costs</i>	Mildly negative. <i>The nonpoor are more likely to have health insurance, which moderates the impact of higher costs. In addition, the higher costs constitute only a small proportion of their income.</i>	Negative. <i>The effect is large, especially for expensive hospital care.</i>
<i>Higher household income</i>	Positive. <i>Higher incomes may have more than compensated for the increased costs.</i>	Positive. <i>The effect on the poor is less since incomes have probably risen less for the poor than for the nonpoor.</i>
<i>Opportunity cost of time</i>	Indeterminate. <i>Although the opportunity cost of time is higher for the nonpoor, they are also more likely to have long-term salaried jobs with sickness-related benefits including sick leave. In addition, services are more readily available, reducing overall contact time.</i>	Negative. <i>The poor are more likely to depend on daily wages and can less afford to take time off for health care, including preventive care. This would be most critical for mothers who are less likely to take appropriate care of themselves during pregnancy and their newborns. Also, travel time in search of services may be greater in remote areas.</i>
Other outcomes		
<i>Nutrition</i>	Positive. <i>Doi moi has led to increased production and greater availability of rice and other food items.</i>	Indeterminate. <i>Availability and prices are more favorable, but the effects of commercialization may lead to more pressure to sell rather than consume.</i>
<i>Smoking</i>	Negative. <i>There is more exposure to tobacco advertising and more income with which to buy.</i>	Mildly negative. <i>The income effect is weak and exposure to tobacco marketing is lower.</i>

While the monetary cost of education is quite predictable, health-care expenditures are often unexpected and can be large, with a catastrophic effect on the household income and expenditure

The quality of health care is of fundamental importance both in attracting patients to health providers and in ensuring that patients are able to regain their health. The 1990s may have seen an increase in the quality of service available to the urban population as increased Government spending and competition led to more and better options for those who could afford to pay for quality. However, since the introduction of *Khoan 10* (which permitted the contracting out of land to farmers), investment in rural areas may have lagged as many communes lacked the ability to raise revenues, while work brigades and collectives were unable to adapt to the changing situation.

The private sector has entered the health sector quite forcefully in recent years, opening up new options for the population. Drugs, which were once available only through Government health providers, can now be purchased at private pharmacies. Many providers now essentially operate in the private sector, offering their patients better services. While private-sector providers have probably improved the health options of the nonpoor, by virtue of their focus on high-income patients they may have had a negative effect on the poor. Health providers may have shifted their focus to their private patients, to the exclusion of poorer patients, who are less able to pay the fees involved. Moreover, public health providers may have focused their energies on competing with the private sector, thus restricting access by poor patients.

The introduction of fees in 1989 is, of course, expected to affect the use of health services. However, the effect is likely to be much greater on the poor than on the nonpoor. The nonpoor have had large increases in their incomes so health-care cost as a percentage of total income is likely to have gone down. At the same time, the improvement in quality and the increase of options may have even justified this increase in cost for the nonpoor. The poor, on the other hand, may find that the cost of health care has increased beyond their means, for both outpatient services and hospitalization.

The market reforms associated with *doi moi* have made time more valuable. The effects of this development are difficult to predict. For curative care, the effect is likely to be minimal as illnesses are relatively rare and the benefits of visiting a provider usually outweigh the time cost associated with a visit. The increase in the value of time may reduce the amount of time that women, especially among the poor, can spend with their newly born children. It may also lead to a reduction in prenatal visits.

Chapter 3 shows that while the nutritional status of the entire population has increased, this increase has not been equally distributed and the poor have in general not gained as much as the nonpoor in terms of nutritional outcomes. *Doi moi* has led to an increase in the availability of food and a subsequent decrease in the price of food; it has also opened new commercial opportunities to the rural poor. In many cases, the rural poor may prefer to sell food rather than consume it themselves. The poor population with limited or marginal land may also find that the local food safety net that once existed is now gone.

Income generally has a positive effect on health as it allows consumers to purchase better food and higher-quality medical services. However, higher income can also have a negative effect on health if it is channeled toward the consumption of health-damaging products such as tobacco or alcohol. The opening up of the economy has also made

tobacco more available and has led to an increase in advertising. The poor should be relatively protected because of their lower incomes and the general targeting of these products toward the better-off segments of society .

Doi Moi and Health

Doi moi has radically changed the health system even more than the education system. Before recent reforms, public providers offered health care exclusively, often with financing from work groups or communes or directly from the Government. However, in recent years there has been an explosive growth in private-sector participation at the primary level, both in terms of the number of providers and the availability of pharmaceutical products. Hospitals, although largely still public, have raised fees substantially and the Government has introduced health insurance as a way to pool risks and provide some protection from catastrophic costs. Households now pay for most of the cost of health care out of their pockets. The Government is in the process of targeting health subsidies to reach the poor.

Viet Nam, long respected as a leader in primary health care, has developed an impressive health system despite its low level of income. Public health services are organized following internal boundaries, with commune health centers (CHCs) as the main source of primary health care, and hospitals being operated by districts and provinces. There are also a number of specialist hospitals at the national level.

Between 1945 and 1975, the health system grew at an impressive rate. The number of hospital beds per 100,000 population increased from 22.2 to 276 and the number of doctors per 100,000 population rose from .3 to 25. There were similar gains in the number of nurses, hospitals, and local health centers (Witter 1996). Before the advent of *doi moi*, the health sector had entered a period of decline that paralleled the economic problems of the country. The integration of the health systems of the North and the South also put a strain on the national health budget. By the mid-1980s, an estimated 80 percent of the health budget was being dedicated to curative care, mostly through hospitals (Fritzen 1999).

To arrest the collapse of the health system, the Government authorized user fees in 1989. A series of decrees and laws, including the 1993 Ordinance on Private Practices of Medicine and Pharmacy also authorized the private sector to provide health care. In 1994, the central Government took responsibility for paying the salaries of CHC workers in an effort to help these facilities maintain their service.

Although public financing is largely from the central budget, the health system is decentralized. The budget allocation for health care is distributed through a number of national programs and the national health budget. The national programs target specific health problems (such as goiter, malaria, and tuberculosis) and needs (such as immunization and the construction and maintenance of CHCs). The national health budget largely distributes resources through national programs and makes transfers to the provinces in order to maintain the public health system. The budget is allocated on the basis of each province's population and preestablished financing norms (capitation guidelines). The norms are designed to give more resources to poorer provinces. In practice, the actual allocation of resources is negotiated between the province and the central Government.

In recent years there has been an explosive growth in private-sector participation at the primary level, in terms of both the number of providers and the availability of pharmaceutical products. Hospitals, although largely still public, have raised fees substantially and the Government has introduced health insurance as a way to pool risks and provide some protection from catastrophic costs

Recent Government decisions to take over the CHC payroll are an important step toward ending the vicious circle of poor communities having impoverished health-care providers

Fritzen (1999) finds that the budget allocation generally favors provinces with greater health needs and mountainous and remote areas.

Quality of Health Services

Quality is central to a successful health service. High technical quality is necessary to ensure that patients receive proper diagnosis and treatment. However, in order to attract patients, providers also need to provide a high level of quality in terms of both the physical aspect of the building (for example, providing chairs for waiting patients) and the relationship between the patient and the provider.

By all accounts, health services suffered a reduction in quality in the 1980s and early 1990s. Several studies reported such a reduction in quality in the early years of *doi moi*; this was no surprise, given Viet Nam's extensive health network and the decrease in public financing in the late 1980s. Gellert (1995), citing studies made by the Ministry of Public Health, discusses a reduction in quality in CHCs. Litvack (1999) mentions a decline in the availability of primary health care personnel as work brigades are discontinued and the health system has fewer resources with which to focus on basic services. As more goods and services are traded rather than centrally allocated, many health personnel have had to seek additional sources of income in the face of a reduction in work in their primary jobs. Likewise, there are concerns that both patients and providers are relying too much on drugs.

Until the recent financing reforms, CHCs were largely dependent on commune administrations for subsidies and had their funding reduced in the early years of *doi moi*. Even after the financing reform in 1994, communes still contribute a large part of the CHCs' budget; clearly, this puts centers in poor communes at a distinct disadvantage and has created a vicious circle of low quality: the lack of resources has led to a decrease in quality, which, in turn, has led to few patients and even fewer resources (Fritzen 1999). Recent Government decisions to take over the CHC payroll are an important step toward ending the vicious circle of poor communities having impoverished health-care providers.

From surveys in four rural communes conducted in 1992, Tipping et al. (1994) (see also Segall et al. 2000) report that while respondents were generally happy with the technical quality of services and the availability of drugs, there were many complaints about the treatment of patients, especially in hospitals. The researchers also expressed concern over prescriptions and the quality of the drugs that were distributed.

The community survey of the 1997–1998 VLSS does contain detailed questions on the quality of the services provided by the commune health center. However, the 1992–1993 VLSS provided only very basic information, so comparison is difficult. Table 4.10 presents the opinions of community leaders about the quality of local health facilities (CHCs were explicitly referred to in the 1997–1998 survey and were most likely the focus for most communities in 1992–1993).⁸

⁸ Community leaders were asked to list the problems of health providers in 1992–1993 and CHCs in 1997–1998. The table shows the percentage of communes that reported each problem, regardless of the order of importance.

Table 4.10: Reported Problems in Local Health Providers (%)

Quintile	VLSS 1992–1993			VLSS 1997–1998		
	Lack of Facilities	Lack of Medications	Poor Sanitation	Lack of Facilities	Lack of Medications	Poor Sanitation
1	67.6	37.7	34.3	85.3	60.6	13.3
2	69.4	32.0	35.9	84.3	47.9	18.4
3	72.4	28.9	37.9	84.3	44.8	17.1
4	74.7	28.8	40.1	81.6	44.8	14.2
5	75.9	24.6	40.1	73.5	38.6	15.6
Total	71.7	30.8	37.5	82.1	47.3	15.7

Sources: 1992–1993 and 1997–1998 VLSSs

There has been a general deterioration in the quality of CHCs, especially in poorer communities. In 1992–1993, wealthier communes were concerned about the lack of facilities and materials; by 1997–1998, this trend had reversed and the quality of local facilities serving the rich quintiles was better than average. It is worth pointing out, however, that the total amount of complaints had increased and that only for the richest quintile was there an actual decline in the number of complaints.

Box 4.4: Health Quality

Under doi moi, households have a variety of options for their health care that did not exist in the past. In many cases, however, these options are out of the reach of the poor, who have to accept costly, low-quality care.

The CHC is not concerned about the health of villagers. The attitude of the CHC is negative. Medicines are available at the CHC but are too expensive for poor families. I don't know if the Government has a policy to subsidize the prices of essential medicines for people living in remote areas.—Mr. Hoang, 42-year-old deputy village chief

There is never enough medicine for the people in the village. The first day of the month, medicines are available, but several days later there are no more medicines except a few tablets and some antibiotics.—Man, Mekong delta region

With respect to medication, there appears to have been a general increase in concern about the lack of drugs in the commune facilities. This seems to be a particular problem for poorer communes; this gives cause for concern because there are likely to be fewer private vendors of drugs in poorer, isolated communes. One positive development appears to be an improvement in the cleanliness of local facilities.

In summary, community leaders believe that the quality of CHCs has deteriorated and that the deterioration is greater in poor communes. Given the lack of alternative health care for many of the poor, this decline in quality has probably led to some decrease in the use of health services by the poor.

Private-Sector Participation in Health Care

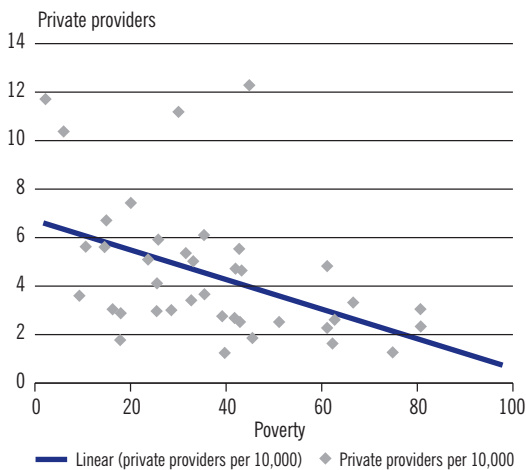
The private sector plays an important role in the provision of health services in Viet Nam. In 1989, the Government began to authorize the private sector to provide health care.

Under current laws, provincial health authorities license private pharmacies following guidelines set by the national Government.

Provincial health authorities are also responsible for licensing private health facilities. Generally, the law allows public employees to work in the private sector outside their official working time. There have been few studies of the size and scope of the private sector; in 1996, the Ministry of Public Health estimated that there were around 26,000 private health personnel, many of whom were also employed by the Government. According to these estimates, 80 percent of private physicians are also State employees.

The previous discussion on health-seeking behavior shows that private clinics capture only a relatively small segment of the market and that this share has been declining.⁹ However, drug vendors, which are an important component of the health-care system, are, for the most part, private.

Figure 4.7: Relationship Between Private Providers and Poverty



Sources: World Bank 2000b; 1997–1998 VLSS; Central Census Steering Committee (2000)

Although little evidence is available, private facilities generally seem to give preferential treatment to wealthier patients, without necessarily hurting the access of the poor. However, given the structure of the health system of Viet Nam, resources from the private sector may be leaving rural public providers and becoming increasingly focused on the cities and the rural nonpoor. A recent survey of private facilities showed that in 1999 about two-thirds of such facilities were located in urban areas, mostly in Hanoi and Ho Chi Minh City. Figure 4.7 shows the distribution of private health facilities (expressed in number of facilities per 10,000 population) compared with the percentage of the population living below the poverty line.

Although private health providers operate throughout the country, as expected, the private health sector is concentrated in areas with low poverty. This concentration implies that the State will continue to be a major provider of health services for the poor for some time to come. The private health sector could be encouraged to provide services to the poor only through some innovative health financing schemes and to cover the poor through community insurance.

Relationship between Medical Costs and Income

The economic reforms introduced with *doi moi* have opened up income opportunities that, by all accounts, have led to a higher standard of living for most of the people of Viet Nam (Nguyen and Pham 2000). Perhaps even more than the education sector, the health sector has been liberalized and resources are increasingly being allocated through prices rather than through mandates. In 1989, the Government began phasing out the public monopoly on health and permitting the private sector to establish private practice and pharmacies. At the same time, public providers at all levels were authorized to charge fees for both services and medications. Although the Government provides significant subsidies to the health sector as a whole, many public providers effectively operate on the basis of full or near full cost recovery.

⁹ It is quite possible that, with time, patients will have a better understanding of the fees charged by public facilities and will be able to differentiate between a public provider that is recovering its costs from a purely private provider.

Table 4.11 reports the share of household budget spent on health care in 1992–1993 and 1997–1998, as a percentage of total expenditures and of nonfood household expenditures.

Table 4.11: Health Expenditures as a Percentage of Total Household Expenditures

Quintile	VLSS 1992–1993		VLSS 1997–1998	
	% of Nonfood Expenditures	% of Total Expenditures	% of Nonfood Expenditures	% of Total Expenditures
1	17.5	5.4	15.1	4.8
2	17.7	6.2	14.5	5.4
3	17.7	7.0	13.8	5.6
4	15.9	6.9	13.1	6.1
5	12.6	6.5	9.4	5.4
Total	16.1	6.4	12.8	5.5

Sources: 1992–1993 and 1997–1998 VLSSs

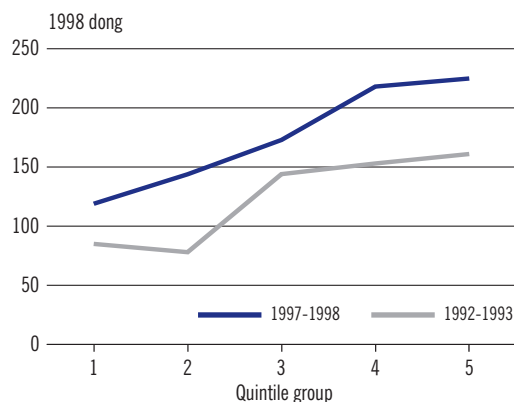
Although health care still takes up a large share of the household budget, this share has decreased in relative terms. The overall pattern of distribution of expenditures has remained relatively constant in five years, although the wealthier quintiles have seen a greater decline in their share of health spending than the poorest quintiles have.

Segall et al. (2000) studied four rural communes in Quang Ninh in 1992. The study showed that households spent an average of 13.2 percent of their income on health care, with the poor spending substantially more on health care than the nonpoor. Care must be taken when comparing results based on income with those based on consumption and spending since income generally understates the total consumption of the household because of the exclusion of home-grown consumption goods (for example, rice that is consumed and not sold). This bias is especially strong for the poor. Given that caveat, these results are quite similar to the results for nonfood expenditure. Clearly, health care is a major expense for poor households.

The cost of service varies greatly among providers and patients. As the health system in Viet Nam is still largely public and subsidized, different users may pay different prices as some users are granted partial or total exemptions. Likewise, major differences in the quality of services affect the cost to the user. Figure 4.8 shows the average real cost (in 1998 dong) of a hospital stay in Viet Nam, by expenditure quintile.

The cost has risen for all quintiles and appears to have become slightly more progressive in the sense that richer quintiles are paying more for their hospital stay. Table 4.12 summarizes the cost of one visit to a health provider as a percentage of per capita nonfood expenditure, using two different measures of cost. The first measure, the quintile cost estimate, takes the actual costs paid by patients in the quintile and divides it by the average per capita nonfood expenditure of the quintile. The population cost estimate, on the other hand, takes the average health expenditure across the population and divides it by the per capita nonfood expenditure of the quintile. The population cost estimate has the advantage of holding some aspects of quality constant across the quintiles. As with the

Figure 4.8: Average Cost of a Hospital Stay



Sources: 1992–1993 and 1997–1998 VLSSs

Table 4.12: Health Care Expenditures as a Percentage of Total Household Nonfood Expenditures

Quintile	VLSS 1992–1993				VLSS 1997–1998			
	Hospital	CHC	Regional Clinic	Private Clinic	Hospital	CHC	Regional Clinic	Private Clinic
	Quintile Cost Estimate							
1	43.4	11.6	27.3	17.6	73.0	21.2	27.7	40.8
2	23.8	11.5	11.4	22.1	43.7	12.7	16.6	24.4
3	30.4	10.1	19.3	10.6	29.7	8.6	11.3	16.6
4	22.3	6.4	5.1	4.9	18.8	5.5	7.1	10.5
5	8.1	3.2	2.8	4.9	7.0	2.1	2.7	3.9
Total	17.8	5.2	6.8	10.0	17.8	5.2	6.8	10.0
	Population Cost Estimate							
1	27.9	3.6	5.0	5.3	44.4	4.7	7.9	8.5
2	20.3	2.6	4.8	3.2	26.7	2.8	4.7	5.1
3	17.4	2.0	4.5	3.8	19.0	2.0	3.4	3.6
4	14.2	1.5	1.7	2.5	12.3	1.3	2.2	2.3
5	5.6	0.9	1.1	1.2	4.7	0.5	0.8	0.9
Total	12.3	1.3	2.2	2.3	12.3	1.3	2.2	2.3

Sources: 1992–1993 and 1997–1998 VLSSs

HHealth care–related expenditures force about 3 million people into poverty every year

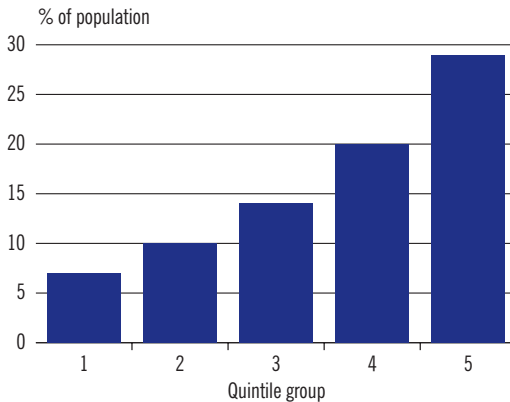
education estimates, it is important to note that differences in health-care costs reflect more than simply differences in quality; they also reflect differences in subsidy levels and many other factors.

Despite declines in the relative cost of health care, health care remains quite expensive for the poor. The share of health-care cost in per capita nonfood expenditure has declined for all quintiles, and indeed it appears that health care has become quite affordable for households in the fourth and fifth quintiles. For the poor, however, a single hospitalization is still quite expensive in terms of per capita expenditures and even a visit to a commune health center or a clinic is relatively costly as a percentage of income. Studies show that health-care expenditures are onerous not only for the poor but also for the nonpoor. In fact, an additional 4 percent of the population, or about 3 million people, slide into poverty each year because of expenditures related to health care (Wagstaff 2001).

Incomes have risen substantially and the number of contacts with providers has also increased. Since the overall share of health-care expenditures has dropped, it appears that costs have not risen as fast as incomes and that most households have additional resources to spend on health. It is worth pointing out that while the share of spending on health care has declined, spending on education has increased by an amount greater than the decline in health-care spending.

Following an official decree and a series of regulations in 1992, Viet Nam formally introduced health insurance in 1993. Health insurance is mandatory for workers in enterprises with 10 or more employees, and is voluntary for others. Most of the nonmandatory enrollees are students. By 1998, the insurance program was able to enroll 76.8 percent of the target population (workers in the formal sector) in the mandatory scheme but only 5.3 percent of the target population (independent workers, farmers, and students) in the voluntary scheme. All in all, about 14 percent of the entire population is enrolled in the Health Insurance Program (Dunlop 1999).

Figure 4.9: Population Covered by Health Insurance



Source: 1997–1998 VLSS

Figure 4.9 shows the distribution of health insurance by expenditure quintile in 1997–1998. Clearly, the health insurance program has been most successful in enrolling higher expenditure quintiles. This is not surprising since most enterprises with 10 or more employees are located in urban areas, where the richer quintiles predominate. Students are another target group for health insurance and they also come largely from wealthier quintiles.

Health insurance largely covers the wealthier segments of the population. This is not surprising since a main source of health insurance is employment, largely in urban-based enterprises and in Government service. This disparity probably contributes to the growing disparity between the poor and the nonpoor in the use of hospital services. The average health insurance coverage in urban and remote areas and among ethnic groups is equivalent to that of the poorest group in Figure 4.9. Coverage is quite low in the Central Highlands and the Mekong delta region. The health insurance coverage among the poor in these areas is certain to be even lower than the above figures.

Government spending on health increased rapidly in the 1990s, growing at a real rate of 12 percent to 14 percent a year. While this growth rate is impressive, it should be pointed out that it was achieved from an extremely low initial level in 1991. Government expenditure grew by 1 percent to 2 percent of gross domestic product in the same period.

The health system remains largely public in ownership, but in 1993, 84 percent of health financing was private (Nguyen 1999). Estimates show that in 1998, 80.5 percent of total health expenditure originated from households, compared with 14 percent from the provincial and national budget. The remaining 5.5 percent came from commune budgets, health insurance, and foreign donors. For public-sector providers, the contribution from user fees has actually declined as a proportion of total spending on health care (World Bank 2000b). However, this may be the result of more and more private health

Box 4.5: The Cost of Health Care

Under doi moi, the cost of health care has become a major concern of the entire population. Health problems are unpredictable and their consequences can be devastating for the poor.

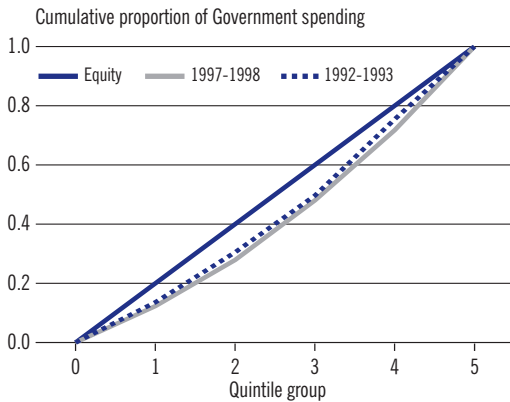
The demand for medicine in this district is very low. The people here are very poor. The poor transportation network also prevents villagers from coming to this pharmacy. We have clients from the communes only on market days. People here do not buy all the medicines prescribed for them. They usually buy just half and buy some more if they have not fully recovered from their sickness.—Ms. Phan, pharmacist

This commune is very close to the market. There are some local private clinics and local pharmacies, mostly in the market. If you get sick, just visit a private doctor, or telephone a private doctor. A visit costs a little bit more—about 25,000 to 30,000 dong—but it is very convenient.—Mr. Luong, 50 years old, Mekong River delta

Minorities can receive medicines free of charge. The Kinh can ask for medicines without paying for them but we don't get priority. Some of us receive less than the minorities do, and others receive nothing. In the past, we had medical books and we went to the CHC for medical checkups and free medicine. The CHC used to receive financial support from the health department. But today, nobody has a medical book.—Man, Central Highlands region

To see a doctor you should have an income of at least 500,000 dong. If you have only 200,000 to 300,000 dong don't go to a doctor. It is easier now to go to a hospital. Medicines are available and they can help cure sickness faster. However, the cost of visiting doctors and buying medicines is much higher than before. We must have money to be hospitalized. We have no health insurance.—Man, Mekong delta region

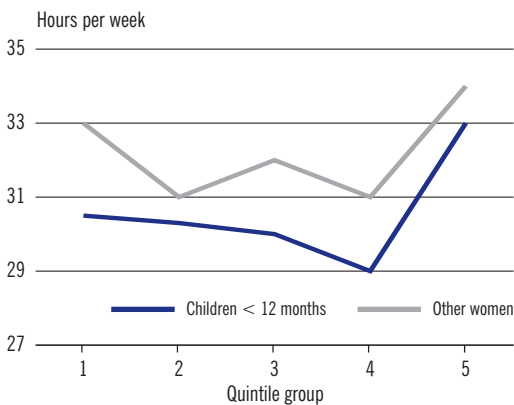
Figure 4.10: Distribution of Public Subsidies for Health



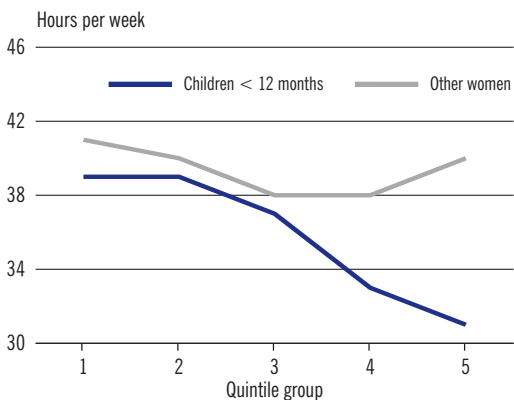
Sources: 1992–1993 and 1997–1998 VLSSs with finance data from World Bank (2000b)

Figure 4.11: Hours Worked per Week by Women Who Are Pregnant or Have Infants

(a) 1992–1993



(b) 1997–1998



Sources: 1992–1993 and 1997–1998 VLSSs

spending directed at the private health sector, particularly for the purchase of pharmaceutical products.

Figure 4.10 presents a benefit analysis of Government spending on health care, using a modified Lorenz curve. It shows the percentage of Government (including commune) spending on health care that accrues to each quintile. Thus, it shows the percentage of total public subsidies that reach the poorest 20 percent, the poorest 40 percent, and so on. In a society where there is perfect equity in the distribution of subsidies, the Lorenz curve will be a straight diagonal line. If the poorer households receive proportionally more of the subsidies than the richer households, then the line will be above and to the left of the diagonal line. Likewise, if richer households tend to receive more than their proportional share of health subsidies then the line will be below and to the right of the diagonal line. The distribution of subsidies is less equal the farther the actual line is from the diagonal line.

Overall, the Government has spent more on health, but the distribution of subsidies has become increasingly inequitable. In 1992–1993, Government spending on health generally favored the richer quintiles; by 1997–1998, this bias had increased slightly and subsidies were more inequitable. The explanation of this is clear: the poor tend to use community health centers more than the nonpoor, whereas the latter use hospitals more than the former. While the distribution of visits to CHCs was relatively stable in the 1990s, hospitalizations (in terms of inpatient days) have become less equitable with time.

Greater Opportunity Cost of Mother's Time

Although visits to health centers are relatively rare throughout the year and relatively short, time is still an important input in health outcomes. One of the most important inputs is the mother's time devoted to care in the last months of pregnancy and to a newborn infant. Indeed, increasing the mother's time investment is one major way in which households trade off the number of their children with child quality (Becker 1991).

Figure 4.11a shows the average number of hours worked per week by women who are pregnant or have had children under the age of 12 months and for other ever-married women in 1992–1993. Figure 4.11b gives the same data for 1997–1998.

There is a growing tendency among wealthier women to take time off to take care of young children, while poor women are working more regardless of whether they have young children or not. The 1997–1998 data show that while pregnant and lactating mothers of children under 12 months in urban areas worked only 25 hours a week, their counterparts in rural areas worked 37 hours. In the Northern Highlands and North Central regions, pregnant and lactating women worked even longer hours—43 hours and 45 hours per week, respectively. In 1992–1993, women with young children tended to have the same work pattern as women without children, although on average they worked slightly less. Women in the fifth quintile tended to work more than other women. By 1997–1998, women in general were clearly working more. Women in the first, second, and third quintiles tended to follow the same pattern as in 1992–1993, working only slightly less if they had small children (although significantly more than they worked five

The income of most families in Viet Nam has increased significantly in the decade of the 1990s, and, perhaps for the first time in the history of the country, a majority of the population have sufficient income to meet their household food needs

years earlier). However, women from the fourth and especially the fifth quintiles reduced their workload substantially to spend more time with their young children.

Nutrition and Food Consumption

The income of most families in Viet Nam has increased significantly in the decade of the 1990s, and, perhaps for the first time in the history of the country, a majority of the population have sufficient income to meet their household food needs. The poverty rate has dropped below 50 percent and the production of agricultural products has increased to a large extent. Indeed, in just one decade Viet Nam was able to transform itself from a net importer of rice to a major exporter of rice.

However, these advances do not necessary imply that the nutritional status of households has improved. It is entirely possible that households have simply taken their additional income and spent it on higher-quality food rather than more nutritious food, for example, by substituting noodles for rice. Or households may be spending their income on other goods instead of food.

In addition to household choices about consumption, agricultural households may feel more pressure to sell products rather than consume them, as they may have done in the past. The value of rice in terms of other goods has probably increased, making it more attractive to sell rice and buy other goods with the money earned. In some extreme cases, poor families who are not self-sufficient may find that the value of rice has increased so much (because local farmers prefer to sell outside the local market) that they cannot purchase as much food as in the past.

These issues are obviously quite complex and a full analysis of the issue involved goes beyond the scope of this report. Table 4.13 shows data on the average per capita consumption of all food and of rice in 1992–1993 and 1997–1998, expressed in 1,000 dong, adjusted for 1998 prices.

Although all expenditure quintiles increased their total expenditure as well as their expenditure on food, the increase was faster for the richer quintiles than for the poorer

Table 4.13: Per Capita Consumption of Food and of Rice (*in thousand dong, adjusted for 1998 prices*)

Quintile	VLSS 1992–1993			VLSS 1997–1998		
	Food Consumption	Rice Consumption	Total Consumption	Food Consumption	Rice Consumption	Total Consumption
1	664	362	860	800	432	1,151
2	912	453	1,237	1,090	496	1,692
3	1,111	502	1,587	1,312	513	2,184
4	1,367	514	2,108	1,647	512	3,018
5	2,122	462	4,046	2,719	462	6,649
Total	1,270	460	2,043	1,645	484	3,317

Sources: 1992–1993 and 1997–1998 VLSSs

Tobacco consumption is largely a problem affecting men, although the proportion of tobacco use has declined for both men and women

quintiles. In terms of food consumption, all quintiles except the fifth increased their total food consumption by about 20 percent per person. The fifth quintile increased their food consumption by 30 percent. For the first quintile, increased rice consumption accounted for half of the increase in food consumption (and for 25 percent of the total increase in consumption). For other quintiles, rice played an increasingly marginal role in the diet; for the fourth and fifth quintiles, total consumption of rice was stagnant or declining.

Consumption of Tobacco

Tobacco has long been recognized as a growing threat to health in high-income countries and more recently in middle- and low-income countries. Recently the Government of Viet Nam has taken steps to ban tobacco advertisements and to prohibit smoking in some public places.

Nevertheless, there are several reasons to worry that *doi moi* will lead to greater tobacco consumption. Viet Nam has liberalized its foreign trade and tobacco products are increasingly available. The commercialization of tobacco has been growing, as has the possibility of its glamorization. Incomes have been growing, and many households, especially those who have recently escaped from poverty, may be spending their additional income on alcohol and tobacco. Of course, increased education and a number of awareness programs aimed at pointing out the harm caused by tobacco may counter some of these factors. Table 4.14 reports the percentage of the population currently using tobacco, focusing on adolescents and adults.

Table 4.14: Current Tobacco Users (%)

Quintile	VLSS 1992–1993		VLSS 1997–1998	
	12 to 17 years old	18 to 60 years old	12 to 17 years old	18 to 60 years old
1	4.8	21.6	1.0	14.3
2	2.5	21.7	1.9	17.6
3	4.5	23.9	1.2	20.6
4	3.1	26.0	0.8	21.9
5	3.9	26.9	0.8	22.9
Total	4.0	24.2	1.3	19.8

Sources: 1992–1993 and 1997–1998 VLSSs

Although there is much room for improvement, the evidence points to some positive trends in tobacco consumption. Perhaps most notable is the large reduction in tobacco consumption by adolescents in all expenditure quintiles. Likewise, fewer adults are smoking; about one fifth of the working-age population is a smoker, compared with a quarter of the population in 1992–1993. Since it is reasonable to assume that incomes have increased faster than prices have, this reduction in tobacco use is most likely the consequence of greater awareness of the harm that tobacco can cause to human health. Even among smokers, the average number of cigarettes smoked per day has dropped slightly. It is worth pointing out that tobacco consumption is largely a problem affecting men, although the proportion of tobacco use has declined for both men and women.