Propelled by a declining faith in government, many developing nations have searched for a 'magic pill' to cure the ills of their underfunded and inefficient public sector dominated health systems. Allured by the success of free market mechanisms in promoting economic growth, conservative politicians and economists, starting in the early 1980s, pushed many developing countries to turn to the free market to finance and provide their health services. 'Marketization, defined as the idea of using market forces to finance and provide health services, was seen as an effective means to pursue efficiency only. This goal became a dominant objective for ideological reasons and at the expense of equity and cost containment: no one had suggested that a free market could provide equal and universal access to health care. Here we examine the empirical results of the several countries who took the magic pill—marketization—and show how theoretical treatments for ambiguously defined illnesses may have significant and negative effects.

According to neoclassical economic theory, an optimum level of social welfare can be achieved by emphasizing consumer sovereignty. Consumers choose health services, constrained only by their budgets, relying on their own preferences to trade off the prices that we have to pay for health services versus other goods. Under this model, there must of course be competition among providers to yield optimal social welfare, including little restriction on who can practice medicine or sell drugs. Therefore, a simple market system emphasizes consumer demand to generate price competition and contain the cost of health services. Insurance coverage would be held down to a minimum so that consumers would have to pay directly the full price of health services at the point of delivery. On the supply side, government intervention would be kept at a minimum in the insurance, health service, pharmaceutical, and medical education markets. Price competition then would force providers to produce services efficiently at minimal cost, and remove any pure profit.

The magic of marketization often seduces governments into action without a critical understanding of the conditions required for efficient markets and with no reference to empirical evidence. The health market has serious failures and they may produce results the opposite of what was intended. Correcting market failures may be impossible or expensive. For example, the United States—the advanced nation which has been most faithful in employing market forces in health care—spends 14% of its GNP on health care, but still fails to ensure universal access or to control costs.

Health systems are rather complicated. Economists often think in terms of supply and demand in a marketplace, but a health system from a market perspective, consists of a series of interconnected markets: insurance, physician services, hospital care, factor supplies such as health professionals, pharmaceuticals, medical equipment, and finally capital and medical education. An increase in medical school training slots eventually affects the cost and demand for health insurance when physicians can induce demand for their services which increase the cost of health care and in turn raise demand for insurance. A change in the capitation payment method to GPs (such as GP fundholders) alters demand for hospital care and in turn influences investment in hospital equipment and demand for medical specialists. Hence, the outcomes produced from the market may not be
those predicted by simple economic theory. Lacking a credible macro-theory of health systems, we can only rely on empirical evidence to tell how successfully market forces can improve efficiency and control cost inflation.

Several emerging nations—Singapore, South Korea, Chile, and the Philippines—have wholeheartedly embraced market principles in overhauling their health systems since 1980. Singapore and South Korea implemented systems where patients have to self-finance the charges of health services they use. Chile and the Philippines promoted consumer choice and spurred competition with private for-profit insurance plans and HMOs. The decade-long experience of these countries can teach us a great deal about what impacts are produced by other market forces in the health sector. The results are not encouraging.

NATIONAL EXPERIENCES

Singapore

Singapore, a nation of 3.3 million people, won world-wide acclaim for implementing a thorough, consistent, and comprehensive health care system in 1984 that employed market forces and competition. It also assured equity by providing subsidized health services to low income groups and the poor. Singaporeans pay directly for their health services and have free choice of providers.

The government designed an ingenious mechanism to finance health services yet avoid the moral hazard that arises from insurance. Health care financing was based on individual responsibility. It mandated each worker to accumulate a savings account to fund their health expenditures over their lifetime. A 6-8% wage tax was imposed on each worker depending on age group, and was deposited into a 'Medisave' account from which the worker could withdraw to pay for hospital expenses of family members. Any unused amount in the Medisave account becomes a part of the worker's estate upon death.1

In 1991, the government also offered a hospital catastrophic insurance plan. Workers may voluntarily enrol and pay the premium from their Medisave account. For outpatient services, workers have to pay 100% of the charges from their current earnings or savings.

Under this financing scheme, patients pay directly for their health services and pay more when they demand higher-level services. This method of self-financing has been admired by the most ardent advocates for market competition, such as Senator Phil Gramm, who has proposed legislation to adopt similar schemes in the United States.2

Meanwhile, Singapore employed market competition to induce hospitals and clinics to run efficiently and offer patients better value for their money. The government restructured its public hospitals and clinics by organizing them into independent trusts run by their own Boards of Directors. To further enhance competition, Singapore encouraged the growth of for-profit hospitals and clinics, which operate under minimal government regulation.3 Theoretically, all hospitals and clinics would have to operate efficiently and lower their prices to compete for patients.

What has Singapore learned ten years later? It is saddled with a widespread duplication of expensive medical equipment and high technology services. Physician income has been growing at a phenomenal rate and its health cost inflation rate has accelerated, consuming an increasing share of GDP. Singapore’s experience is best summarized in the 1993 White Paper issued by its Ministerial Committee on Health Policies. It concluded that:

‘... market forces alone will not suffice to hold down medical costs to the minimum. The health care system is an example of market failure. The government has to intervene directly to structure and regulate the health system.’ 4

The White Paper suggests limiting the supply of hospital beds and physicians to reduce provider-induced demand as well as gradually restoring fee regulation for hospital and physician services to curb the market power of private providers from setting excessively high fees.

South Korea

South Korea, a nation of 45 million people, developed national health insurance (NHI) to finance its health care. Starting in 1977, South Korea implemented universal health insurance to assure all its citizens equal financial access for health services. Its insurance benefits, following economic theory, incorporated demand-side devices that were theoretically able to control health expenditure inflation. High copayments and coinsurance rates were used to minimize moral
hazard, deter unnecessary demand for services, and impose market constraints on providers.

Uniform coinsurance rates of 20% and 30% were established, respectively for inpatient hospital services and drugs. However, higher copayment and coinsurance rates were adopted for outpatient services, since consumers were more likely to initiate demand for these services and price elasticity would be high. Patients had to pay effective coinsurance rates of 41.2%, 62.0%, and 65.0% for outpatient services obtained at clinics, community hospitals, and secondary hospitals, respectively. Furthermore, the benefit package excluded expensive high technology services such as CT scans, lithotripsy, and transplants. Patients had to pay 100% of the charges for these excluded services. In other words, the system used demand pressures to control costs, including the use of high technology. Patients paid, on the average, 51% of health expenditures out-of-pocket in 1989 when the NHI was fully implemented.

To promote competition, Korea also encouraged the development of private hospitals and private practitioners. Between 1975 and 1987, the public sector's share of total hospital beds declined from 34.5% to 12.6%. 85% of physicians were in private practice by 1985. The government did regulate the payment rates to providers for the services covered under its NHI, but not the quantity of services. Moreover, payment for non-covered high technology services were left unregulated.

Health expenditures per capita rose dramatically in South Korea. Between 1980 and 1985, the per capita cost rose annually at 15.4% in real terms, a trend which has continued unabated. In spite of an enviable high average annual growth rate of 7.2% in national income, total health expenditure in South Korea have risen faster and taken an even larger share of Korean national resources from 4.0% in 1980 to 7.3% of GDP in 1991.

What explains such a cost escalation? South Korea found that both the inpatient and outpatient services per capita had doubled between 1980 and 1989. Expensive high technology services proliferated throughout the country. Their use grew at a phenomenal rate with physicians charging extremely high fees to perform them. For example, South Korea has six CAT scanners per 1.0 million people—triple the rate of Canada. Physicians' net income had risen to thirteen times the average income of all Koreans compared to 4.7 times in Japan. So much for the consumer choice theory and its prediction that patients can exercise sovereignty over providers and contain cost inflation.

Chile

Chile, a nation of 14 million people, introduced major institutional and financial reform beginning in 1979. The health system was also reorganized. A principle change was the strengthening of market forces to enhance efficiency and contain cost inflation. This was accomplished by giving workers a choice of health insurance plans and by promoting the development of private insurance and providers to compete with the public sector provision of health services.

Most Chileans were covered under the National Health Fund (FONASA). Workers were compelled to have 7% of their wages deducted from their payroll to finance health services. Under the reform, all workers could choose between public or private insurance plans—ISAPREs. The wage tax would go to the plan that the worker choose. The development of ISAPREs was encouraged through direct and indirect governmental subsidies, such as the government's full rebate to those employers who contributed an additional 2% of wages to complement the compulsory 7% wage tax if workers enrol in ISAPREs.

ISAPREs provide outpatient and inpatient services through their own clinics and hospitals or through contracted private or public facilities. ISAPREs usually require coinsurance payments varying between 10% and 40% of the cost of each service.

In addition to having options for private health insurance plans, workers who remain with the public plan can select services from private-sector providers under a 'preferred provider' system (PPS). Under this arrangement, patients have to pay large coinsurance rates when they opt for private providers and the coinsurance rate varies by level of provider. Patients pay 50%, 66.7% and 75% of changes for Level I, II, and III facilities, respectively. The levels are classified according to their technical sophistication. The more expensive the provider, the higher the coinsurance. Private providers who participate in the PPS arrangements are reimbursed according to a fixed price schedule. By 1992, twelve years after its introduction, 20% of the population had enrolled in ISAPREs and 15% had enrolled in PPS.
Now Chile has in effect a two-tiered system. The private insurance plans—ISAPREs—artfully tailored benefits that appeal to high income workers since 7% of the wages of highly paid workers generates much larger premiums than lower wage workers. These higher premiums per worker plus government subsidies enabled ISAPREs to offer better health services and more benefits, producing a two-tiered health care system. According to a World Bank Report, the annual expenditure per beneficiary in 1992 was US $44 and US $160 for the public sector and ISAPREs, respectively.8 The administrative and sales expenses of ISAPREs amounted to 20% of the revenues.10

In addition, ISAPREs established strict underwriting rules to select good risks to insure. As a result, the less healthy people were left to be covered under the public plan. Chilean experience demonstrated that private health insurance plans would ‘cream skim’ the affluent and healthy people to insure. Even nations introducing strong regulations to control risk selection, such as the US has done, have not been able to reduce risk selection to a reasonable level.11

The Philippines

The Philippines, a nation of 70 million people, has a pluralistic system of health care financing and provision. Health services are financed by general revenues, social and private insurance, corporate-sponsored plans, community and cooperative organisations, and self-pay. The services are provided by both public and private facilities.

The Philippines used a different approach to promote competition. Encouraged by the publicity about the efficiency and low cost of the US health maintenance organisations (HMOs), the Philippines started in the early 1980s to promote HMOs as a lower-cost alternative form of financing and delivering of health services. In theory, HMOs would compete with traditional insurance plans and force them to be more efficient. To spur the growth of HMOs, legislation compelled employers to grant their employees dual choice between indemnity health insurance and HMOs, the government provided soft loans to the new HMOs, equipment imported by HMOs were exempt from duties, and tax subsidies were given for HMOs to operate in the provinces. The government left HMOs unregulated to encourage further their faster growth. By 1991, there were more than two dozen HMOs operating in the Philippines. Most of them are investor-owned, but a few are community based or employer-initiated.12

Services delivered by HMOs were supposed to be less expensive because HMOs combine insurance and provision of health services into one organisation. By asking enrollees to prepay a lump sum, regardless of how many services they use, HMOs have the incentive to prevent illness and reduce the costs of ambulatory and inpatient care. Moreover, HMOs usually operate their own clinics with physicians paid on a regular salary or on a fee-for-service base, at rates negotiated by the HMO with the physicians. In the Philippines, HMOs contract with hospital services because they lack the capital to build their own hospitals.

After a decade, the Filipinos found their HMOs charged high premiums, higher than those of comparable benefit plans offered by social or private insurance and had little beneficial effect on efficiency and cost constraint. A study found the investor-based HMOs tended to cover the high income groups, focusing on employment-based groups rather than individual enrollees. The HMOs also established underwriting procedures to select the best risks to insure and excluded the elderly. Financial data showed that, on average, only 55% of HMO revenues was spent for health services, 15% to 20% for sales commissions, 20% for administrative costs, and 10% for profit.12

The HMOs are optimistic about their growth prospects. They foresee a yearly growth in enrolment ranging from 20% to 100% over the next several years. Part of this optimism arises because they can tailor their products to the affluent groups who want higher quality services and are willing to pay more. In addition, most of the HMOs are located in Manila where they operate as a government-sanctioned cartel. The HMO executives meet together regularly to hear complaints such as ‘unfair competition’ brought about by an HMO that offers lower prices or better benefits. The HMO association adjudicates the complaints and often asks an HMO to cease its ‘unfair’ practices. The association also has strongly opposed any public regulation of the HMOs, arguing that they are not insurance operations and therefore insurance regulations should not apply to them. Moreover, only regulations that are appropriate to the Philippines should be considered because HMOs is a new industry.
Experience shows that economic incentives are potent forces driving organisational and individual behaviours. For example, the insurance companies select good risks to maximize profit and physicians practice price discrimination to increase revenue. However, the question is: toward what end do market forces work? Do they work as the theory postulates, that consumer choice and competition yield a more efficient system of financing and provision of health services than government action? Evidence from the four market-based systems described clearly shows market forces have neither improved their systems’ overall efficiency nor contained cost inflation. Why?

Marketization emphasizes choice and economic incentives; each stakeholder, in pursuit of his own self-interest, generates competition. This theory assumes that all stakeholders are created equal, but they are not. Providers have greater market power. Physicians have superior medical knowledge than patients; that is why patients pay physicians to obtain their professional judgements. Moreover, consumers do not necessarily have time, information or the presence of mind to engage in price shopping when faced with an emergency or striking illness. In economic terms, the health care market is riddled with asymmetry of information, imperfect agency relationship, professional dominance, and a single-provider monopoly, especially in sparsely populated areas. A market system gives the stronger stakeholders the freedom to use their market power to garner the largest profits. When the insurance or delivery markets are not firmly regulated, health care expenditures rise faster because these stronger stakeholders/providers and insurers—transfer an ever larger share of consumers’ income to themselves through higher prices, induced demand, and risk selection. Consumers’ market power is not sufficient to constrain these behaviours.

The four nations offer several specific lessons for developing nations. Singapore and South Korea showed that a simple demand-side approach—requiring patients to pay directly the full (or near full) prices of the services they use—was not sufficient to limit the powers of providers in setting high prices, rendering unnecessary services, and introducing new expensive technology to increase profits and prestige. To contain cost inflation and improve allocative efficiency, the government has to regulate the use of expensive technology and prices.

Under a market system however, price regulation by itself is not sufficient to control cost inflation and monopolistic profits. Singapore and South Korea, along with Canada, China, Germany, Japan, and the USA, all found that physicians and hospitals can induce demand to offset reduction of revenues. Devices such as global budgeting or overall cash limits must be introduced to reduce provider-generated demand and contain overall cost escalation.

Finally, the experience of Chile and Philippines, along with those of the USA, prove that it is perilous and inefficient to create private insurance markets to finance health services. One of the reasons is due to risk selection. For-profit insurance plans and HMOs tailor their products to low-risk customers and those who have the ability to pay. To avoid individual adverse selection, private plans often limit their insurance to large employer groups. This practice excludes most of the people in developing nations, except affluent employees in the organized sector. The elderly, disabled, chronically ill, low income, unemployed, workers in the unorganized sectors, and farmers are left as a public responsibility. In Chile, a middle-income nation, the groups being left out comprise two-thirds of its population. The United States, a wealthy post-industrialized country, leaves out at least one-third of the population to be public charges; they also tend to be the high risk, high cost groups.

Private insurance creates a two-tiered health care system; the affluent groups, insured with private plans, are reluctant to pay higher taxes to fund similar health services for the low-income and disabled groups. Reforming this inequitable system will be difficult. Besides opposition from the insured affluent groups, private insurance plans, once well-established, become well-financed and ferociously active interest groups who will strenuously oppose any public action for universal health insurance or stronger regulation of private insurance. Any nation that contemplates relying on private insurance to finance basic health care would be well-advised to study the history and experiences of the USA, Chile, and Philippines. Their unforeseen long-term negative consequences were much greater than any short-term relief that private insurance may have provided.

In 1993, senior leaders in China invited several
leading health economists in the world to assess how marketization could be used to reform the Chinese health sector. Drawing on worldwide empirical evidence, these experts issued a 'Manifesto' at the end of this international seminar which is reprinted in this issue. They emphatically concluded that private insurance is an inferior choice.

Private health insurance entails large transaction and management costs. In the unregulated HMO market of the Philippines, transaction costs and profit totalled 45% of premium revenues. In Chile, the transaction costs in this regulated insurance market totalled more than 30% of the average premium incomes—20% incurred by insurance companies, 7 to 10% incurred by clinics and hospitals for record keeping, accounting and claim filing to meet the requirements of insurers, and 2-3% for governmental regulatory expenses. In the USA, where medical costs are expensive, the total transaction costs could run as high as 25% of premiums. Meanwhile, most public-run health insurance systems spend less than 10% of revenues on transaction costs. Using the private insurance market to achieve greater efficiency in health care requires us to weigh the inefficiency losses from public sector financing against the additional transaction costs of an insurance market.

CONCLUSION

Simply put, many nations have tried market-based health systems. They discovered that simple market approaches do not work because there are serious market failures in the health sector. The market is dominated by providers who have superior power in making price, quantity, and resource-allocation decisions. Consequently, any State that wants to marketize its health system has to intervene to equalize the market power between consumers and providers; that means strong and complex regulations.

Relying on private insurance to finance basic health care services is clearly an inferior approach. It only exacerbates the inefficiencies in the health sector by creating another market layer in this multi-layered sector which increases significantly the transaction and regulatory costs. Private insurance, by selecting largely affluent and healthy people to cover, also creates a two-tiered health care system. No nation has been able to regulate this risk selection effectively. Once a significant private insurance market is established, such as in the USA, it is almost impossible to remove. Thus, the inefficiency and inequity produced by the private insurance market is likely to persist.

Relying on the government to provide health services may not be a much better alternative than the market-based systems. Public-sector provision of health services often suffers from bureaucratic inefficiency, long waiting time, and unresponsive public sector workers protected by their unions. Patients may not get value for money from a rigid government-run system with inefficient and depersonalized government clinics and hospitals. Often a centrally-planned health delivery system also lacks adequate information and market signals, and the motivation to innovate.

National experiences teach us that neither pure centrally-planned nor free-market health systems can achieve maximum efficiency. A complex mixed system seems to be the answer. In health care financing, well-designed State organized financing schemes (eg community financing and social insurance) have proven to be more efficient and equitable. As for the delivery of health services, public sector provision often succumbs to health care professional/trade union dominance and cumbersome bureaucracy. When they occur, patients' welfare suffers. Carefully crafted market approaches seems to be more responsive to patients' needs and may also induce providers to be more efficient. But, to bring out the most effective market forces to advance the interests of the population, the State has to institute tough regulatory measures in the delivery market to correct market deficiencies and to curb provider abuses.

Marketization, then, is not a simple pill whose magic can be harnessed easily for the benefit of all the people. Instead, it is a complicated system of regulated markets. Fortunately, the past two decades of marketization in the health sector of many nations has also revealed many useful principles and practices as to how a State can structure a system to bring out the positive market forces. The system of having GPs serving as agents for patients is such an example. Global budgeting and 'single pipe' payment systems are other good examples.

Efficient 'marketization' of the health sector creates great challenges for developing nations. Many low-income countries lack tax revenues to fund basic health care, adequate information and
human resources to design the regulatory parameters, as well as the capacity to manage market competition. Therefore, incrementalism would be the best policy. A developing nation could experiment with marketization at several demonstration sites where experiments are designed based on what we have already learned globally about the positive and negative impacts of marketization. These demonstrations allow a nation to accumulate knowledge and experience as to what combination of State and market roles may work best within that nation’s culture, socioeconomic, and political structure. Then the successful experiment can be expanded gradually to the entire nation, always bearing in mind the evidence about the adverse effects of marketization.

REFERENCES