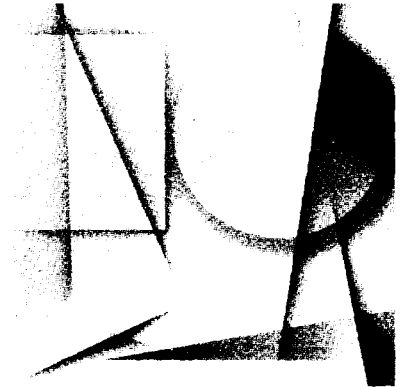


Investing in People and Growth



A well-educated, healthy work force is essential for economic growth. Here the transition economies have a strong foundation on which to build. As the Introduction noted, high quality of and good access to basic education and health care were two of the proudest achievements of central planning. Yet the health care and education systems that transition governments inherited were built to fit the rigid environment of a command economy, not the more flexible and ever-changing demands of freely competitive markets. Reform of education is therefore needed, both to give workers more transferable, marketable skills and to develop informed citizens, capable of participating actively in civil society. Reform of the health care system is needed to raise life expectancy and to reduce the burden of disease and injury, contributing both to productivity and the quality of life. The trick for governments will be to reshape health care and education to meet the demands of a new economic system without throwing away the achievements of the old.

Reshaping skills

The primary purpose of the education system is to impart knowledge and skills and, just as important, to transmit certain values. The resulting education package will vary enormously across countries and cultures. Achieving the primary objective involves a number of subsidiary ones: equitable access to education and training; producing the types of educational activities that equip individuals—economically, socially, and politically—for the societies in which they live (external efficiency); running schools and other institutions as efficiently as possible (internal efficiency); and financing education in ways that are both fair and efficient.

Initial conditions

Under central planning the CEE countries and the Soviet Union were well-educated societies, with almost universal

primary and lower secondary enrollment, high levels of literacy compared with countries at similar incomes (and sometimes with those with much higher income), and impressive levels of basic numeracy and engineering skills. Access was relatively equitable, for girls as well as for boys—a major achievement given the powerful effect of equal education on overall health and productivity. In China, too, levels of educational attainment were—and are—impressive by developing country standards.

Given these successes, and given the many other demands on policymakers during transition, one might think that education reform is one policy that governments could afford to put on hold. But reform of education is needed, and urgently. First, the inherited education system was highly inefficient even in the context of central planning. The state financed education on the basis of rigid formulas, allocating resources without regard to student or employer demand. And although the provision of education was for the most part a public monopoly, it was poorly coordinated. Programs for professional development were fragmented, and scarce resources were often wasted on duplication of facilities, as each enterprise and ministry developed its own. Nor did administrators or teachers have any incentive to use resources efficiently. The result was gross overstaffing and high unit costs. In many ways the education system—like the health system, as we shall see below—had problems similar to those of state enterprises. The solution, although not the same, will involve some of the same elements—for example, incentives to efficiency and greater responsiveness to consumer demand. As explained below, the second reason why reform is needed is that the inherited system has major deficiencies in terms of supporting a market system.

Education reform is urgent because the erosion of a country's human capital imposes high downstream costs. Ill-educated people make up a large proportion of the unemployed and the poor. Fortunately, there is good

evidence that higher enrollments and a rapid response of the education system to changing labor markets pay dividends: such factors explain a significant part of the higher growth rates of the high-performing East Asian economies in recent decades. In transition economies a shortage of necessary skills hampers enterprise restructuring and privatization.

In China a serious problem is provision of social services, which has stagnated in China's poorest regions. Educational achievement in these areas is deplorable, and, as discussed below, so is health status. In the poorest towns and villages half the boys, and in some minority areas nearly all the girls, do not attend school and will not attain literacy. Only thirty of the seventy school-age children in a poor village in Tongxin County attend elementary school; in another village in the same county none of the fifty children have attended school in the four years since the local elementary school collapsed.

Adapting education and training to the market economy

Education systems under central planning focused, on the one hand, on teaching all students a uniform interpretation of history and national purpose, and on the other, on mastery of fixed, specialized bodies of knowledge to be applied in narrowly defined jobs. Education therefore emphasized conformity for all and specialist expertise for each. This philosophy rendered socialist education systems inadequate to the needs of a market economy in at least three ways. First, although basic education was in many ways superior to that in many Western countries, subsequent training was too specialized from too early an age. Poland's secondary technical schools taught about 300 occupational skills to meet the specific and fairly static demands of the central plan. In Germany, by contrast, about sixteen broad apprenticeship programs are available to sixteen- to eighteen-year-olds. Second, adult education and training, essential for job mobility in a market economy, was neglected because workers were expected to remain in their first occupation throughout their working lives. Third, subjects such as economics, management sciences, law, and psychology—all of which feature prominently in market economies—were deemed irrelevant and ignored or underemphasized.

Liberal market economies also use education to transmit cultural, political, and national values as well as knowledge and skills. In sharp contrast with education under central planning, however, their systems emphasize personal responsibility, intellectual freedom, and problem-solving skills.

The skills that students acquire through their education can be assessed along three dimensions: the ability to solve a known class of problem; the ability to apply a given technique to a new problem; and the ability to

choose which technique to use to solve a new problem. Although this hierarchy of skills was recognized throughout the centrally planned economies, in many the upper end—that involving independent, critical thought—was regarded as seditious. Figure 8.1 illustrates, in terms of these three dimensions, both the strengths of the old system and the need for change. Mathematics and science scores of children in the NIS, Hungary, and Slovenia are considerably above the international average. Clearly these countries have successful education systems. However, children in these countries, in comparison with their counterparts in Canada, France, Israel, and the United Kingdom, do better on tests of how much they know than on tests that ask them to apply that knowledge in new circumstances. These results suggest that the education systems of centrally planned and market economies were both effective in achieving their different objectives. They also indicate the direction in which change is needed in the systems of CEE and the NIS, both to help them convert human capital to meet the demands of a market system and to fill in gaps in knowledge. Higher education policy in China is increasingly facing similar problems.

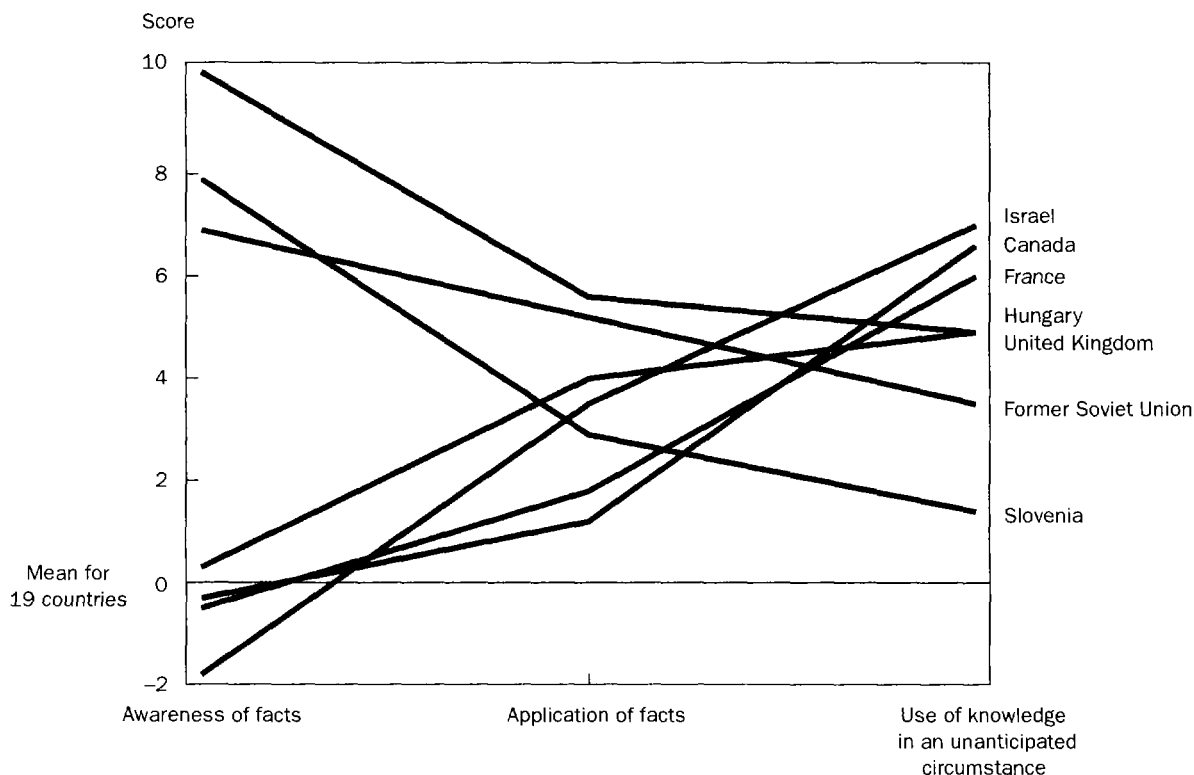
Adapting the education package will not be easy (Table 8.1). The gaps in the curriculum have led to missing concepts and hence to missing words. "Efficiency," for example, means something very different to a manager seeking only to comply with a central plan than to one seeking to boost profit and market share in a competitive system. Although language adapts rapidly, missing concepts and, as a result, missing words can still impede speedy and effective transfer of knowledge and skills.

Policy directions

Priorities for reform lie in three principal areas: finance, content, and delivery. The financing of education should provide incentives for efficiency. One way is to allocate public funds for training and higher education on the basis of enrollment, to make the system more responsive to demand—although such a policy needs to be accompanied by improved accountability, as discussed below. Training vouchers would allow workers to choose what kind of training to seek and where; this would improve both occupational and geographical mobility. Reform of education financing is important not simply because it supports more efficient management of schools (internal efficiency) but also because it can improve the content of education (external efficiency) by empowering consumers to demand the education and training they need. A separate issue is to ensure that funding improves access—a major problem in rural China. Government must accept responsibility for guaranteeing access to quality education; this may require interregional transfers to help offset widening regional disparities (see Chapters 4 and 7).

Socialist education emphasized accumulating knowledge rather than applying it.

Figure 8.1 Science and mathematics test performance of children in selected transition and established market economies



Note: Data are deviations from the overall mean, for a sample of nineteen countries, of test results of nine- and thirteen-year-olds on the second International Assessment of Educational Progress, conducted in 1991. The countries shown are those whose performance was above the sample mean. Source: Kovalyova 1994; for technical details see Education and Testing Service 1992a, 1992b.

New curricula are central to the reform of content, especially in such subjects as economics and history, both to produce a more critical type of learning and to adjust schooling to changing needs and values. New textbooks will be needed, and reform should encourage the development of a competitive commercial publishing industry. This would allow replacing the selection of textbooks from a centrally determined list with a pluralist model that allows schools, teachers, and pupils to choose for themselves. But perhaps most important to improving quality will be raising the accountability of educators. This must start with training new teachers and retraining

existing ones. Performance incentives for teachers and local administrators should be strengthened, as should the assessment of teachers. Finally, examinations need to be reformed so that they test the capacity to use knowledge as well as to accumulate it.

Improving the delivery of education is a complex process. It generally implies decentralization, to make education more responsive to local needs; diversification of supply, including private suppliers, to promote competition and thus efficiency; and diversification of educational practice, to enhance individual choice. These initiatives, however, require a major change in the role of the

Table 8.1 Examples of needed changes in the education package

Component of the education package	Objective
Knowledge	Preserve the achievements of the old system but rectify the earlier underemphasis on social sciences and law.
Skills	Assist the movement from specific skills to broader and more flexible skills better able to meet the continually changing demands of a market economy. Strengthen the ability to apply knowledge in new and unforeseen circumstances.
Attitudes	Strengthen the idea that the initiatives of workers and of others are rewarded. Assist the understanding that employing workers (subject to suitable regulation) is not exploiting them but giving them an opportunity to earn a living. Assist the understanding that business has its place in society and hence that profits are needed to provide an engine of growth.
Values	In line with the changed relationship between the citizen and the state, encourage the understanding that citizens need to take responsibility for their actions, including their choices about education, work, and lifestyle. Foster the understanding that freedom of expression is an essential and a constructive component of a pluralist society governed by consent.

state, which has to establish a framework that includes methods of funding, accreditation of providers, and monitoring of quality, particularly in poor areas.

Progress to date

Transition countries have made some progress toward these goals, but much remains to be done. During the early stages of transition education reform in CEE and the NIS, understandably perhaps, was not a high priority. As Chapter 7 noted, fiscal and political pressures prompted central governments to decentralize much of the financing of education. But local governments generally had even fewer resources than central government. Real spending on education fell, yet little effort was made to reduce overstaffing, with the result that a growing share of education spending now goes toward teachers' salaries. There has been both a tremendous decline regionwide in the provision of preschool education, with potentially devastating consequences for the learning ability of large numbers of children, and a decline in access to compulsory education in the less affluent countries, particularly for minorities.

The state sector, and its secondary vocational and technical training programs in particular, responded slowly to the arrival of a market economy. As a consequence many graduates now feed the lines of unemployed. On the positive side, new institutions have sprung up (many of them private), especially in the teaching of social sciences and business administration, partly because of rising returns to these disciplines. Most of the CEE countries and NIS have revised their curricula, especially in history and the social sciences. Decentralization has also occurred: in Russia, for example, the centrally determined part of the primary and secondary curriculum was reduced from 100

percent to about 80 percent. And schools can now choose their textbooks, although shortages make it difficult for teachers to follow the new curricula.

Yet although the content of lessons may have changed, the manner in which they are taught has not. Old methods persist throughout the region and will doubtless take time to change. The challenge is daunting. But no education system can hope to foster choice, autonomy, and accountability in society as a whole without first acquiring these characteristics itself.

Improving health

Health care consumes a significant share of resources in all countries, and the debate over access to and the cost of quality care inspires strong emotions everywhere. The primary objective of health policy is to improve citizens' health, within a budget constraint. Several subsidiary objectives follow from this twofold obligation: equitable access to health care; producing the quantity, quality, and mix of health interventions (including preventive care and health education) that bring about the greatest improvement in health (external efficiency); running medical institutions as efficiently as possible (internal efficiency); and financing health interventions in ways that are efficient and equitable.

Initial conditions and progress to date

Many of the CEE countries and the NIS face a health problem associated with transition itself, superimposed on a longer-term problem. By the mid-1960s life expectancy in the CEE countries was only one to two years shorter than that in the industrial market economies, and the gap seemed to be closing. Thereafter, however, the gap started

to increase, strikingly so for middle-aged adults, as health outcomes increasingly lagged behind progress elsewhere. By the late 1980s Hungarian men aged fifteen to fifty-nine stood a greater risk of dying than their counterparts in Zimbabwe, and the risk of death in Czechoslovakia was higher than in Vietnam. By the mid-1980s mortality rates from heart disease among forty-five- to fifty-four-year-old men in Czechoslovakia were double those in Austria; thirty years earlier the rates had been much the same.

What has happened to health during transition? Two conclusions emerge: rapid reform is not necessarily detrimental to health indicators, but slow reform or the absence of reform does little to impede a long-run deterioration. In many of the NIS the long-run trend toward worsening mortality has accelerated since transition began, particularly for men. The sharp decline in men's life expectancy in Russia between 1990 and 1994 was the most dramatic shift of all (Box 8.1). By contrast, infant mortality and life expectancy improved in the advanced reformers (Table 1.1). In Poland between 1989 and 1995, infant mortality fell from 19.1 to 13.4 per 1,000 live births, and life expectancy increased by one year for men and six months for women. The picture is mixed in the other reform groups. The number of low-birthweight babies has risen sharply in Bulgaria, Romania, and the Slovak Republic from a combination of poor diet, stress, smoking, and excess alcohol consumption during pregnancy—all risk factors that have increased during transition. In FYR Macedonia declining levels of basic immunization in 1991 led to a striking increase in the incidence of measles during 1992 and 1993.

Maternal mortality improved dramatically in CEE between 1990 and 1995 but worsened slightly in the NIS, where mortality rates are now about four times above the European average. The Central Asian republics experienced a dramatic deterioration between 1988 and 1991. Some of the apparent worsening may simply be the result of improved data collection (see Box 4.1). The major causes, however, include the lack of contraception, high rates of abortion, deteriorating socioeconomic conditions, inadequate health services, and the indiscriminate use of pesticides and chemical fertilizers in agriculture. Of these, abortions are a particularly severe problem, and illegal abortions an even greater one. The most obvious remedies include improved education, especially for girls and young women, a greater emphasis on preventive measures—such as contraception, screening for cervical and breast cancer, and updated obstetrical practices—healthier lifestyles, and the promotion of breastfeeding.

The story in China has generally been very different, although parallels are now beginning to emerge. The health status of the Chinese people by the end of the 1970s was remarkably good for a country at China's income level. These gains, although partly the result of sound

health policies, were largely due to rising income and what that means for diet, education, access to clean water and sanitation, and the like. Recent analysis, however, suggests that these gains, at least as indicated by mortality rates for children under age five, tailed off sometime in the early 1980s. By the late 1980s China had actually fallen behind countries at similar income levels. In addition, the incidence of noncommunicable diseases is rising rapidly. The death rate from lung cancer (70 percent of Chinese males smoke) is rising by 4.5 percent a year and that of deaths related to hypertension by 8.7 percent a year.

In rural China a share of communal production used to be set aside to finance collective needs, including primary health care, vaccination, birth control, and maternal health care. The downturn in China's health performance relative to its income level coincided with agricultural reforms that reduced the ability of the village to tax peasants. A system of cost recovery rapidly replaced tax funding, creating general problems of access. Infant and maternal mortality rates in rural areas are 50 to 100 percent greater than the national average. Problems are particularly severe for the rural poor (more than one in four referred to hospitals by village doctors never go because of high cost), and greater still in the poorest townships and villages—among the poorest quarter of the population, for example, the infant mortality rate is 3.5 times greater than among city dwellers.

Policy options

HOW CAN HEALTH BE IMPROVED? Four groups of factors influence a person's health: income, lifestyle, environmental pollution and occupational risks, and the quality of available health care. Experts agree that income and lifestyle are by far the most important; thus the causes of health outcomes go well beyond the health sector.

Lifestyle choices are clearly the key to improving health. The single largest contributor to the health gap between Eastern and Western Europe is cardiovascular and cerebrovascular disease—heart attacks and strokes—for which the main risk factors include excessive alcohol consumption, smoking, obesity, unhealthy diet, and lack of exercise. All these factors are more prevalent in CEE and the NIS than in industrial market economies. And the single most important factor, smoking, is far more prevalent: in the third quarter of 1995 Lithuanians spent 4 percent of GDP on alcohol and tobacco, compared with 2.1 percent on health care. As elsewhere, policies to reduce these risk factors in transition countries include taxation to discourage consumption of alcohol, tobacco, and unhealthy foods; removal of food subsidies that distort food prices in favor of unhealthy diets; and legislation on alcohol, tobacco advertising, and food labeling. Also important are public education programs to inform the population about diet (specifically, the benefits of reduced consumption of alcohol and fat, and of increased

Box 8.1 Is transition a killer?

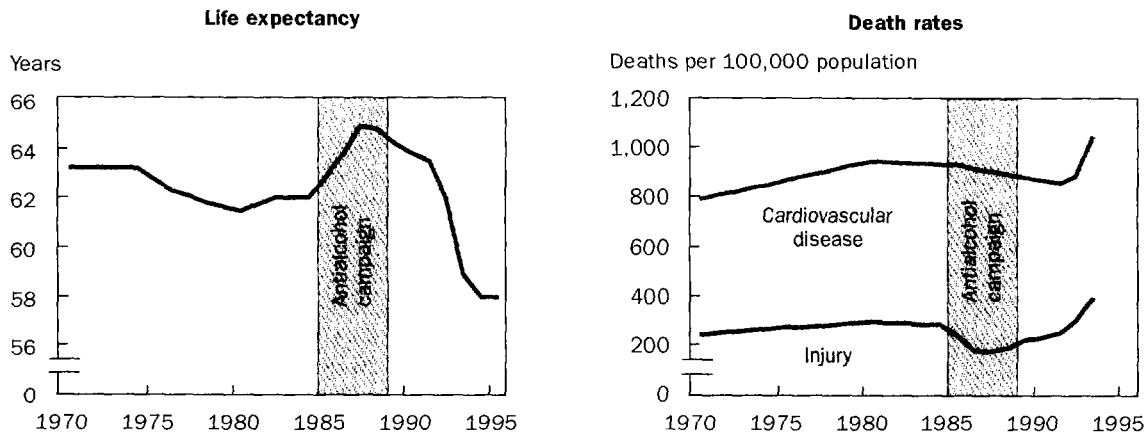
More Russians are dying during transition. Male life expectancy fell by six years between 1990 and 1994 (from sixty-four to fifty-eight; see figure) and that of women by three years (from seventy-four to seventy-one). Early evidence suggests that the decline may now have stabilized: in 1995 men's life expectancy was unchanged, while women's actually rose by a year. The largest increase in mortality (about 50 percent) was among men aged twenty-five to fifty-four; the rise for the older men in that group was mainly due to an increase in cardiovascular disease, and that for younger men mainly to accidents, suicide, substance abuse, and murder. Russian adult mortality is now 10 percent higher than that in India. Similar if less dramatic increases in mortality have occurred in the other European NIS. In contrast, life expectancy has increased in the advanced reformers in CEE (Table 1.1).

Defective data are unlikely to be a major explanation. A second explanation—that transition itself is a direct cause—is the subject of continuing investigation. But increasing indirect evidence links economic hardship with declining health. Early results from a Hungarian study suggest that poor regions and those

going through the greatest socioeconomic shock are starting to see mortality rates rise. These results are consistent with those from studies of equity and health in the United Kingdom over the past thirty years.

Two factors can be suggested as at least partial contributors. The first is substance abuse—alcohol and illicit drugs. Alcohol consumption was significantly reduced during President Mikhail Gorbachev's campaign to curb abuse during 1985–88, but the relaxation of that campaign in the late 1980s coincided with rising mortality, including through accidents, alcohol poisoning, and increased fatalities among those already suffering from cardiovascular disease. The second factor, less well documented but supported by extensive observation, is a decline in the quality of and access to medical care over the past five years, which has increased mortality among those with serious injuries and cardiovascular emergencies. Transition may have aggravated both sets of influences. It is not difficult to imagine a causal link between declining living conditions, stress, and alcohol consumption. Deterioration in law enforcement, particularly with respect to alcohol production and road safety, further increases the risk of injury.

Male life expectancy and death rates from injury and cardiovascular disease in Russia



Note: "Injury" includes deaths caused by accident, assault, poisoning, and suicide. Source: World Bank data.

consumption of fruit and vegetables), exercise, and the risks of smoking and other dangerous behavior.

Pollution and occupational risks are also widespread in CEE and the NIS. Severe environmental pollution, in particular air pollution, is largely the result of these countries' heavy use of hydrocarbon energy sources. In the "Black Triangle," where Germany, the Czech Republic, and Poland meet, about 6.5 million people are exposed to extremely polluted air. Air pollution may explain around 9 percent of the Czech Republic's health gap with Austria. Cleanup will be neither easy nor cheap. On the other hand, health is damaged more by cigarette smoke than by smokestacks; individual behavior is crucial. Unhealthy living environments and behavioral risk factors both afflict the poor and the undereducated disproportionately. It is the poorest—because they have the fewest choices—who live in the shadow of belching chimneys and in cold, damp homes. As with other social policies, closing the gap in health will mean focusing on the most disadvantaged groups, disseminating information to them and maintaining their access to health care.

Health services under the old regime in CEE and the NIS were strong on preventive health care, especially in providing immunizations. Maintaining and building on this impressive record have received too little attention. Preventive health efforts need to focus on control of communicable diseases but are threatened in some countries by problems in vaccine production, purchase, and delivery. Improving education and preventive services for women and their babies is an effective way to improve overall health and avoid unnecessary medical expenditure. This is not to say that curative health services—primary health care and hospitals—should be neglected. Although they have a smaller direct impact on life expectancy than public health measures, well-being should be assessed not only in terms of length of life, but also in terms of its quality; a hip replacement or the removal of a cataract does little to increase life expectancy but can make a huge difference to one's enjoyment of life.

HOW TO IMPROVE HEALTH CARE DELIVERY. Curative health services in CEE and the NIS retain most of the inefficiencies inherited from central planning. In the NIS people can admit themselves to hospitals, and many enter for long stays for nonclinical reasons (in Russia 21 percent of the population spent time in the hospital in 1993, compared with 16 percent in the industrial market economies and around 10 percent in middle-income countries). Hospitals have too many doctors, who are poorly paid and often poorly trained. Rigid budgeting systems give managers neither the incentive nor the freedom to use resources efficiently. For example, funding of hospitals is related to inputs, such as the number of beds, rather than to treatment given or—best of all—to health outcomes; hospital

managers therefore have an incentive to keep a large number of beds, preferably empty ones. Public health programs are poorly structured, and modern methods of quality control are absent. There is little consumer choice and little accountability. Citizens are still considered the passive recipients of state-run health services rather than active participants in efforts to improve their lifestyle.

Addressing these problems means reforming the quantity, mix, and quality of health services. When national income is declining—as it did in every CEE country and the NIS in the early stages of reform—the health sector will almost inevitably shrink. This makes it all the more important to adjust the mix of health spending away from highly specialized care toward more basic and outpatient care and toward public, occupational, and environmental health services; this will require closure of unnecessary facilities or their conversion to other uses. Hungary, for example, is planning to eliminate 20,000 hospital beds during 1995 and 1996. Countries also need to make major efforts to boost the quality of care, including by upgrading and modernizing skills. Self-regulation of the medical profession—an important component of civil society—can increase quality. So too can greater competition between providers, and in particular private, nonprofit providers, often organized by NGOs.

As the economy starts growing again, policymakers have to devise a strategy to allow the health sector to grow in a controlled way, both to prevent an explosion in health spending and to ease efforts to adjust the overall mix of medical activities toward preventive and basic health care. Several countries are already experiencing pressures to increase medical spending sharply, particularly that on high-technology care. This is a common problem for health policy worldwide. Even though the best way to improve health is through improved lifestyles, preventive measures, and basic health care, the medical profession tends to be more interested in the hospital sector and state-of-the-art techniques. The medical lobby is well placed to steer policy in the CEE countries and the NIS because, in contrast with most market economies, the health minister is often a physician, as are many parliamentarians. As a result, the ministry of health can easily become the ministry of the health profession. Here, as elsewhere, policymakers ignore at their peril the politics of reform.

FINANCING HEALTH CARE. How should transition countries pay for their health care? Market economies choose among four approaches. Out-of-pocket payment, the main form of health finance until this century, remains so today in the very poorest countries, which have neither the tax revenues for public funding nor the institutional capacity for insurance. Private, for-profit insurance is important in many developing countries but among the industrial countries only in the United States.

Social insurance is the main source of health finance in many countries, including Argentina, Chile, Germany, the Republic of Korea, and Uruguay, whereas tax funding is the principal source in many others, including Denmark, Norway, Sweden, the United Kingdom, and many countries in Latin America, the Middle East, and North Africa. Reliance on public funding is not accidental. Technical advances have made much medical care too costly for most people to pay for out of pocket; this implies the need for some form of insurance. A purely private insurance system, however, can lead to gaps in coverage (because of uninsurable risks) and to exploding costs. The United States exemplifies both problems: despite high *public* medical spending about 17 percent of U.S. citizens below retirement age were uninsured in 1994, yet total medical spending that year absorbed over 14 percent of GDP, a much higher fraction than in any comparable country (the figure for the United Kingdom is 7 percent). To contain costs and promote access, the industrial market economies have increasingly financed health care through taxation, social insurance, or a mixture of the two.

Many of the transition economies, including Croatia, the Czech Republic, Estonia, Hungary, the Kyrgyz Republic, Latvia, FYR Macedonia, Russia, the Slovak Republic, and Slovenia, have already switched from taxes to social insurance to pay for health care, and many others are considering doing so. This shift has caused problems, not least because the same prerequisites for sustainable social insurance outlined in Chapter 4 apply when it is being used to fund health care. First, structural deficits arise because workers' contributions subsidize the nonactive population, including pensioners (who consume large amounts of health care). Second, substantial reliance on payroll taxes has increased labor costs and aggravated incentives to work in the informal sector (in Hungary, for example, as described in Box 4.4). Third, some governments have lost control of spending, because contributions and expenditure are determined separately by a more or less autonomous health insurance fund.

Alongside the question of how to raise resources is a second and separate issue: how to pay doctors, hospitals, and other providers. A number of approaches are used, none of them perfect. Payment on a fee-for-service basis creates an incentive to oversupply: the doctor has an incentive to prescribe more treatment, and if the insurance company pays most of the costs, the patient has no incentive to refuse. The resulting cost explosion has been a problem in almost all countries where fee-for-service is a significant part of health finance. However, carefully designed and regulated fee-for-service, together with a global budget cap for medical spending, can help raise efficiency and contain costs at the same time. For precisely this reason, many countries (Canada is an example) have

adopted annual spending caps. An alternative approach, capitation, pays providers a fixed amount per patient per year. This method is excellent at containing costs but less good at maintaining service quality: doctors have an incentive to accept as many healthy patients as possible and then to see each as little as possible. The primary care systems of some countries (Romania is an example) pay doctors through a mix of capitation and fee-for-service, encouraging cost containment across most services but rewarding particular activities.

Paying medical providers has triggered a series of problems in CEE and the NIS, not the least of which is runaway expenditures. In 1992 the Czech Republic introduced fee-for-service payment without the necessary regulatory structure to cap medical spending, resulting in an entirely predictable—and entirely predicted—spending overrun. Most countries have yet to sort out the proper relationship between the public and the private sector. The private sector will supply health services only for a profit, and this raises questions about the extent to which public funding should be a source of private profit.

Future reforms of provider payment ought to have three central components. First, it is necessary to develop new payment systems that create incentives for efficient service delivery, for example by basing reimbursement as far as possible on health outcomes rather than the amount of diagnostic activity or treatment administered. Second, a framework is needed for monitoring quality and access and for tight control of spending. Third, policymakers must seek financing mechanisms that stimulate competition among providers, both public and private.

China faces difficult problems of health finance in both urban and rural areas. Like income transfers, urban health finance is based on the enterprise; the Anshan Iron and Steel Works, with 400,000 employees, has not only its own hospital but its own medical school. This ties workers to enterprises. In rural areas, as discussed earlier, the major problem is to finance health care in a way that assists access to medical care.

Health finance in Vietnam also faces severe problems. Household spending on health care is high, but there is no system to assist the poorest. Without a clearly defined government role, the private sector has remained largely unregulated. Ill effects include health care of variable quality and pharmaceuticals available without prescription. For both reasons, spending on private pharmaceuticals has exploded.

The big picture: How to make funding and delivery compatible

Experience from a cross-section of countries yields some clear lessons for transition countries on how to ensure that the means used to finance health care do not clash with

the means of delivery. First, access and cost containment are both assisted by a substantial reliance on public rather than private funding. Second, health services can be delivered effectively by private providers for profit, by private nonprofit providers (often NGOs), by the public sector, or by a combination of these. Third, different approaches to funding and the different types of delivery cannot be mixed indiscriminately. One compatible package is tax funding of health care produced, often on a decentralized basis, by the state. Another is mainly public funding plus private, fee-for-service production plus regulation to contain expenditure. The last element is critical.

The agenda

Like the economy-wide production apparatus they were built to support, health and education systems under central planning were strong on accumulation but highly inefficient and unresponsive to changes in people's needs.

Ensuring that all citizens are able to enjoy and contribute to long-term economic growth will require coming to grips with these failings. In the health sector, policymakers must focus first on better allocation of resources: expenditures should be shifted from specialized services toward preventive care and encouraging healthier lifestyles. Another priority, particularly in rural China and Vietnam, must be to ensure universal access to basic health services. Better allocation of existing inputs will also be critical to upgrading education, although here the need to develop a demand-led system of provision is even stronger than in health. The ingredients for a healthy population are much the same under any economic system, but what counts as good education changes radically with the move from plan to market. Reformers must focus on developing an education system that is more responsive to demand, and that teaches people to think for themselves and to adapt to changing market circumstances.