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**FROM SOCIALISM TO PRIVATE MARKETS:
VIETNAM'S HEALTH IN RAPID TRANSITION**

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Introduction

Over the past five years, the dramatic transformation of formerly socialist countries, especially the ex-Soviet Union and China, has attracted considerable attention. Altogether about 1.5 billion people, one-quarter of the world's population in about 30 countries, have been engaged in major restructuring of their societies, characterized by structural reform of the economy and, in many cases, political change from one-party authoritarianism to multi-party democracy. Often overshadowed by these highly visible and sometimes turbulent economic and political transformations have been the social and human dimensions of transitions: how are people faring in times of rapid change? Recently, disturbing signs of social distress have surfaced in some transitional countries (Eberstadt 1993; Cornia and Sipro 1993). Many nations in Central and Eastern Europe, for example, are in the midst of a health crisis, reflected by an upsurge of mortality, depressed fertility, fragmentation of the family unit, and collapse of social structures such as the health care system. In Russia there were an estimated 500,000 excess deaths in 1993 (Cornia 1994).

In comparison to Central and Eastern Europe and China, the rapidly changing economic and health situation in Vietnam has commanded comparatively less attention, due in part to a recently terminated American-led international embargo. Yet, Vietnam launched "doi moi" (renovation) in 1986, discarding three decades of centrally-planned socialism in a move towards a market economy. Vietnam's reforms are significant because the country is the third most populous of the former socialist nations, after China and Russia, and Vietnam is larger than neighboring Thailand and the Philippines. The country is now enjoying a remarkable income growth of about 8 percent annually and is situated in the world's fastest growing economic region of Asia. Few studies about health in contemporary Vietnam have been published, and some earlier analyses suffered from data limitations or interpretative biases (McMichael 1976; Segal 1986; Navarro 1977).

Eight years after "doi moi," a unique opportunity has emerged to critically examine the Vietnam's health experience. Health data, both old and new, are becoming increasingly accessible. A national census conducted in 1989 was preceded one year earlier by a national demographic health survey (1988). In the past few years, several micro-level village studies have been undertaken by non-governmental organizations, and major international agencies have undertaken reviews of the health sector in preparation for accelerating donor assistance (Guldner and Rifkin 1993; Save the Children 1992; Smithson 1993; Sternin 1994; World Bank 1992; SIDA 1992). Released earlier this year was a major national sample survey of living standards in 1992-1993 undertaken in collaboration with the World Bank, the United Nations Development Program (UNDP), and Swedish International Development Agency (SIDA) (State Planning Committee 1994).

What is the health situation in Vietnam? Which legacies, both positive and negative, have been inherited from the past? How have recent economic reforms had an impact upon the health sector? What are the major challenges for contemporary health policy? These questions are addressed in this paper.

Health under Socialism

To understand the contemporary health situation in Vietnam, an assessment of health under socialism is necessary for the legacies of the past powerfully influence the current health scene.

During the transition from socialism to private markets in the late 1980s, Vietnam was economically backward but socially advanced. In comparison to other Asian and formerly socialist countries, Vietnam was extremely poor but enjoyed relatively low mortality levels (Table 1).ⁱ Although its GNP of less than US\$200 per capita was comparable to Bangladesh's, one-half of China's, one-third of Indonesia's and one-twelfth of Russia's, Vietnam's average life expectancy of 64 years was nearly one decade longer than Bangladesh's and approached that of the three wealthier countries.ⁱⁱ The UNDP (1992) ranked Vietnam's human development index - a composite measure of health, educational, and income achievements - 44 positions higher than its national income ranking (UNDP 1992). The superior longevity achievement for Vietnam's income level is illustrated in Figure 2 which plots infant mortality according to GNP (Census 1989). Vietnam's infant mortality level is several-fold superior to economically comparable Myanmar and nearly approaches those countries which have three or four-fold Vietnam's income level.

Good human survival, however, disguised compromises in the quality of life. Figure 3, which contrasts the level of childhood malnutrition with under 5 mortality, shows the comparatively poorer nutritional status of Vietnamese children among Asian countries. Whereas under 5 mortality in Vietnam approximated that of China's, the prevalence of childhood malnutrition in Vietnam was more than twice that of China's. According to dietary surveys, daily caloric intake averaged less than 2,000 per person and 42 percent of under 5 children were below two standard deviations of international standards in weight-for-age anthropometry (National Institute of Nutrition 1991). Similar levels of malnutrition were noted in height-for-

weight (49 percent) and weight-for-height (9 percent). The prevalence of low birth weight newborns ranged from 12 to 20 percent (National Institute of Nutrition, 1991). Common among children were parasitic infestations with ascaris, hookworm, and trichuris. Micro nutrient deficiencies were problematic, with signs of vitamin A deficiency several-fold above WHO standards, highly prevalent iron-deficiency anemia among women (40-50 percent) and children (35 percent), and iodine deficiency goiter widely prevalent especially in geographically inaccessible mountainous regions (National Institute of Nutrition 1991).

This mixed health picture - good survival but poor nutritional status - may be hypothesized to reflect the dual effects of socioeconomic developments shaping the determinants of health as well as the performance of the health care system (Mosley and Chen 1984). The major determinants of health consisted of equitable social development constrained by economic backwardness. Despite four wars over the past 50 years, Vietnam was able to attain near universal adult literacy (88 percent) and primary school enrollment (Ministry of Education and Training 1991). Great progress in gender equity was achieved, with women joining men in the labor force and girls as well as boys attending school (Allen and Thac 1989; Allen 1990). Social development, however, could not overcome all of the economic barriers to good health. With a per capita income of about \$200, more than 54 per cent of the population had incomes rated as poor or very poor (NIN 1991; Doanh 1993). Food and diet were inadequate, and access to clean drinking water and adequate sanitation and were only 30 percent and 24 percent, respectively (World Bank 1991; UNICEF 1994). Even under a socialist system that emphasized equity, inadequate and uneven distribution had not been eliminated entirely. The difference in infant mortality rate was three-fold between the poorest and the richest province; in four provinces, adult literacy was less than two-thirds; and in the worst province, 51 percent of 10-19 year olds had never attended school (Vietnam Atlas 1989).

Under socialism public health was considered a state responsibility implemented by a centralized, hierarchical five-tier health care system. Led by a central ministry, health services were provided free of charge throughout the country's provinces, districts, and over 10,000

communes - extending occasionally down to the brigade level (SIDA 1992-93). As private activities were forbidden, legislation and regulations were unnecessary, and the services were financed entirely from state finances generated at the commune, provincial, and central levels.

Health care coverage was extensive and mostly equitable, but problematic were the system's inefficiency, lack of effectiveness, and poor quality. Indeed, even before the economic reform, Vietnam's health system may have been in trouble due to under financing and bureaucratic rigidity. Table 4 presents data on Vietnam's health facilities and personnel in 1989 (MOH 1990; MOH 1992). Although the density of hospital beds and doctors was among the highest in Asia, Vietnam's public financing of health care was among the lowest in the region, averaging less than US\$1 per capita (Table 5) (World Bank 1992). Despite these limited resources, the number of hospital beds per capita in Vietnam was twice that of China's and six times that of Indonesia, and the number of doctors per population was comparable to China's but three times that of Indonesia (Table 6) (Guldner and Rifkin 1993). High density of service facilities ensured reasonable geographic access and free services facilitated economic access, but underpaid health workers in over-staffed and decaying facilities with few drugs, limited supplies, and antiquated equipment generated neither effectiveness nor quality (Save the Children, 1992). More than half of the commune health centers, for example, lacked simple weighing scales or sterilizers (MOH survey, 1991). Consumer utilization was low, and consumer dissatisfaction must have been wide-spread, important historical factors that may account for rapidly changing health-seeking behavior among the Vietnamese today (Guldner and Rifkin 1993).

Health and Economic Reform

"Doi moi" in 1986 set off a powerful set of interactions between economic reform and the health sector. These interactions began with the macro economy which Vietnam has managed remarkably successfully (Ljunggren 1993; Dapice forthcoming). Despite transitional crises, economic growth and gains in personal income have averaged more than 5 percent annually; inflation has been controlled; the currency exchange rate has been stabilized; and foreign trade

imbalances have been reduced (World Bank 1993). Early efforts to privatize agriculture through land reform and price decontrol have given a tremendous stimulus to food production. From chronic food deficits and a food crisis in 1988, Vietnam increased food production by 4.0 to 8.3 percent annually. In 1992 Vietnam exported about 2 million tons of food grain, emerging as the world's third largest rice exporter (World Bank 1993).

Economic stability and income gains have probably generated positive health benefits. The majority of peasant families are economically better-off and are able to purchase the necessities of life, including health care. These advances, however, are being compromised by regional imbalances and the growing economic gap between population sub groups (State Planning Committee 1994; Doanh 1994). Those rural farmers with good land and urban entrepreneurs able to exploit new openings are enjoying unparalleled economic opportunities. The scale and magnitude in the take-off of the private economy is reflected by the fact that by 1993, 10 million of the total workforce of 31 million are employed in the private sector (Socialist Republic of Vietnam 1993).

Not all people have fared well. Although data are scanty, absolute, real income of the poorest remains stagnant or may have been reduced (Action Aid 1993). Perhaps a million public sector workers and military personnel have been retired or retrenched, and about 3.7 million workers, or 11 percent of the labor force, are now classified as unemployed (IMF 1994; State Planning Committee 1994). Especially hard hit are the rural poor, female-headed households, and ethnic minorities who constitute about 13 percent of the population (IMF 1994; Census 1989).

The disadvantaged live mostly in backward rural areas, especially in the northern mountainous and central highland regions which are also weakest in human and physical infrastructure, markets, and land resources. In 1989, the gap in GDP between the wealthiest and poorest provinces was five-fold (World Bank, 1993). By 1992-1993, average urban household income was double that of rural income, and the wealthiest quintile of households had 4.4 times

the per capita income of the lowest quintile. The Vietnam Living Standards Survey (1994) found significant correlation between income and social welfare. The lowest literacy rate was found in the poorest quintile in rural areas and expenditure per pupil was 10 times higher in the highest quintile than in the lowest. Average annual health expenditure was 4.6 times higher in the highest quintile than in the lowest. Vaccination coverage, weight of newborns, height and weight of the population had all increased in the higher income quintiles. (State Planning Committee 1994).

Two other undesirable health consequences are the collapse of the commune-based social welfare system and the emergence of new social pathologies. Under socialism, the commune cooperative system provided a safety net for the poor, the disabled, the elderly, children, and female-headed households. With the shift from collective to family-based agriculture, the fiscal base of these commune-based social programs collapsed, and the services have been withdrawn, privatized or supported by user charges. Government social support for the vulnerable groups has nearly disappeared, although its impact has been cushioned by informal mutual aid among farmers.

In urban areas, social dislocation and alienation have generated new socio-behavioral pathologies. The influence of cosmopolitan attitudes and aspirations have resulted in the introduction of hazardous new lifestyles and a return of some traditional values of gender bias. Patriarchal attitudes associated with Confucianism and new commercial tastes are leading to gender inequalities, as reflected by the disproportionate laying-off of female workers, declining school enrollment, especially for girls, the withdrawal of subsidized day-care services, and greater domestic work burdens on women (State Planning Committee 1994; UNICEF 1994). The process of "commodification" of people - especially women and children - is contributing to a commercial sex industry. In 1993, Vietnam reported an estimated 100,000 to 200,000 prostitutes and over 20,000 abandoned street children (UNICEF 1994). Moreover, child labor has increased and child school enrollment has dropped. Employment for six-to-fifteen year old school-age children increased 37 percent, and an especially disproportionate number are girls.

School enrollment has dropped about the same percentage for this age group (State Planning Committee 1994). Like elsewhere in Asia, Vietnam's major cities are no longer free of drug abuse, crime and violence.

These changing economic and social determinants of health are probably generating an extremely dynamic epidemiologic and health transition (Chen, Kleinman, Ware 1994).ⁱⁱⁱ While Vietnam continues to struggle with the first generation of infectious diseases, nutritional deprivation, and reproductive health risks among children and women, a second generation of chronic and degenerative diseases of diet and lifestyle is becoming increasingly more important among adults and the elderly. In addition, a wholly unanticipated third generation of new health threats, mostly behavioral and environmental, is quickly emerging.

Childhood infections and malnutrition still dominate in the national burden of disease. The major causes of death continue to be diarrhea and acute respiratory tract infections, exacerbated by malnutrition (Ministry of Health 1992). Tuberculosis remains common, and cutbacks in mosquito spraying has contributed to a resurgence of malaria, some of which is resistant to routine chemoprophylaxis (Socialist Republic of Vietnam 1993). Although the coverage of basic childhood immunizations appears to remain high (70-75 percent), regional imbalances in the control of childhood infections and malnutrition may be worsening (State Planning Committee 1994). For Vietnam's poor, the diseases of poverty and underdevelopment persist.

Meanwhile, the burdens due to chronic and degenerative diseases are likely to grow given changing diets, increasing consumption of tobacco and alcohol, and more sedentary lifestyles (State Planning Committee 1994). In cities, air pollution and injury due to crowding, mechanical transportation, and rapid urbanization are increasing (World Bank 1993). Although only 19 percent of the population was urbanized in 1988, the growth of Vietnam's cities, especially Hanoi and Ho Chi Minh, has accelerated with a national population growth rate of 2.1

percent (Socialist Republic of Vietnam 1990) and has been accentuated by rural to urban migration, propelled by the push of rural poverty and the pull of urban opportunity.

The growth of the sex industry has already contributed to some 1,425 reported positive cases of HIV, mostly in Ho Chi Minh City where diagnostic facilities are available. In the first six months of 1994, 197 new HIV positive cases were detected, including 50 prostitutes under 30 years old (Saigon Newsreader 1994). Official projections estimate that Vietnam may have 300,000 HIV cases by the year 2000 (Indochina Chronology 1994). Sexual and reproductive health problems are likely to grow in significance. The government is pursuing a vigorous population program because Vietnam has comparatively high fertility (3.8 children per couple) and only modest contraceptive use prevalence (38 percent). Contraception in the past has depended heavily on intra-uterine devices, formerly imported from Eastern Europe. Given the government's emphasis on population programs, a major challenge will be the provision of safe and effective contraception, sexual health information and education; safe abortion; control of sexually-transmitted diseases including HIV/AIDS; and the management of maternal and child health programs.

In 1989, the government announced four new health policies - legalization of private medical practice, privatization of pharmaceutical production and sales, imposition of user charges in public medical facilities, and the launching of a national health insurance scheme (MOH 1992; Able-Smith 1993). These health policies are leading to an explosive growth of private medicine and private pharmaceutical markets. In the brief period of five years, the formerly socialist public health sector has been powerfully and probably irreversibly altered.

Data in Table 7 show that utilization of public services has markedly declined (Smithson 1993; Guldner and Rifkin 1993). Between 1986 and 1990, medical consultations have halved, and inpatient admissions have declined by one-third (Save the Children, 1992). In contrast, self care has emerged as the most common form of treatment for acute illness. Recent surveys show that 50-86 percent of patients first resort to self-treatment in response to illness, and 94 percent

purchase drugs for themselves directly (Save the Children 1992). Self-treatment is even more pronounced among high income groups (Hanoi Medical School, 1992). It has been estimated that per capita drug consumption has increased over 150-fold from the very low baselines before economic reform (UNICEF 1994). According to the 1992-1993 living standards survey, Vietnamese across all income groups are already spending about 6 percent of their income on health care (State Planning Committee 1994). Within a very few years, private health spending, as a percentage of household budgets, has already begun to approach those of other market economies.

The number of registered private practitioners now exceeds 2,000, many of whom are retired or retrenched government or military workers, and the number of private pharmacies has grown from 2,000 in 1990 to over 6,000 in 1992 (UNICEF, 1994). Decisions about pharmaceutical production, importation, and sales have been decentralized to provincial governments. Lacking regulatory and quality controls, private medical practice and drug sales, unfortunately, have generated many wasteful and potentially iatrogenic problems - particularly the misuse of antibiotics, vitamins and steroids and contra-indicated injections. Opening the private drug market has resulted in enhanced availability but drug quality and appropriate use have been questionable. Most importantly, the demarcation between the public and private sectors is becoming obscured. An entire spectrum of public to private relationships is developing (Smithson 1993). Full-time government employees are supplementing their incomes through part-time private practice (MOH survey 1991). One village-based survey found that 70 percent of the drug sellers were moonlighting government workers, and most drugs, even when prescribed in public facilities, were purchased from private sources using public commune station or district hospital facilities (Save the Children 1992; Smithson 1993).

This changing balance between public and private activities is reflected in the flow of resources in the health sector. The Vietnam government's health budget for 1993 was estimated between US\$125 and \$160 million or about 1.1 percent of its 1993 GDP.^{iv} We estimate that the average per capita recurrent health care expenditure has probably quadrupled from the estimate

of \$1 in 1989 to \$4 by 1993, half from government and half from private expenditure which is still extremely modest by Asian standards. The financial turnover of the private sector has already grown to equal that of the public sector (Smithson 1993). Between 1986 and 1993, the share of health spending in government budgets has averaged 4 to 5 percent. Although data are imprecise, governmental revenues as a share of GDP increased from 12 percent in 1991 to 22 percent in 1993 (World Bank 1993). The health budget as a share of total government spending has apparently increased over the reform period (World Bank 1993). The increased funds, however, have gone mostly for salary adjustments for under paid health workers and little has been invested in infrastructure, transportation, drugs or improved practices (Smithson 1993).

Public sector financing comes from four sources - tax revenues, user fees, insurance, and foreign aid (Guldner and Rifkin 1993). By 1991, central tax funds constituted only 20 percent of total public health expenditures, with most public funds coming from provincial revenues (Smithson 1993). It has been estimated that user fees are generating only 5 percent of public revenues, and foreign aid constitutes about 16 percent. The share of public financing from the insurance system is uncertain. Given the extremely tight budgetary situation of hardpressed public facilities, user fees and sale of drugs have increasingly been employed for resource mobilization, resulting in the misuse of drugs in both the private and public sectors.

The traditional mode of allocating tax resources for recurring, capital, and special expenditures according to the number of sanctioned hospital beds, number and type of employees, and other input factors are neither efficient nor equitable. Preventive activities commanded only 11 percent of public expenditures in comparison to 78 percent expended for curative care (MOH 1992). Field studies show that user fees may exclude those too poor to pay, and its implementation has been inconsistent and variable. Exemption from fees, for example, is "a paper right," rarely enjoyed by the poor but more often by state officials (Save the Children, 1992). The national insurance system now covers public sector employees, but its implementation has just begun, and insurance does not yet cover dependents or the otherwise employed or unemployed.

Framework for Economic Reform and Health Transition

Insights about the Vietnam experience provide an empirical basis for developing a conceptual framework on the interaction between economic reform and the health sector. The proposed interactions are schematically shown in Figure 3. The framework shows that economic reform which withdraws government subsidies, imposes user charges, liberalizes prices, and promotes international trade - all will have an impact on both the socioeconomic determinants of health as well as the health care system. The health sector, in turn, can influence the quality of human resources for economic productivity, because good health promotes child learning, labor productivity, entrepreneurship, and the avoidance of costly illnesses. A bi-directional relationship, thus, may be postulated, with each of the cause-and-effect relationships possessing both positive and negative consequences. For Vietnam, several aspects of this framework are noteworthy.

First, Vietnam's earlier investments in health, education, and human resources have likely contributed to the rapid economic take-off after the introduction of reforms.^v New incentives and private markets cannot initiate and sustain economic progress without high quality human resources, including healthy and educated people to capitalize upon economic opportunity. In other words, the people's health is a necessary, although insufficient, condition for successful economic reform.^{vi}

Second, Vietnam in the 1990s inherited a stagnate and decaying health care system. The public health system under socialism produced excellent survival rates but poor quality of life indicators. Pragmatism and sound execution maximized output in terms of human survival, but the health care system was probably already in an incipient crisis due to under-financing and structural rigidities. We have no evidence suggesting that simply retaining the old system would have been superior or even feasible. Restructuring of the health sector was necessary, and inevitable.

Third, structural adjustment, privatization, and liberalization of the economy can powerfully impact on both the socioeconomic determinants of health status as well as the structure and financing of the health care system. Economic reform may generate aggregate economic advances, but problems can arise with regional imbalances, income disparity between social groups, and social problems like gender inequity, social marginalization, and socio-behavioral pathologies. These new health threats will join persisting health problems to challenge a health system containing an uncertain mix of public and private components. A pluralistic system may be expected to develop through the growth of private practice and pharmaceutical sales along with a restructured public sector.

Finally, the development of a coherent set of health policies is absolutely critical for guiding contemporary health investments as part of social and economic reform. There is abundant evidence that good health contributes to sustained economic progress, and some emerging health threats like AIDS, if uncontrolled, can be extremely damaging to the economy. Indeed, a vibrant and productive health care industry can be an important service component of a healthy economy. The effects of good health on economic performance are long-term, and are not visible for a decade or longer. Recognition of this time lag is important for guiding investment decisions as well as in attributing cause-and-effect relationships between economics and health during times of rapid change.

The net health impact of economic reform in Vietnam undoubtedly has been mixed - with some clear benefits, several emerging dangers, and also fresh opportunities. The major pluses are improvements of private consumption (including better nutrition and higher spending on health) and choice, and an economic capacity to sustain reforms in the health care system. The chief dangers are the introduction of new health threats, the lack of regulatory control and uneven distribution of health service for disadvantaged groups. Unless corrective actions are undertaken, health differentials between urban and rural areas and between the rich and poor can be expected to worsen.

Challenges for Health Policy

In health, as well as in economics, Vietnam has entered a "twilight zone" of policy transition between an outdated past and an uncertain future (Perkins 1993). Whereas socialism acknowledged health as a universal entitlement and the obligation of the state, present economic reforms are clearly shifting responsibility for health to the individual and his/her family. Health transactions between providers and consumers are changing from public bureaucratic provisioning to market exchanges. A laissez-faire health care market, however, is known to possess major market imperfections.vii Correcting these market imperfections requires an understanding of the forces now driving the health care sector and finding the right public-private mix, as well as the new functions that must now be developed by the state. The major challenge that Vietnam faces is that the social sector may be increasingly starved for funds if other priorities take precedence over social welfare (Leipzig 1992). Economic reform has made financial resources available for health reform, but only if the political will exists to use these resources for health advancement.

Two powerful forces driving public-private health interactions are consumer behavior and the flows of financing. The four critical roles of the state in shaping these forces are informational, regulatory, service provision and economic functions. Health-seeking behavior among the Vietnamese is rapidly changing as is reflected by the emergence of self-care as the front-line response to illness. Self-care is partly in response to the changing structure of the health care service supply system, but a reasonable hypothesis is that it is also powerfully driven by consumer preferences and demand. After all, the autonomy for individual and household decision-making is being promoted in all spheres of Vietnamese life, not simply in health care. New patterns of health-seeking behavior possibly reflect the people's low confidence in the old public system, newly developed desires for private medicine, and the unprecedented access to new drugs and products, including traditional medicines imported from abroad.

Information: To strengthen the capabilities of individuals and families to make healthy choices in the health market, the state must adopt new informational roles and must institute new legal and regulatory guidelines. Beyond top-down instructions and bottom-up reporting of health activities, Vietnam's health sector must now be able to mount major public information campaigns, disseminating critical health information to millions of households that have assumed primary responsibility for their own health. Problems such as HIV/AIDS and proper use of drugs depend fundamentally on individual health behavior - not on the health care system, either public or private. The informational role must also monitor the changing character of the burden of disease, both traditional and unanticipated new health problems. Information and analyses are also needed to map changing health markets and consumer behavior. Information about people's knowledge, attitude, behavior, and choice of care in both the public system and the private markets will be critical for the government to discharge its new responsibilities.

Regulation: The government also will need to develop a regulatory environment for the efficient and effective functioning of health markets. Positive practices such as high professional standards, ethical behavior, and the rational use of drugs should be promoted by the state as well as professional and business associations. Wasteful, inefficient, or damaging practices, such as unnecessary commercially-driven health practices or adulterated drugs, need to be controlled. Together, the regulatory guidelines should generate distinctive public versus private sectors, which unfortunately are now blurred. Especially dangerous has been the creeping practice of siphoning off or commandeering public resources for private gain. Without clear a separation of public and private systems, backed by disciplinary enforcement, Vietnam could acquire the worst features of both systems. To the inefficiency of the public sector could be added the inequities of the private sector.

Service Provision: With the growth of the private sector, Vietnam will need to develop a coherent policy with regard to the government's role in direct service provisioning. The abundance of public facilities, especially in urban areas, needs rationalization. Although the privatization of public units may be considered, as with state enterprises, having more profit-

driven systems subsidized initially by the government may simply enhance inefficiency and waste. A better alternative may be to promote some form of market between providers in the competition for users of health insurance systems. Also given the country's heterogeneity, the government will have to address the lack of services, either public or private, in the most inaccessible and poorest regions of the country. In these areas, the public sector is underdeveloped and it is unlikely that private sector growth would meet health needs. Thus, the development of a publically-operated primary health care infrastructure mobilizing as much as possible local human and financial resources should be an explicit public sector priority. Developing such public services will require both allocative guidelines for channeling public resources into disadvantaged areas as well as field innovations to design and implement primary health care programs that utilize as much as possible local resources.

Financing: A second powerful force driving the health sector in Vietnam is the dramatic shift in the flow of health care financing. From an entirely publicly financed and operational system, a mixture of public and private financing and provisioning has already developed. In addition to enhancing the health output of the private sector through information and regulation, a major priority should be to focus on public expenditure and pricing policies, much of which have been decentralized to the provinces. It would seem prudent that priorities should emphasize cost-effective preventive rather than curative services; promote equity; stabilize the financing of key public institutions in research and development; and develop risk-sharing arrangements to mobilize revenues, protect against catastrophic loss, and ensure fiscal sustainability. These objectives should promote the overall goal of equity in health outcome and in access to services. This equity goal of government cannot be over-emphasized for no other system beyond public interventions can maintain equity in the face of private markets.

The current low allocation for prevention needs to be corrected. As demonstrated in many countries, preventive programs are extremely cost-effective and equity-enhancing (World Bank 1993). These merit goods should receive the highest priority; in some countries like China they command at least half of central public expenditures (Hsiao 1994). Preventive services are

mostly organized into categorical programs, such as the expanded program in immunization, control of diarrhea and acute respiratory infection, malaria control, and family planning. These activities should receive strong central support, while operationally their integration with horizontal primary health services should be encouraged at the provincial, district, and commune levels.

The incentive structure inherent in resource allocation criteria should be thoroughly reviewed. The traditional allocative guidelines are based on inputs, not outputs, equity or efficiency. The guidelines thus can operate as perverse incentives, encouraging false reporting of beds and staff, worsening regional imbalances, and failing to stimulate productivity and client responsiveness. Under budgetary pressures, public units are resorting to drug sales as the most important source of flexible revenues. These practices lead to the gross misuse and abuse of drugs. Criteria for resource allocation should promote both equity as well as worker productivity. Experiments with worker incentive payment systems should be considered. Worker salaries should be increased to maintain competitiveness with the private sector, but this will inevitably require a pruning, through attrition, of the number of public sector employees. Rather than a flat salary for whatever work is offered or fee-for-service which encourages over-consumption, a capitation payment for services and drugs to patients who have choices over their providers, perhaps expressed through a flexible voucher system, could be considered (Able-Smith 1993).

The newly introduced user charges also need to be rationalized. User charges in public facilities are generating about 5 percent of total revenues, an insignificant source overall. User charges may be an important revenue source in some of the larger urban hospitals, but at lower levels in the system it may neither generate significant revenue nor ensure equitable access. A more appropriate objective of user charges should be to enhance rational service utilization, such as charging for drugs, rather than as a significant resource mobilization tool.

A more promising method of revenue generation is risk sharing insurance. A national system using health insurance cards was introduced in 1989. An employer-based public insurance system, like those successfully deployed in Western Europe, has considerable promise, but should not be expected to solve all problems (Able-Smith 1993). Insurance coverage thus far has been limited to state employees and pensioners (Able-Smith 1993). The system has the potential of expanding coverage to dependents and ultimately the general public, and the next step might be to add child birth coverage for employees. Like in China, risk sharing insurance may be more appropriate for the urban industrial areas rather than the rural areas (Hsaio 1994). The government may have to establish a rational subsidy program for rural and remote areas to reduce the inequities in coverage. For the poor, coverage using free health insurance cards is under consideration. Because Vietnam is predominantly a rural agrarian society, decentralized provincial, district, and community insurance funds may be even more appropriate. Other Asian countries, like Thailand and China, are experimenting with community-based insurance systems including revolving drug funds (Hsiao 1994; Meyers 1994). These experiments essentially attempt to mobilize local resource, enhance efficiency, and promote equity through risk sharing and pooling of local funds. Because drugs often constitute the bulk of financial turnovers, local drug funds hold some promise of decentralized and sustainable community-based systems. From the perspective of communities, there are efficiency and equity rationales for a composite system involving the central support of national prevention programs linked to local financing for drugs and curative services. Curative services should entail some modest client payment for rationalizing utilization, but the level of charges should not preclude access by the poor. User surveys will be important to assess the effects of insurance on utilization behavior since health insurance for the poor could stimulate higher demand for subsidized services (World Bank 1994).

Finally, Vietnam can only revamp its health financing policies through better coordination of external health groups, both commercial as well as international donors. Foreign donors now account for about 16 percent of the resources in public health, and concessional resources for Vietnam are likely to grow. As donor resources are not tied down to recurring

costs, Vietnam's coordination of diverse donors into a coherent plan for the health investments will be critical for the smooth development of Vietnam's future health sector.

Institutional Reform

Key to developing these new functions of government is institutional reform. As in economic reform, strong Vietnamese institutions are essential for health policy development in the revitalization and restructuring of the health sector (deVilder; SIDA 1994). In the abstract, institutional reform means developing the social mechanisms within society wherein multiple actors (the government, the Communist Party, private business, professionals, non-governmental groups, and international agencies) are able to harness appropriate technical skills for solving problems that successfully accommodate diverse health, political, and commercial interests. Put simply, sustained health advances in Vietnam will require a cadre of policy-makers and health scientists working in stable and supportive institutions to address rapidly evolving health policy challenges.

The functioning of government departments is perhaps the highest priority, and the most difficult, in the reform of health institutions. Health policy in Vietnam today is under the purview of at least a half dozen governmental bodies - the ministries of health, finance, labor and social welfare and the national commissions on women and children, population, and minorities. And there is an abundance of duplication of services between vertically organized programs and horizontal service provision (World Bank 1994). No single ministry, of course, can cope with all aspects of health policy, but policy coherence cannot be achieved without clear policy goals and strong coordination across diverse governmental bodies. Such coordination needs to be developed both centrally and at the decentralized provincial and district levels. A balance between governmental control and institutional autonomy needs to be developed to promote analytic independence while linking information, analysis, and research to policy decision-making.

Vietnam has many trained and gifted people, but their skills and experiences must be adapted to these new challenges. To plan and manage data collection and analysis, health monitoring, and health research, skill development will be needed in the demographic, epidemiologic, and public health sciences. Health education will require the development of cooperative linkages between government and the private sector. The capacity to fulfill regulatory functions will depend upon linkages between health and legal bodies. To plan and develop new financing policies, health economics will be required within the health ministry but also in other ministries and in educational institutions.

The modernization of public health institutions in Vietnam will be neither easy nor rapid, given the legacies of the past in which public health essentially followed the hygiene model found in formerly socialist educational systems. Public health in socialist countries has emphasized disease control through hygiene and top-down program management. The "new public health" needed by Vietnam today will require additional disciplinary skills but more importantly more flexible and adaptive approaches to generate innovation, experimentation, and evaluation. Successful transitional foreign models are not readily available for duplication, and Vietnam will be challenged to generate its own unique solutions to new challenges.

In these endeavors, Vietnam is a success story in comparison to other socialist countries. Unlike Central and Eastern Europe, Vietnam has thus far avoided the economic instability and social upheaval accompanying transitions. All evidence suggests that mortality levels continue their secular downward trends. Vietnam's transition in health more closely approximates that of neighboring China, where economic advances have been accompanied by political stability under one party rule. Civil-political freedom has been traded, at least temporarily, for political order and stability. In both Vietnam and China, there has been an explosive growth of private medicine and a collapse of major parts of the public health system. Like China, Vietnam's predominantly peasant agriculture provided an initial economic boost offering maneuvering room for subsequent economic and social restructuring. Vietnam began its reforms much later,

and unlike China, the country is more dependent upon foreign assistance and, also, more vulnerable to external forces.

Vietnam, however, has demonstrated remarkable adaptability and pragmatism in undertaking structural reform. Indeed, it could be argued that, thus far, Vietnam like China offers a more positive model of health transition with economic reform than Central and Eastern European countries, although both countries presently lack a coherent macro-policy for coordination of their health care systems (Hsiao 1994). Some neighboring Asian countries - Korea, Singapore, Taiwan - have been able to enjoy economic advances while improving equity. Economic reform in Vietnam has put universal high quality health care within economic reach. Realization of that potential will be dependent upon the political will to use the country's growing public resources for health and to create conditions for efficient private services to play a growing role.

Does Vietnam represent an "Asian Model" of economic and health reform? The answer to this question is as much technical as it is normative, ethical, and political. Given Vietnam's political decision to accept greater inequality for economic growth, how much good health do the people want, and how much inequity will the Vietnamese people tolerate?

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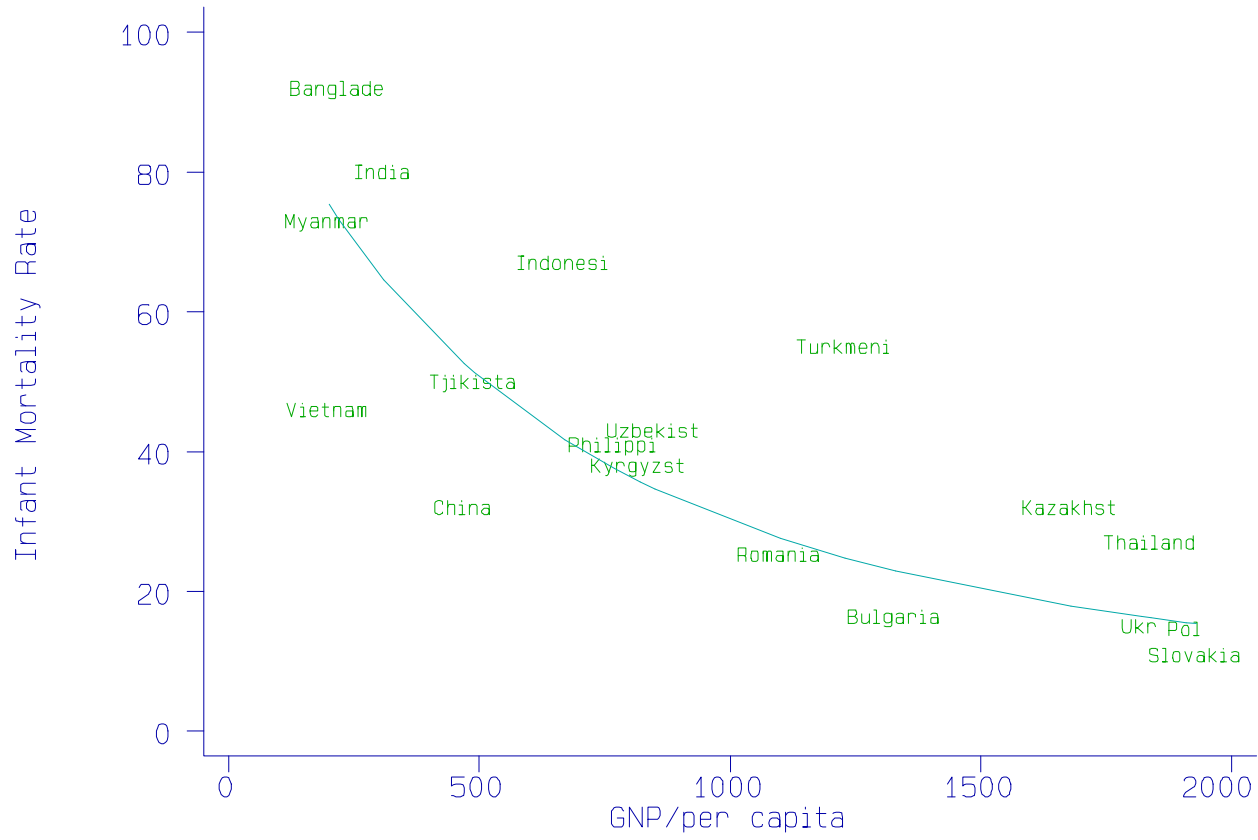
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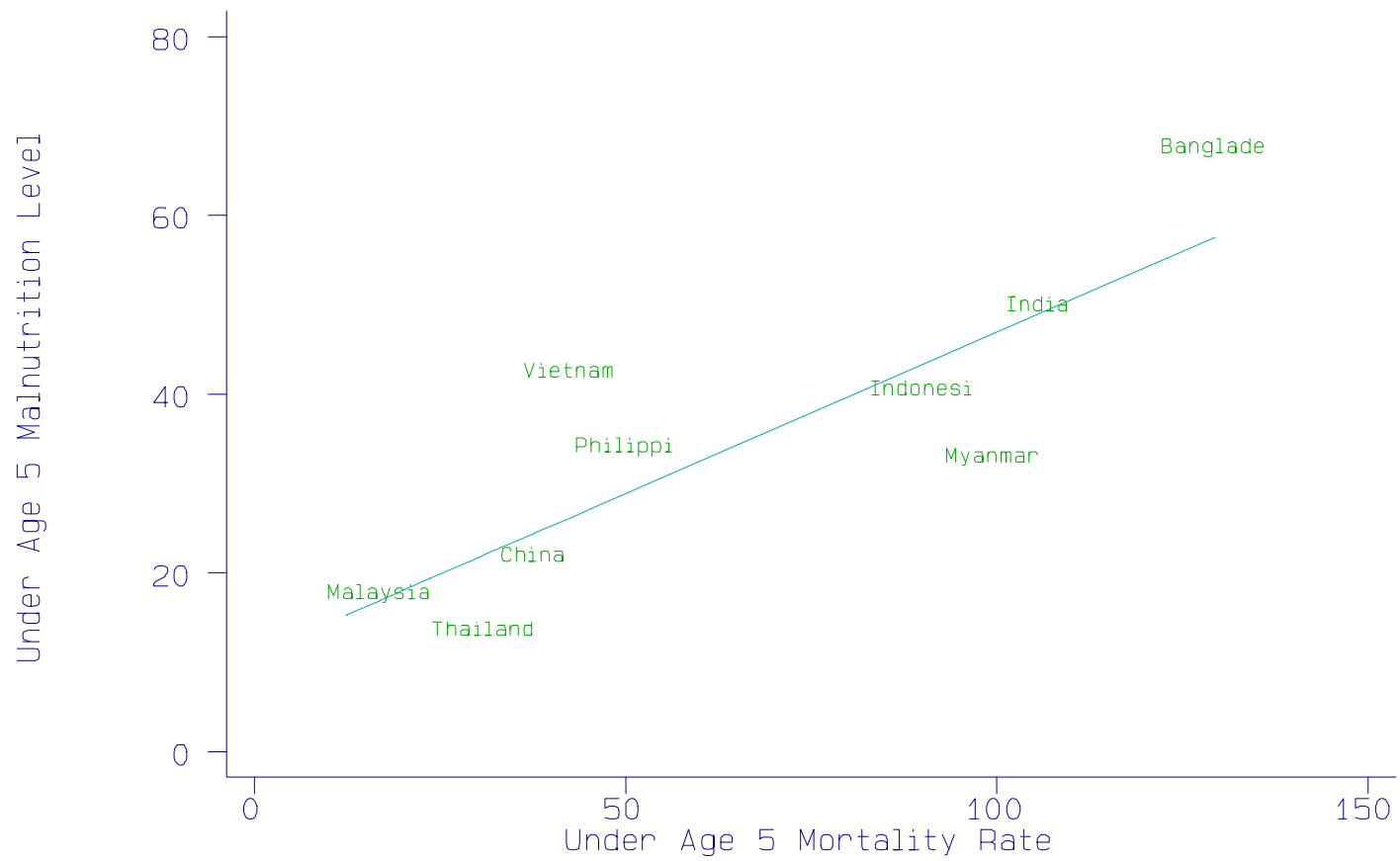
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Figure 2:IMR and GNP in 18 Asian and Eastern European Countries



Source: Vietnam Census 1989;
World Bank Social Indicators of
Development 1994

Figure 3: Under 5 Malnutrition and Mortality in 9 Asian Countries



Source: MOH, 1990;
Vietnam Census
1989; World Bank
Social Indicators for
Development 1994

Table 1**Demographic, Socioeconomic, and Health Indicators
in Vietnam and Selected Former Socialist
and Other Asian Countries (1989)**

Indicators	Former Socialist			Other Asian Countries		
	Vietnam	China	Russia	Indonesia	Thailand	Bangladesh
Population	64.4	1,162.0	149.0	184.3	58.0	114.4
GNP per capita	200	470	2510	670	1840	220
Literacy %	88	73	na	77	93	35
Birth rate	31	22	15	27	22	37
Death rate	9	7	10	9	7	14
Life Expectancy	64	69	69	60	69	55
Infant Mortality	46.0	31.0	18.6	66.0	26.0	91.0
Under 5 Mortality	81.0	37.8	23.7	90.2	31.1	129.4
Total fertility	3.8	2.0	1.7	2.9	2.2	4.0

Source: Vietnam - Census 1989 (13); DHS 1988 (14); SCF (15); UNICEF 1994 (16); World Development Report 1991 (17)

Table 4

Health Facilities and Personnel in Vietnam

	<u>Facilities</u>		<u>Personnel</u>				
	No. Units	Average Pop'n size	Hospital/Facilities	Beds	Doctors/ Assist. Dr.	Nurses	Mid-wives
Central	1	70 million	1,206	34,935	6,810	3,218	546
Provincial	54	1-2 million	249	55,841	25,528	19,041	3,239
District	550	150,000	2,140	43,833	32,045	15,988	4,615
Commune	10,050	10,000	9,243	52,862	18,530	13,307	5,493
National (per million pop.)	1	70 million	3,727	2,671	1,201	736	198

Source: SIDA 1994; UNICEF 1994

Table 5

Government Health Expenditure in Asia 1989

Country	\$ US per capita	As % of total govt expenditure	As % of GNP
Vietnam*	0.83	5.2	0.7
Bangladesh	1.26	4.5	0.7
Bhutan	2.23	2.6	1.2
China	2.88	4.2	0.8
India	5.04	6.7	1.6
Indonesia	4.51	3.8	0.9
Korea	29.74	na	na
Lao PDR	3.03	4.9	2.0
Malaysia	55.41	6.8	2.7
Myanmar	4.40	6.8	1.1
Nepal	1.33	4.3	0.8
Philippines	4.42	3.3	0.6
PNG	30.14	10.0	3.4
Sri Lanka	5.37	4.5	1.3
Thailand	13.64	6.1	1.1

Source: World Bank 1992; Griffin 1

Table 6

Population per Health Facilities and Personnel, Asian Countries, 1989

<u>Countries</u>	<u>Facilities</u>		<u>Personnel</u>	
	Hospitals (per million population)	Beds (patients per bed)	Doctors (population per staff)	Nurses
Vietnam	166.7	389	2,694*	760*
China	63	465	1,000	1,700
Indonesia	32	1,743	9,460	1,260
Thailand	141	665	6,290	710

Note: *Data are for 1990

Source: Griffin 1990; World Bank 1992

Table 7

**Trends in Health Service Activities
in Vietnam (1986-1990)**

Health Activities	Year				
	1986	1987	1988	1989	1990
Consultations (average/person/yr)	2.3	2.1	1.8	1.2	1.0
Inpt Admissions (No. millions)	6.4	6.5	6.3	5.1	4.5
Duration Inpt Stay (days/person)	8.1	8.2	7.8	7.4	7.3
Bed Occupancy (days/month)	29.0	28.5	26.5	22.9	20.8

Source: MOH, 1992

Endnotes:

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- i. Some caution should be exercised in interpreting official mortality statistics in Vietnam, as reporting and definitions may differ from international standards. Infant mortality, for example, may be under-reported because some neonatal deaths under international definition may be classified as a stillbirth. These definitional problems notwithstanding, the basic conclusion of low mortality levels in Vietnam holds up well.
 - ii. The GNP reported here employs international currency exchange rates. A GNP standardized by purchasing power, for example a purchasing parity ratio calculation, would double or triple Vietnam's GNP. The basic conclusion, however, of Vietnam's low mortality in comparison to its income level, however, would still hold under other economic conversion systems.
 - iii. Some preliminary statistics from the Ministry of Health suggest that infant mortality, especially neonatal mortality, may have increased in recent years. The changes, if any, however, are too small to conclude that long-term secular improvements in mortality has stagnated or been reversed.
 - iv. Vietnam's 1993 GDP was \$11.3 billion according to the Vietnam Government Budget Report in 1994, making the health budget \$125 million. David Dapice, in an interview in September, 1994, estimated the adjusted GDP at \$14 billion and therefore, the health budget would have been \$160 million.
 - v. It should be noted that these positive aspects of universal education, health, and gender equity were also present in Central and Eastern European countries, some of which have witnessed an altogether much less successful economic reform program than Vietnam. Thus, the linkages of human resources to economic performance during reform should be seen as a necessary although insufficient condition of successful economic reform.
 - vi. It should be noted that many other socialist economies under rapid reform also enjoyed good health, education, and social development, but obviously not all performed as well as Vietnam in the early years of the economic transformation.
 - vii. For a discussion of the market imperfections in health markets, see Hsiao (1990).